Bartın University Journal of Faculty of Education
BUEFAD Volume 14, Issue 3

920-938
dergipark.org.tr/buefad
DOI: 10.14686/buefad.1686160

# Zooming Into Negotiation: Task-Based Interaction In An Online Synchronous EFL Setting[1]

***Leyla Sağlam [a]* & Nuray Alagözlü [b]***

a Instructor, Istanbul Medeniyet University, https://orcid.org/0000-0002-7040-3433, * leyla.saglam@medeniyet.edu.tr

b Professor., Hacettepe University, https://orcid.org/0000-0001-9868-4399, * nuray.alagozlu@hacettepe.edu.tr

**Research Article**
Received: 28.4.2025
Revised: 17.6.2025
Accepted: 17.6.2025

## Abstract

This study investigates the patterns of negotiation of meaning (NoM) routines that emerge during three types of online synchronous tasks—jigsaw, decision-making, and problem-solving—among learners of English as a Foreign Language (EFL). Grounded in Task-Based Language Teaching (TBLT) and interactionist theories of Second Language Acquisition (SLA), the research draws on a qualitative discourse analysis of 13 hours of transcribed spoken learner interaction involving 32 intermediate-level university students. A total of 225 negotiation routines were identified across the three task types. The jigsaw task produced the highest number of routines (n = 79), followed by decision-making (n = 74) and problem-solving (n = 72). While clarification requests were the most frequent across all tasks, each task elicited a distinct pattern: jigsaw tasks generated frequent information-related clarification requests and confirmation checks; decision-making tasks prompted procedural comprehension checks and coordination-based checks; and problem-solving tasks led to deeper conceptual repairs and clarification episodes, reflecting their abstract and emotionally complex content. The findings suggest that task type and complexity significantly influence both the quantity and quality of negotiation routines, supporting claims from cognitive task complexity theory and interactionist SLA. The study also highlights the potential of online synchronous tasks to foster meaningful learner interaction, language-related episodes, and collaborative problem-solving. Pedagogical implications and suggestions for future research in digitally mediated TBLT environments are discussed.

**Keywords:** negotiation of meaning, task-based language teaching, online synchronous interaction, English as a foreign language, discourse analysis

# Uzlaşmaya Yakından Bakış: Çevrimiçi Eşzamanlı Yabancı Dil Olarak İngilizce Öğrenme Ortamında Görev Temelli Etkileşim

## Öz

Bu çalışma, Yabancı Dil olarak İngilizce (EFL) öğrenenler arasında üç tür çevrimiçi eşzamanlı görev (yapboz, karar verme ve problem çözme) sırasında ortaya çıkan anlam uzlaşması (NoM) rutinlerini araştırmaktadır. Görev Temelli Dil Öğretimi (TBLT) ve etkileşimci İkinci Dil Edinimi (SLA) teorilerine dayanan araştırma, 32 orta düzey üniversite öğrencisinin katıldığı 13 saatlik transkript edilmiş sözlü öğrenci etkileşiminin nitel söylem analizine dayanmaktadır. Üç görev türünde toplam 225 müzakere rutini tespit edilmiştir. Yapboz görevi en fazla sayıda rutin üretirken (n = 79), bunu karar verme (n = 74) ve problem çözme (n = 72) takip etmiştir. Açıklama talepleri tüm görevlerde en sık görülen talepler olsa da, her görev farklı bir örüntü ortaya çıkarmıştır: yapboz görevleri sık sık bilgi ile ilgili açıklama talepleri ve onay kontrolleri üretmiştir; karar verme görevleri prosedürel anlama kontrolleri ve koordinasyona dayalı kontroller istemiştir; ve problem çözme görevleri, soyut ve duygusal olarak karmaşık içeriklerini yansıtan daha derin kavramsal onarımlara ve açıklama bölümlerine yol açmıştır. Bulgular, görev türü ve karmaşıklığının uzlaşma rutinlerinin hem miktarını hem de kalitesini önemli ölçüde etkilediğini ve bilişsel görev karmaşıklığı teorisi ile etkileşimci SLA'nın iddialarını desteklediğini göstermektedir. Çalışma ayrıca, çevrimiçi eşzamanlı görevlerin anlamlı öğrenci etkileşimini, dille ilgili bölümleri ve işbirliğine dayalı problem çözmeyi teşvik etme potansiyelini vurgulamaktadır. Pedagojik çıkarımlar ve dijital aracılı TBLT ortamlarında gelecekteki araştırmalar için öneriler tartışılmaktadır.

**Anahtar kelimeler:** anlam uzlaşması, görev tabanlı dil öğretimi, çevrimiçi eşzamanlı etkileşim, yabancı dil olarak İngilizce, söylem analizi

To cite this article in APA Style:

Sağlam, L., & Alagözlü, N. (2025). Zooming into negotiation: Task-based interaction in an online synchronous EFL setting. *Bartın University Journal of Faculty of Education, 14*(3), 920-938. https://doi.org/10.14686/buefad.1686160

1 This study is derived from an unpublished doctoral dissertation conducted by the first author under the supervision of the second author.

## INTRODUCTION

The integration of digital technologies into educational environments has led to a reshaping of the interactional structure, especially in the field of language teaching. Online learning practices, which gained momentum after the pandemic, have enabled real-time communication between learners, especially through platforms that offer synchronous (simultaneous) interaction. Language use-based learning models now face both new opportunities and difficulties as a result of this evolution. Interactional dynamics need to be reevaluated in regard to foreign language learners' attempts to communicate meaningfully in online settings.

Introduced by Long (1980), the interaction hypothesis is based on the view that the learning of new linguistic forms is possible when learners participate in the process of negotiating meaning. NoM (negotiation of meaning) can be explained as the process of identifying and solving a communication problem by two or more speakers (Ellis, 2003). More precisely, the interaction hypothesis can be defined as a view that makes it necessary for the meanings of linguistic items to be discussed and negotiated in order for foreign language acquisition and learning to take place (Willis, 2004).

According to the interaction hypothesis, interaction is a process that provides opportunities for NoM (Willis, 2004) and in this process, NoM can take place in three ways: "...by asking whether what has been said has been understood; by asking for further explanation of what has been said; and by checking whether what has been said has been understood correctly" (Toksöz, 1998, p. 70).

Interaction in language learning contributes not only to the exchange of information but also to the increase in linguistic awareness, the functioning of feedback processes and the development of production skills. In this context, Task-Based Language Teaching (TBLT), grounded in the use of language for communicative purposes, offers learners the opportunity to use the target language through meaningful tasks, which are defined as goal-oriented activities where learners focus on conveying meaning rather than practicing isolated language forms (Ellis, 2003; Long, 1985). These tasks simulate real-life communication and require learners to process and produce language in order to achieve specific, tangible outcomes. Research by Ellis (2003) highlights how TBLT effectively promotes language acquisition by emphasizing real-world tasks that encourage authentic language use. These tasks engage learners in meaningful communication, thereby facilitating deeper linguistic understanding and practical application of language skills. As a result, students are more likely to develop fluency and confidence in the target language. The interactions carried out within the scope of TBLT allow learners to develop their language proficiency, especially through NoM.

TBLT, as a communicative approach that promotes learning through meaningful and goal-oriented use of language, has formed an important theoretical and pedagogical basis, especially in foreign language teaching. Based on this assumption, task-oriented language teaching requires learners to "...reach a consensus on the meaning of the inputs they are confronted with in the learning process..." (Kalkan, 2003, p.11). In this approach, it is aimed that language learners interact through authentic tasks, process linguistic input and produce outputs. NoM, one of the core elements of TBLT, is defined as a set of interactional strategies that learners use to achieve mutual understanding during communication.

NoM is an important mechanism that brings together cognitive and social interaction dimensions in the language learning process and enables learners to both negotiate meaning and develop language proficiency through routines such as clarification requests, confirmation checks and comprehension checks (Long, 1996; Varonis & Gass, 1985). These processes, especially in task-based interactions, allow learners to recognize their gaps in the target language, receive feedback, and engage in structured production to clarify meaning.

Numerous studies on meaning negotiation in the context of face-to-face interaction have revealed the effects of various task types on these interactional processes. However, empirical studies on how task-based interactions in synchronous online environments are structured, especially in the context of meaning negotiation, are quite limited. Real-time communication environments offered by video conferencing tools such as Zoom enable both verbal and audiovisual multimedia interaction. However, questions about how interaction dynamics are shaped in this new context and which task types encourage specific meaning negotiation moves remain unanswered in the existing literature.

The aim of this study is to explore the patterns of negotiation of meaning (NoM) routines that emerge during three types of online synchronous tasks—jigsaw, decision-making, and problem-solving—in an English as a Foreign Language (EFL) context. In this study, NoM routines are defined as recurring interactional moves

employed by learners to resolve communication breakdowns and ensure mutual understanding. These include strategies such as clarification requests, confirmation checks, comprehension checks, repair initiations, and repetitions.

The study analyzes transcribed discourse data from B1-level EFL learners performing tasks via a video-conferencing platform. Specifically, it seeks to (1) identify the types and frequency of NoM routines used, (2) compare how these routines differ across task types in terms of interactional function and distribution, (3) contribute to the growing body of research on task-based interaction in virtual environments, and (4) offer pedagogical insights for the design of effective synchronous online TBLT activities.

The selection of jigsaw, decision-making, and problem-solving tasks is based on their varying cognitive, interactional, and linguistic demands, which are widely recognized in TBLT literature (Ellis, 2003; Willis & Willis, 2007; Skehan, 1998). Each task type provides a distinct communicative structure and thus creates different conditions for the emergence of NoM routines. Accordingly, the study focuses on the following research question:

1. What are the patterns of meaning negotiation routines that EFL learners perform during online synchronous tasks: jigsaw, decision making, and problem solving?

This study aims to fill a gap in the literature by combining discourse analysis with task-sensitive qualitative investigation, providing a nuanced understanding of how meaning is co-constructed in digitally mediated EFL interactions. It will provide both a theoretical contribution to understanding the interactional aspects of online task-based instructional practices and a methodological basis for future research in these environments.

**Interaction in Language Learning in the Context of Sociocultural Theory and Interaction Hypothesis**

Interaction in foreign language learning is seen as a process that forms the basis of both linguistic and cognitive development. In this context, Sociocultural Theory (Vygotsky, 1978) argues that an individual's learning process is shaped through social interaction. According to Vygotsky, the individual develops cognitively through interaction with a more competent other person; that is, linguistic interaction is not only a means of communication, but also a means of thinking and learning. In particular, the concept of “zone of proximal development” (ZPD) emphasizes the importance of interactional support that enables the learner to go beyond his/her individual capacity. The Interaction Hypothesis draws attention to the importance of the language input provided to learners by interaction in foreign language learning. In parallel with this theoretical framework, the Interaction Hypothesis (Long, 1996) argues that meaningful interaction plays a critical role in foreign language acquisition. According to this hypothesis, when learners communicate using the target language, they employ various strategies to overcome disagreements and maintain communication, which is defined as “negotiation of meaning”. Thus, language learners improve their linguistic skills through the NoM and corrective feedback they experience during interaction.

Long (1996) argues that these interactions increase attention to the linguistic input and facilitate the learner's focus on both meaning and form. These two theoretical approaches conceptually ground the pedagogical value of interaction-oriented tasks and in particular the contribution of NoM processes in language development. Moreover, Swain (2005) stated that these interaction processes have positive effects on language production and problem solving skills. Thus, interaction is a critical component of the language learning process, as it simultaneously supports both comprehension and production, underscoring its indispensable role in successful language acquisition.

**Interaction in Online Synchronous Environments**

Interaction in synchronous online environments enables participants to engage in real-time communication through platforms such as Zoom, Microsoft Teams, and Google Meet. These platforms support verbal and audiovisual exchanges via video conferencing, live chat, and virtual meetings, offering opportunities for immediate feedback and dynamic interaction (Alfares, 2024). Such features promote rapid idea exchange and collaborative engagement, which can foster a sense of commitment and trust among participants (Yoon & Leem, 2021). As a result, online synchronous tools have become essential for enhancing productivity and interactivity in both educational and professional settings (Brown et al., 2019).

The shift toward online language education, especially during the COVID-19 pandemic, has further highlighted the significance of synchronous interaction in language classrooms. However, this transition has not been without challenges. Technical issues, reduced motivation, and screen fatigue have been widely reported as barriers to sustained engagement and effective communication (Almaiah, Al-Saraireh, & Almaiah, 2020; Klohr &

Hennig, 2022). Such disruptions may lead to communication breakdowns, reduced learner participation, and diminished learning quality (Martin, Sunley, & Turner, 2017).

At the same time, synchronous digital platforms offer unique affordances that reshape traditional interaction patterns. Tools such as chat functions, breakout rooms, emoji reactions, screen sharing, and multimedia integration can create new spaces for learner interaction and collaboration. These features may encourage more equitable participation, especially for learners who are less confident in speaking, and offer multiple modalities for meaning negotiation (Thomas & Reinders, 2015). For instance, breakout rooms simulate small-group tasks that are ideal for task-based language learning, and chat boxes can serve as parallel channels for clarification and repetition strategies.

Game-based learning apps and collaborative task-based projects—such as planning a trip or proposing a product campaign—allow learners to practice the target language in meaningful contexts (Deng & Tavares, 2013; Robinson, 2011). These tasks not only maintain open communication channels but also increase learners' engagement through real-world relevance. Therefore, while online synchronous environments pose challenges, they also provide rich affordances that can enhance the nature of interaction and facilitate the emergence of diverse negotiation of meaning (NoM) patterns. A closer examination of how these digital tools mediate communication is essential to better understand interaction dynamics and improve pedagogical practices in virtual TBLT contexts.

**TBLT and NoM**

TBLT is defined as an approach based on the meaningful use of language to develop communicative competence (Ellis, 2003). At the center of TBLT is the learner's production of the target language through real-world tasks. Tasks can be categorized into different types such as jigsaw, decision-making, sequencing, problem solving, and each of them has the potential to produce different interaction patterns (Pica, 1994; Willis & Willis, 2007). During these tasks, learners often negotiate meaning as they co-construct meaning.

In studies focusing on the NoM within TBLT, several task types have emerged as particularly conducive to eliciting interactional routines. Among these, jigsaw tasks are the most commonly employed, as they require learners to exchange complementary pieces of information in order to complete a shared outcome, inherently promoting clarification requests and confirmation checks (Pica, Kanagy, & Falodun, 1993; Long, 1996). Similarly, information gap tasks—which involve learners holding differing pieces of crucial information—are widely used due to their capacity to generate high levels of meaning negotiation (Ellis, 2003). Decision-making tasks also feature prominently in the literature, as they encourage learners to collaboratively evaluate options and reach consensus, thereby eliciting pragmatic forms of negotiation such as confirmation and comprehension checks (Foster, 1998; Varonis & Gass, 1985). In contrast, problem-solving tasks require deeper cognitive processing and abstract thinking, leading to increased use of repair and conceptual clarification strategies (Doughty & Pica, 1986; Swain & Lapkin, 2000). Although opinion-exchange tasks are also studied, they tend to produce fewer negotiation routines due to the lack of inherent information gaps, though they may still foster valuable pragmatic and interpersonal negotiation (Newton, 1991). Overall, these task types are frequently selected in NoM-focused research for their varying capacities to provoke interactional negotiation and learner output modification.

**Online Task-Based Interaction and Negotiation Routines**

In recent years, online task-based applications have started to be investigated especially in terms of NoM in foreign language teaching. However, the number of these studies is limited. Monteiro and Morrison (2014) stated that NoM frequently occurs in tasks carried out in online environments and that these interactions play an important role in the production of linguistic output. Satar and Özdener (2008), on the other hand, compared text-based and audio forms of communication and found that meaning negotiation strategies are used more naturally and more frequently in audio environments.

Negotiation routines in the context of negotiation of meaning refer to recurring interactional strategies that learners use to overcome communication difficulties and ensure mutual understanding. According to Varonis and Gass (1985), such routines typically involve a trigger (e.g., a communication breakdown), a signal (e.g., clarification request), and a response followed by optional follow-up moves. Common strategies include clarification requests, confirmation checks, comprehension checks, repetitions, and repair moves (Long, 1996; Pica, 1994). These interactional moves serve as mechanisms through which learners not only resolve misunderstandings but also engage in deeper language processing, thus contributing to second language development (Ellis, 2003; Swain, 2000). Such practices are essential in online task-based interactions to facilitate effective communication and achieve shared goals.

These routines typically follow four stages—trigger, indicator, response, and reaction to response—as proposed by Varonis and Gass (1985), who conceptualized negotiation sequences as structured interactional episodes aimed at resolving communication breakdowns. The trigger initiates the need for clarification, the indicator signals the presence of a misunderstanding, the response involves providing the necessary clarification, and the reaction to the response confirms whether the clarification was successful. As noted by Varonis and Gass (1985), these stages help structure communication, especially in online environments where clear understanding is crucial. According to Varonis and Gass (1985), negotiation routines include clarification requests, where participants ask for additional information to clear up misunderstandings. Confirmation checks involve repeating or paraphrasing information to verify that it has been understood correctly. Comprehension checks are used to ensure that the listener has grasped the intended meaning, often by asking direct questions or seeking feedback.

The following examples of some of the negotiation devices were provided by Gass and Selinker (2008):

*Comprehension check*

Student: I was born in Nagasaki. Do you know Nagasaki?

*Confirmation check*

Student1: When can you go to visit me?

Student2: Visit?

*Recast*

Student1: What doctor say?

Student2: What is the doctor saying?

*Clarification requests*

Student: Et le coccinelle . . . “And the (masculine noun) ladybug . . .”

Teacher: Pardon? “Sorry?”

Student: La coccinelle . . . “The (feminine noun) ladybug . . .”

*Repetitions*

Student: La chocolat. “(Feminine noun) Chocolate.”

Teacher: La chocolat? “(Feminine noun) Chocolate.”

Student: Le chocolat. “(Masculine noun) Chocolate.” (p. 319, pp.335-336)

The interaction is advanced by the use of negotiation devices, which enable the participants to demonstrate their comprehension of the information they have received and the information they require from their counterpart. For example, an interlocutor may use repetition as a negotiation tactic to inform the speaker that their message was imprecise or misunderstood. The way the repetition is delivered throughout the exchange will facilitate the meaning negotiation. Furthermore, a listener may rephrase the speaker's most recent statement in order to rephrase an incorrect statement while maintaining the original meaning. In other words, an interlocutor could employ a recast as a negotiation tool to respectfully correct and verify (i.e., negotiate for) the speaker's original intent during the communicative event. In the same vein, reformulations, paraphrasing, or clarification requests could be employed as a negotiation tool to inform the speaker of the listener's comprehension level and whether communication is on the verge of disintegrating or is on course to continue successfully.

Nevertheless, there is still a dearth of comprehensive descriptive studies that examine the structure of meaning negotiation routines in online synchronous tasks. More empirical data is necessary to address inquiries such as which task types provide more opportunities for interaction and negotiation, and in which contexts routines such as asking for clarification, confirmation, and correction occur.

## METHOD

### Research Design

This study employed a qualitative discourse analysis approach within a TBLT framework to explore NoM routines during three types of online synchronous tasks: jigsaw, decision-making, and problem-solving. It was designed as an investigation to examine the interactional patterns of EFL learners in a virtual environment and to

evaluate the methodological viability of the broader research project. The specific focus of the article is to answer the following research question:

1. What are the patterns of meaning negotiation routines that EFL learners perform during online synchronous tasks: jigsaw, decision making, and problem solving?

### Participants

A total of 32 EFL freshmen, organized into eight groups of four participants each, participated in the current study. All participants were B1 level English learners, as determined by an English proficiency placement test conducted by the School of Foreign Languages of the same university. Participation was voluntary, and informed consent was obtained. The students had prior familiarity with an online communication tool used in the study and had been introduced to task-based learning and task types as part of their coursework.

**Table 1.** Descriptive Statistics of the Participants

| Variables | N | % |
|---|---|---|
| Gender | | |
| Male | 6 | 18.8 |
| Female | 26 | 81.2 |
| Native Language | | |
| Turkish | 28 | 87.5 |
| Arabic | 1 | 3.1 |
| Age | | |
| 18 | 12 | 37.5 |
| 19 | 10 | 31.2 |
| 20 | 6 | 18.8 |
| 21 | 2 | 6.2 |
| 22 | 1 | 3.1 |
| 24 | 1 | 3.1 |
| Total | 32 | 100.0 |

*Note. Percentages are rounded to the nearest tenth. Participants self-reported their gender, age, and native language.

Table 1 indicates that among the participants, 26 were female (81.2%) and 6 were male (18.8%). In terms of native language, 28 participants (87.5%) reported Turkish, and 1 participant (3.1%) reported Arabic as their first language. The participants' ages ranged from 18 to 24, with 18 being the most frequently reported age (37.5%). All participants had received prior formal instruction in English, although the duration and intensity of their exposure to the language varied.

### Context and Setting

The study was conducted at a state university in Türkiye, in the fall semester of 2023/24 academic year. It was conducted in a fully online synchronous environment through a video-conferencing platform. The platform was chosen for its accessibility and widespread use in online education. The session was recorded with participant consent, and video data were transcribed for interactional analysis. The tasks were administered in one session, with learners interacting solely in English.

The researcher assumed the role of the instructor, actively facilitating the implementation of tasks and managing the online learning environment. This dual positionality allowed for an insider perspective throughout the research process, enabling the researcher to closely observe participant interactions, task engagement, and the dynamics of synchronous communication. As a participant-observer, the researcher ensured the smooth progression of each task, clarified procedural instructions when needed, and monitored technical functionality during the session. While this proximity to the participants enhanced contextual understanding and supported real-time documentation, it also necessitated careful reflection and analytical distance to maintain objectivity during data coding and interpretation. To address potential biases, all transcriptions were independently reviewed, and coding decisions were discussed with external experts to ensure trustworthiness and analytical rigor.

**Tasks and Materials**

The tasks used in this study were adapted from the Oxford Publishing English File Intermediate coursebook. The original materials were selected for their alignment with task-based pedagogy and were adapted to better match the interests, cultural background, and language proficiency of the learners. Adaptations included modifying topic complexity, simplifying instructions and adjusting the cognitive and linguistic demands to suit B1-level learners. Each task lasted approximately 30 minutes and was conducted in a single online session (Table-2).

**Table 2.** Data Collection Procedure Followed

| Task type | Theme | Duration |
|---|---|---|
| Jig-saw | Picture story telling | 30 min. |
| Decision-making | Wedding party | 30 min. |
| Problem-solving | Relationships | 30 min. |

The three tasks implemented in the study are:

- Jigsaw Task: A collaborative information-gap picture story telling requiring learners to pool partial information to complete a narrative.
- Decision-Making Task: Learners collaborated to plan a summer wedding, including choices on venue, food, music, and entertainment.
- Problem-Solving Task: Learners discussed common relationship problems (e.g., jealousy, lack of communication) and then proposed possible solutions to other group's problems.

**Data Collection Procedure**

Prior to the main session, learners attended an online synchronous orientation session where they were informed about the purpose of the research; introduced to the concept of task-based learning; familiarized with the three task types; guided in the use of the video-conferencing tool used and online interaction.

Each group completed three 30-minute tasks in a single session. The data for the tasks were collected through a structured, task-based instructional sequence conducted in an online synchronous environment. The entire procedure consisted of three main phases: pre-task, while-task, and post-task stages, following Ellis's (2003) TBLT framework.

***Jigsaw Task***

The task was based on the visual narrative "One Dark October Evening," with the aim of encouraging meaning negotiation through collaborative prediction and interpretation.

**Pre-Task Phase.** At the outset, participants were introduced to the concept and structure of the task. The instructor explained that the task would involve analyzing different segments of a visual story through distributed photo stimuli, encouraging critical thinking and collaborative storytelling. Students were then placed into home groups of four, ensuring balanced participation and peer interaction.

Within each home group, learners were instructed to assign themselves a number (1 to 4), which would later determine their role as an expert. Each expert would analyze a unique image from the story and share their findings with their home group. The instructor emphasized the importance of active listening, questioning, and synthesis of perspectives to support mutual understanding.

**While-Task Phase.** The core of the task focused on photo analysis and collaborative interpretation. Students with the same assigned number were temporarily grouped into expert teams (e.g., all students numbered "1" formed Expert Group 1). Each expert group received a different image from the narrative and spent time observing and interpreting the visual content independently.

After individual analysis, each expert returned to their home group and presented their observations and interpretations. This process repeated sequentially for Experts 1 through 4, ensuring that each group was exposed to multiple viewpoints and pieces of the overall story. During the reporting process, home group members were encouraged to ask questions, seek clarification, and offer alternative interpretations, which fostered real-time NoM.

Following the expert reports, each home group engaged in collaborative discussion to synthesize the fragmented information and construct a prediction regarding the narrative's storyline. This prediction phase

enabled learners to integrate diverse inputs, reflect on possible interpretations, and co-construct meaning based on visual evidence.

Subsequently, each group nominated a spokesperson to deliver a concise summary of their group's predicted storyline to the class. These brief presentations allowed learners to articulate their interpretations publicly and compare them across groups, further enhancing metalinguistic awareness and collaborative discourse.

**Post-Task Phase.** To conclude the activity, students were given access to the actual narrative of "One Dark October Evening." The class collectively read and listened to the story, followed by a reflective discussion. Participants were encouraged to compare their predictions with the actual plot and consider the interpretive nature of visual stimuli. This final discussion aimed to raise learners' awareness of how meaning is constructed, shared, and negotiated through multimodal input in a task-based environment.

***Decision-Making Task***

Groups were asked to plan a summer wedding by selecting a venue, menu, music, and activities. The task required consensus-building and discussion of options.

**Pre-Task Phase.** At the beginning of the session, participants were introduced to a simulated scenario in which they represented event planning companies competing to organize a summer wedding and after-party for a fictional couple. The facilitator highlighted the criteria for the task: budget consciousness, creativity, and the ability to justify decisions through persuasive presentation.

Participants were divided into eight groups of four students, with each group functioning as a distinct company. The instructor briefly reviewed the expectations and clarified that all decision-making should be collaborative and based on multiple aspects of event organization such as venue, music, food, and activities.

**While-Task Phase.** The core of the activity was centered on collaborative planning and negotiation. Each group was asked to develop a comprehensive plan for the wedding and after-party, considering several key components:

Students were required to work within a simulated budget, discuss the pros and cons of each option, and make collective decisions through dialogue. These discussions provided rich opportunities for NoM, as students clarified ideas, confirmed details, and managed disagreement to reach consensus.

After finalizing their event plans, each group spent additional time preparing a brief presentation to pitch their wedding package to the "couple" (role-played by the facilitator). Groups used shared documents, whiteboards, or digital presentation tools to organize their ideas coherently.

**Post-Task Phase.** In the final stage, one speaker from each group presented the team's event concept in a 5-minute pitch. The facilitator, acting as the couple, evaluated the presentations based on alignment with preferences and budget constraints, and provided oral feedback.

Following the selection of the winning company, the session concluded with a short debriefing discussion. Students reflected on their group's decision-making processes, the persuasiveness of their presentations, and how effectively they communicated their ideas. The instructor emphasized the importance of strategic communication and negotiation in real-world professional contexts, drawing connections to broader language learning goals.

***Problem-Solving Task***

The primary aim was to create authentic opportunities for learners to engage in meaningful dialogue, negotiation, and collaborative reasoning through a contextually relevant and emotionally engaging topic: interpersonal challenges in romantic relationships. This task emphasized critical thinking and negotiation of abstract concepts.

**Pre-Task Phase.** At the beginning of the session, participants were presented with a real-life inspired scenario in which they were asked to discuss and propose solutions to common relationship problems. The instructor underlined the importance of empathy, creative thinking, and clear communication for successful task completion.

Participants were divided into eight groups of four students each. The task instructions were explained, emphasizing that each group would first identify issues in romantic relationships, and then, based on an exchange system, offer solutions to a set of problems created by another group.

**While-Task Phase.** This core stage included three interrelated subtasks: problem identification, problem exchange, and solution development.

***Problem Identification.*** Each group began by brainstorming and listing five common problems typically encountered in romantic relationships. These ranged from interpersonal misunderstandings and jealousy to communication breakdowns and emotional distance. Groups documented their lists using a collaborative online tool.

***Problem Exchange.*** The researcher compiled all group-generated problems and redistributed a different set of issues to each group. This ensured that groups would be challenged to propose solutions for issues they had not initially discussed, enhancing cognitive and linguistic engagement.

***Solution Development.*** Groups then collaborated to generate realistic and practical solutions to the problems of another group as assigned to them. Discussions were expected to reflect genuine attempts at NoM, with learners clarifying terminology, suggesting alternatives, justifying reasoning, and adjusting proposals based on peer feedback.

**Post-Task Phase.** Each group delivered their presentation to the class, sharing the problems they had received and the solutions they proposed. The session concluded with a short debriefing discussion, where students reflected on the diversity of problems addressed, the creativity of the solutions proposed, and the overall dynamics of the task. The instructor facilitated a conversation on the relevance of problem-solving and communication in both real-life and language learning contexts, emphasizing how negotiation strategies used during the task parallel authentic interpersonal communication.

## Data Analysis

Since the main focus of the study is spoken learner interaction, only the while-task phases of the recorded data were analyzed. A total of 13 hours of spoken interaction were transcribed verbatim and anonymized for analysis. The dataset included eight groups of four participants for each task type.

The transcribed interactional data were analyzed through a discourse analytic framework, specifically aimed at identifying and categorizing instances of NoM in learner-to-learner interaction across three synchronous online task types: jigsaw, decision-making, and problem-solving. The analysis was both qualitative and functional, in line with discourse-analytic principles described by Dörnyei (2007) and Varonis and Gass (1985).

Following Dörnyei's (2007) guidance on micro-level classroom discourse analysis, each utterance in the transcripts was examined to uncover how learners collaboratively constructed meaning in real-time communication. Emphasis was placed only on their interactional function—that is, how each utterance contributed to mutual understanding, task progression, or repair of communication breakdowns. Each occurrence was coded, categorized, and tabulated according to the type of task, the utterance initiating the negotiation routine, the response and the interactional context or pattern observed.

A total of 225 negotiation routines during the while-task phases were identified and analyzed. Frequencies were calculated for each routine type by task, and patterns were compared. Analytic procedure followed is as in the following:

### *Transcription*

All group interactions were transcribed verbatim using conventions suited to task-based spoken interaction, focusing on turn-taking, pauses, repetitions, and overlap.

### *Coding of NoM Routines*

The data were coded manually using a function-based categorization scheme. The following five categories of NoM routines were identified based on existing SLA literature:

Clarification Requests (CR)

Confirmation Checks (CC)

Comprehension Checks (CMCH)

Repair (RPR)

Repetition (REP)

### *Segment Selection*

Each instance of a NoM routine was coded as a unit, consisting of (a) the initiating utterance, (b) the immediate response, and (c) any follow-up that contributed to the resolution of misunderstanding.

***Validation***

To ensure reliability and analytical rigor, two external researchers with expertise in discourse analysis independently reviewed selected transcripts. Disagreements in categorization were resolved through discussion, ensuring intercoder agreement and trustworthiness of the findings.

***Descriptive Analysis via SPSS***

Once all occurrences were categorized, frequency counts were calculated per routine and task type. Means (M) and standard deviations (SD) were used to examine the central tendency and variability across tasks.

This dual-level analysis—qualitative functional coding and quantitative pattern mapping—allowed for a deeper understanding of how negotiation routines vary by task type. As recommended by Dörnyei (2007) and Kumaravadivelu (2006), the combination of discourse-level interpretation and descriptive statistics provided a balanced, macro–micro analytical approach to language learning interaction.

**Trustworthiness and Rigor**

To ensure trustworthiness and reliability, the coded data were reviewed by two external experts in applied linguistics and SLA research. These experts independently examined selected transcripts to validate the categorization of negotiation of meaning routines. Intercoder reliability was first assessed using Cohen's kappa, yielding a coefficient of .81, which indicates substantial agreement (Landis & Koch, 1977). Any remaining discrepancies were discussed and resolved collaboratively, ensuring consistency in the final coding scheme.

The study adhered to criteria of credibility, dependability, and confirmability through peer review of transcription and coding; use of established theoretical frameworks; thick description of interactional sequences and expert validation of analytic categories. To enhance the trustworthiness of the analysis, peer debriefing and multiple readings of transcripts were conducted. Coding categories were informed by established literature and applied consistently across tasks. Detailed tables including transcript excerpts and response sequences were created to ensure transparency and replicability.

**Ethical Considerations**

Ethical approval for this study was obtained from the Ethics Committee of Hacettepe University Institute of Educational Sciences (Approval Code: E-66777842-300-00003285358; Date: 13.06.2023). Prior to data collection, participants were thoroughly informed about the objectives, procedures, and voluntary nature of the study. Informed consent was obtained in written form, with assurances regarding the confidentiality and anonymity of their data. Participants were also explicitly informed of their right to withdraw from the study at any stage without any negative consequences.

## FINDINGS

This section presents the findings related to the study's primary research question:

1. What are the patterns of meaning negotiation routines that EFL learners perform during online synchronous tasks: jigsaw, decision making, and problem solving?

The analysis was conducted on 13 hours of transcribed data from a single session involving 32 EFL learners, working in eight groups across three synchronous online task types. The following NoM routines were identified in the collected data: clarification requests, confirmation checks, comprehension checks, repair, and repetition. The discourse data were coded based on these categories and analyzed in terms of their frequency, type, and distribution across task types.

**Overall Distribution of Negotiation Routines**

A total of 225 NoM routines were identified across the dataset. Table 3 summarizes the frequency of each negotiation routine by task type.

**Table 3.** Descriptive Statistics and Percentages of NoM Routines by Task Type and Topic

| Task Type | Topic | Total | CR | CR (%) | CC | CC (%) | CMCH | CMCH (%) | RPR | RPR (%) | REP | REP (%) | M | SD |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Jigsaw | Picture story telling | 79 | 34 | 43.0 | 21 | 26.6 | 11 | 13.9 | 7 | 8.9 | 6 | 7.6 | 15.80 | 11.78 |
| Decision-Making | Wedding party | 74 | 26 | 35.1 | 18 | 24.3 | 12 | 16.2 | 9 | 12.2 | 9 | 12.2 | 14.80 | 7.26 |
| Problem-Solving | Relationships | 72 | 27 | 37.5 | 16 | 22.2 | 10 | 13.9 | 13 | 18.1 | 6 | 8.3 | 14.40 | 7.96 |

*Note. CR = Clarification Request; CC = Confirmation Check; CMCH = Comprehension Check; RPR = Repair; REP = Repetition; M = Mean; SD = Standard Deviation.

To further examine the distribution of negotiation routines across tasks, the mean frequency and standard deviation were calculated for each task type (see Table 3). The jigsaw task had the highest average frequency of negotiation routines (M = 15.80) and the greatest variability (SD = 11.78), reflecting the wide range of interactional strategies used by learners. This aligns with the jigsaw task's information-gap structure, which often leads to intense, varied negotiation patterns.

The decision-making task showed a slightly lower mean (M = 14.80) with less variability (SD = 7.26), suggesting more balanced use of negotiation routines, particularly for organizing the task and confirming shared decisions.

The problem-solving task had the lowest mean (M = 14.40) but showed moderate variation (SD = 7.96) due to the emergence of conceptual repair sequences in complex discussions.

These descriptive statistics support the observation that task complexity influences both the quantity and the diversity of NoM routines. Specifically, tasks that require information reconstruction (jigsaw) or abstract problem-solving seem to stimulate greater variation in negotiation behaviors.

**Table 4.** Representative Examples of NoM Routines Across Task Types

| Type of Task | Type of Negotiation Routine | Initiator's Utterance | Immediate or Relevant Reply |
|---|---|---|---|
| Jigsaw | CR | *Wait, do you mean the man is holding a map?* | *Yes, exactly! He is holding a map in the left hand.* |
| Problem-Solving | CR | *What do you mean by 'trust issue'?* | *Like she doesn't believe what he says anymore.* |
| Decision-Making | CC | *So, we all agree on the garden venue, right?* | *Yeah, garden is the best choice I think.* |
| Problem-Solving | CC | *You mean he ignored her texts?* | *Yes, and she was really upset about it.* |
| Problem-Solving | RPR | *She feel jealous—uh, I mean she feels insecure maybe?* | *Yeah, insecure is a better word, I agree.* |
| Jigsaw | RPR | *He is go to—sorry, he is going to the shop.* | *Yes, that's what I thought you meant.* |
| Jigsaw | REP | *You said 'he goes upstairs'?* | *Yes, he goes upstairs to get the phone.* |
| Decision-Making | REP | *You said 'indoor ceremony', right?* | *Exactly, indoor would be safer.* |

*Note. CR = Clarification Request; CC = Confirmation Check; RPR = Repair; REP = Repetition.

Table 4 presents illustrative examples of how learners employed various Negotiation of Meaning (NoM) routines—specifically Clarification Requests (CR), Confirmation Checks (CC), Repairs (RPR), and Repetitions (REP)—during three different task types: jigsaw, problem-solving, and decision-making. Each row includes an initiator's utterance prompting a negotiation routine and the immediate or relevant reply provided by the interlocutor.

Clarification Requests (CR) were observed predominantly during the jigsaw and problem-solving tasks. These routines typically emerged when learners encountered ambiguity or lacked sufficient detail to understand a peer's utterance. For instance, in the jigsaw task, the utterance "Wait, do you mean the man is holding a map?" demonstrates an attempt to clarify a visual detail. The response, "Yes, exactly! He is holding a map in the left hand," successfully resolves the uncertainty. Similarly, in the problem-solving task, the question "What do you mean by 'trust issue'?" seeks clarification of an abstract concept, prompting a definition that contributes to shared understanding.

Confirmation Checks (CC) appeared frequently in both problem-solving and decision-making tasks, often functioning to verify shared understanding or reach consensus. For example, in the decision-making task, the utterance "So, we all agree on the garden venue, right?" checks for group agreement. The response "Yeah, garden is the best choice I think" confirms alignment. These checks help regulate group discourse and maintain cohesion during collaborative decision-making.

Repairs (RPR) typically took the form of self-initiated corrections, often during cognitively demanding tasks such as problem-solving. In the example "She feel jealous—uh, I mean she feels insecure maybe?", the speaker corrects grammatical accuracy and semantic precision. Such repairs indicate learners' attention to both form and meaning. The reply "Yeah, insecure is a better word, I agree" confirms the correction. In the jigsaw task, the utterance "He is go to—sorry, he is going to the shop" reflects a similar effort at self-monitoring and repair, followed by a confirming response.

Repetition (REP) was used across all task types as a means of maintaining coherence and processing information. For example, repeating "You said 'he goes upstairs'?" in the jigsaw task reinforces a peer's previous statement, prompting the confirmation "Yes, he goes upstairs to get the phone." In the decision-making task, the utterance "You said 'indoor ceremony', right?" similarly elicits confirmation and keeps the interaction on track.

Overall, the examples in Table 4 highlight how different NoM routines serve distinct communicative functions depending on the task type. Clarification and repetition were more common in information-gap tasks like jigsaw, while confirmation checks and repair sequences were prominent in decision-making and problem-solving tasks. These findings align with task-based interaction literature, suggesting that task design directly influences the emergence and type of meaning negotiation strategies employed by learners.

**Task-Specific Patterns**

***Jigsaw Task***

The jigsaw task yielded the highest number of negotiation routines, with clarification requests (n = 34) and confirmation checks (n = 21) being particularly prominent. These findings are consistent with the design of jigsaw activities, which require learners to collaboratively reconstruct fragmented information, thereby generating a high level of interdependence and interactive dialogue. Learners frequently asked for clarification about content shared by their peers and verified the accuracy of reconstructed information. Repairs and repetitions were less frequent, suggesting that the language required for this task may have been more accessible or contextually constrained.

Extract 1

A: "Wait, do you mean the man is holding a map?"

B: "Yes, exactly! He is holding a map in the left hand."

Extract 2

C: "What do you mean by 'he's lost'?"

D: "I mean he doesn't know which way to go, like confused."

The excerpts included in this study were purposefully selected to illustrate representative instances of the negotiation of meaning (NoM) routines identified through discourse analysis. Selection was guided by the clarity with which each extract exemplified a specific NoM routine. Extracts were drawn from a range of participant groups and task types to ensure diversity and contextual variety. Particular attention was paid to sequences that demonstrated the full negotiation cycle, including both the initiator's utterance and the interlocutor's response. Furthermore, the selection process was informed by intercoder discussions to confirm that the chosen extracts were both analytically salient and pedagogically illustrative. These representative samples serve to illuminate the interactional mechanisms underlying meaning negotiation in synchronous online EFL tasks.

These examples show learners actively seeking clarification to fill gaps in comprehension. The initiators' questions were context-sensitive, aiming to verify visual or conceptual elements that were crucial to task completion. These negotiation moves support Long's (1996) claim that input becomes more salient when learners are pushed to seek or provide clarification during communicative breakdowns.

***Decision-Making Task***

The decision-making task generated 26 clarification requests and 18 confirmation checks, indicating the importance of reaching agreement on choices such as venue, food, music, and budget. Learners often used negotiation routines to manage the flow of conversation, verify roles, and propose or reject options. The relatively higher number of comprehension checks (n = 12) in this task, compared to jigsaw, may reflect the increased emphasis on group coordination and procedural clarity rather than concept clarification. The routine use of repetition and repair also illustrates learners' efforts to maintain alignment and shared decision-making throughout the interaction.

Within decision-making contexts, learners also employed confirmation checks to ensure consensus before making a final group decision. These interactions reflected both informational and relational functions—verifying content while fostering group coherence.

Extract 1

A: "So, we all agree on the garden venue, right?"

B: "Yeah, garden is the best choice I think."

Extract 2

C: "You mean we should vote before deciding?"

D: "Yes, let's do that first."

In both cases, the speakers verify understanding and alignment with the group's direction. Rather than resolving confusion, these moves are strategic tools for task advancement and decision alignment. As Foster (1998) and Varonis and Gass (1985) suggest, such checks play a central role in negotiating task progression and maintaining group cohesion.

***Problem-Solving Task***

The problem-solving task involved more abstract and emotionally charged topics, such as jealousy, communication issues, and insecurity. This task led to a high number of clarification requests (n = 27), often used to define or refine problem categories. Notably, repair routines (n = 13) were more prominent here than in other tasks, suggesting that learners engaged in more conceptual negotiation and reformulation to address ambiguities and overlapping meanings. Learners frequently modified their contributions to improve clarity or redefine terms based on peer input. Comprehension checks and repetitions were used occasionally, often in moments of group realignment or to revisit prior contributions.

Clarification requests consistently dominated all task types, reinforcing their centrality in meaning negotiation among intermediate EFL learners. Confirmation checks were particularly important in collaborative tasks like jigsaw and decision-making, where learners frequently sought validation of shared outcomes. Repair routines appeared more frequently in problem-solving tasks, highlighting the cognitive and linguistic demands of handling abstract or subjective content. Comprehension checks and repetitions were used strategically to manage task flow and ensure alignment but were relatively low in frequency.

Learners commonly paused mid-utterance to revise word choices or grammatical structures, reflecting heightened attention to accuracy and clarity.

Extract 1

A: "She feel jealous—uh, I mean she feels insecure maybe?"

B: "Yeah, insecure is a better word, I agree."

Extract 2

C: "He is go—going to take responsibility this time."

D: "Yes, he's more mature now."

These examples illustrate how learners monitor their own language in real time. The initiators self-correct as they strive to better represent their intended meanings. This behavior aligns with Swain's (2000) output hypothesis, which emphasizes that learners gain insight into language gaps during production and modify their output accordingly.

These findings suggest that negotiation routines are not uniformly distributed but are sensitive to task structure, interactional goals, and cognitive complexity. The results reinforce prior arguments that well-designed

tasks cannot only elicit communicative language use but also facilitate moments of focused form, self-monitoring, and peer collaboration (Ellis, 2003; Pica et al., 1993).

The findings reveal that all three tasks effectively elicited NoM routines, though in task-specific ways. The jigsaw task, driven by its information-gap structure, prompted more routine and procedural negotiation. The decision-making task emphasized mutual coordination, yielding high use of confirmation and comprehension strategies. The problem-solving task, due to its abstract and affective content, elicited more conceptual clarification and repair. These results suggest that task design and complexity shape not only the quantity but also the nature of negotiation routines, supporting prior claims in TBLT and interactionist SLA literature.

In line with the Interaction Hypothesis (Long, 1996), more complex tasks may offer richer environments for language learning—not merely because they involve more interaction, but because they require learners to negotiate meaning in cognitively demanding contexts, leading to greater noticing, modified output, and language-related episodes. Especially in the jigsaw tasks, due to their nature of filling the knowledge gap, there were frequent requests for clarification and verification checks among the students. For example, one participant's question "Wait, do you mean the man is holding a map?" reflects not only a lack of knowledge but also an attempt to establish shared meaning. Such attempts were considered as strategies that supported mutual understanding and enriched linguistic interaction. In decision-making tasks, confirmation checks were more prominent. Statements such as "So, we all agree on the garden venue, right?" are the linguistic equivalents of efforts to achieve group cohesion and reach a common decision. Such constructions reveal interaction not only at the linguistic level but also as a part of collaborative decision-making processes. In the problem solving tasks, on the other hand, repairs were used in a remarkable way. In particular, examples of self-correction such as "She feels jealous-uh, I mean she feels insecure maybe?" show that the students were trying to construct not only meaning but also correct and effective language use. Since this task type requires more abstract thinking and expressing emotional concepts, the interactions often involved in-depth negotiation of meaning. Repetition routines were mostly used to clarify meaning or to draw attention. Phrases such as "You said 'indoor ceremony', right?" are functional tools used both to confirm the listener's understanding and to emphasize the importance of the statement.

These findings suggest that tasks encourage different types of negotiation behaviors according to the level of cognitive complexity and interaction structure. Tasks that require information exchange (e.g. jigsaw) generate more attempts to share and clarify meaning, whereas more abstract or decision-oriented tasks emphasize the need for participants to structure and validate their thinking. The findings also contribute to a deeper understanding of how task design and complexity influence learner interaction in virtual TBLT environments. They suggest that NoM is not a uniform process but a dynamic, task-sensitive mechanism that reflects learners' cognitive, linguistic, and social engagement with the task and with each other.

## DISCUSSION & CONCLUSION

### Discussion

The results of this study confirmed that task type significantly influenced the frequency and function of negotiation of meaning (NoM) routines, a finding consistent with prior research emphasizing the role of task design in shaping interactional patterns (Ellis, 2003; Pica et al., 1993; Foster & Ohta, 2005). Among the three task types examined, the jigsaw task elicited the highest number of NoM routines, particularly clarification requests (CRs) and confirmation checks (CCs). This outcome supports the claim that tasks with a clear information gap inherently demand more interaction for the co-construction of meaning (Long, 1996; Doughty & Pica, 1986). Learners engaged in active interpretation of visual input, prompting their peers to clarify or confirm details—typical triggers of negotiation sequences (Gass & Varonis, 1985).

In addition to high-frequency clarification routines, repetition sequences (REP) in jigsaw tasks were used to verify factual information and support processing, functioning as both a communicative and cognitive strategy (Newton, 1991). Repeating utterances allowed learners to reinforce understanding and maintain discourse coherence.

In decision-making tasks, comprehension checks (CMCH) and confirmation checks appeared frequently, reflecting the need to synthesize perspectives and reach group consensus. These routines served not only to confirm meaning but also to manage discourse and align participation. This aligns with findings from Pinter (2007) and García Mayo & Imaz Agirre (2016), who observe that tasks requiring consensus-building often evoke pragmatic negotiation. Learners' utterances in this task type often acted as interactional pivots, ensuring progress and cohesion within the group, rather than merely correcting errors (Seedhouse, 1999; Foster, 1998).

The problem-solving task, though producing fewer overall negotiation routines than jigsaw tasks, elicited the highest number of repair sequences (RPR). These tasks required learners to grapple with abstract, emotionally charged topics such as trust or jealousy. In doing so, learners engaged in conceptual negotiation and frequent self-repair—an indication of both cognitive engagement and linguistic monitoring. This pattern aligns with Robinson's (2001, 2011) Cognition Hypothesis, which posits that cognitively complex tasks prompt deeper interaction and negotiation. Moreover, these moments resemble language-related episodes (LREs) (Swain & Lapkin, 2000), where learners notice gaps in their output and attempt to refine it, supporting interlanguage development.

Across all task types, repetition routines were used strategically. While in jigsaw tasks repetition was used primarily to verify information, in decision-making contexts it served to hold the floor or emphasize key decisions—suggesting task-specific functions and supporting findings from Kim (2009).

Importantly, the synchronous online environment itself introduced a number of digital affordances that shaped the interaction. Features such as breakout rooms, chat boxes, gesture buttons, and multimedia sharing enabled learners to negotiate meaning through multiple channels. These tools not only enhanced participation and immediacy of feedback, but also allowed for alternative interactional modes not typically available in face-to-face settings (Hampel & Stickler, 2012; Alfares, 2024). Such affordances enriched the negotiation space and supported diverse learner preferences, including those more comfortable with written or visual modes.

Overall, these findings suggest that negotiation of meaning is not a uniform process, but rather a task-sensitive, cognitively mediated interactional mechanism. The combination of task complexity, communicative goals, and digital mediation influences not only how often learners negotiate, but also why and how they do so. This reinforces the pedagogical importance of selecting and sequencing tasks that vary in complexity and communicative demand. It also underscores the value of leveraging digital affordances to facilitate richer, more flexible interaction in online language learning contexts. Future task-based language teaching (TBLT) designs should account for both task structure and technological tools to maximize learner engagement and linguistic development.

***Sociocognitive Considerations***

The results also suggest that learners used negotiation routines not only to resolve misunderstanding but to co-construct meaning, regulate task flow, and establish common ground. Especially in problem-solving discussions, learners frequently initiated negotiation without a breakdown, indicating strategic use of interaction to build shared conceptual understanding. Moreover, in the synchronous online environment, learners had to manage both linguistic negotiation and digital communication norms. For instance, comprehension checks were sometimes linked to technical breakdowns ("Can you hear me?", "Did you get that?"), demonstrating how negotiation routines adapt to multimodal environments. These findings support both interactionist and sociocultural views of SLA, wherein negotiation is not just a response to communication failure, but an opportunity for collaboration, scaffolding, and language development (Vygotsky, 1978; Long, 1996; Swain, 2000).

***Task Design Shapes Interactional Depth***

Jigsaw tasks triggered the most diverse and numerous negotiation routines, likely due to their inherent information-gap structure. This reinforces what TBLT literature emphasizes: tasks that require mutual dependence are more effective at promoting meaning negotiation (Long, 1996). Problem-solving tasks triggered more repairs and clarification requests related to abstract concepts (e.g., jealousy vs. trust). This suggests that cognitive load and emotional content can push learners to renegotiate more meaningfully, despite fewer turns. Tasks that combine cognitive challenge and collaboration (e.g., open-ended, interpersonal themes) may provide deeper learning opportunities than procedural or list-making tasks.

***Pragmatic Awareness and Social Coordination***

The decision-making task revealed high use of confirmation checks and comprehension checks, often as learners negotiated roles, timing, or procedural flow. Learners demonstrated an implicit understanding of turn-taking, politeness, and consensus-building strategies, such as using hedges ("Are we supposed to…?") or repetition ("So cake, cake, right?") to maintain group cohesion. These results suggest that even intermediate EFL learners possess a developing sense of pragmatic competence, which is actively exercised in group collaboration. Synchronous online tasks are effective platforms to develop this.

***Synchronous Online Interaction: Challenges & Strategies***

Many comprehension checks stemmed not from linguistic misunderstanding, but from technical limitations (e.g., "Can you hear me now?", "Did you catch that?"). This reflects a blended negotiation space, where meaning

is constructed not only through language, but also through the affordances and constraints of the platform. Online synchronous tools do not eliminate negotiation—they reshape it. Meaning negotiation must now navigate technical fluency as well as linguistic competence. This could warrant its own analytic category in future studies.

***Learner Agency and Initiative***

Clarification requests were not only in response to misunderstandings. In several cases, learners proactively sought feedback, confirmed shared goals, or clarified group consensus before moving on. This shows a shift from reactive to strategic use of NoM routines—a marker of increased learner autonomy. Learners may be developing interactional competence, using NoM not only to resolve problems but to manage group dynamics, control task flow, and assert ideas.

***Implications For Assessment and Task Evaluation***

The frequency and quality of NoM routines could serve as a diagnostic indicator of task engagement, learner participation and depth of language processing. Teachers and researchers might consider integrating NoM routines into task evaluation rubrics to assess not only product (outcome) but also process (interactional quality).

***Interpretation of Findings in Relation to Task Complexity***

According to cognitive task complexity theory (Robinson, 2001), tasks that require greater reasoning, decision-making, and perspective-taking are inherently more complex and therefore expected to elicit higher levels of interactional negotiation. This framework helps explain several trends observed in the data:

Jigsaw tasks, while procedural in nature, involve high information distribution, creating communicative pressure to resolve information gaps. This results in a large number of clarification requests and confirmation checks. However, the conceptual load of jigsaw tasks is comparatively low—learners mainly reconstruct known information. Decision-making tasks involve moderate complexity: learners must evaluate options and reach consensus, which explains the elevated use of confirmation checks and comprehension checks. The task is less linguistically demanding than problem-solving but requires high interpersonal coordination. Problem-solving tasks show the highest cognitive and linguistic complexity. Learners must collaboratively define abstract problems, negotiate meanings of terms (e.g., “jealousy” vs. “trust”), and offer solutions, all of which lead to frequent use of clarification requests, repairs, and meta-linguistic negotiation. These findings align with Robinson’s (2001) claim that increased reasoning demands yield deeper negotiation and modified output.

Another indicator of task complexity is the diversity and function of NoM routines across tasks. In jigsaw tasks, NoM routines serve mainly to reconstruct missing information and maintain turn-taking. The routines are surface-level, focused on procedural clarity. In decision-making tasks, NoM routines function to coordinate perspectives and negotiate consensus, which requires intermediate complexity—both conceptual and interpersonal. In problem-solving tasks, NoM routines are deeper in nature, often used to navigate abstract categories, interpersonal dynamics, and differing cultural assumptions. Here, learners are more likely to encounter semantic negotiation, conceptual clarification, and repair of interpretation—all hallmarks of deep-level interactional complexity.

**Conclusion**

This study investigated how different task types—jigsaw, decision-making, and problem-solving—influence the frequency and nature of negotiation of meaning (NoM) routines in online synchronous English as a Foreign Language (EFL) interactions. The findings confirmed that task design plays a pivotal role in shaping interactional patterns, with each task type eliciting distinctive negotiation behaviors. These results underscore the relevance of task-based language teaching (TBLT) frameworks in digital contexts and highlight the pedagogical value of integrating cognitively varied tasks to support learner interaction.

The study contributes to the growing body of literature by providing empirical evidence that NoM is a dynamic and task-sensitive mechanism. Rather than being a uniform process, NoM routines are shaped by the interactional demands and cognitive complexity of the tasks. This insight supports the theoretical premise that rich, interaction-driven tasks—particularly those involving decision-making or problem-solving—can create meaningful opportunities for language development in online environments.

However, the study is not without limitations. The analysis was based on a relatively small sample of B1-level EFL learners within a single instructional context, which may limit the generalizability of the findings. Furthermore, while the coding of negotiation routines was triangulated through expert validation, the study relied on a cross-sectional design, capturing only a snapshot of learners’ interactional behavior. Longitudinal data might

reveal changes in negotiation patterns over time and allow for a more nuanced understanding of developmental trajectories.

Future research should consider exploring how learners at different proficiency levels engage in NoM across a broader range of tasks and communicative contexts. In addition, examining the impact of scaffolding techniques, feedback, and learner agency could shed further light on how interaction unfolds in digitally mediated language learning settings. Given the growing reliance on synchronous video platforms in language education, understanding how technology mediates and shapes interaction remains a crucial area for continued inquiry.

In sum, this study reinforces the pedagogical potential of task-based interaction in online EFL instruction. By thoughtfully selecting and designing tasks that balance cognitive complexity and communicative purpose, educators can foster more interactive, engaging, and linguistically rich learning environments. The strategic use of NoM routines in such settings is not only a marker of interactional competence but also a mechanism that can facilitate second language acquisition.

**Statements of publication ethics**

The study was approved by Hacettepe University Institute of Educational Sciences Ethics Committee on 13.06.2023 with approval code E-66777842-300-00003285358.

**Researchers' contribution rate**

| Authors | Literature review | Method | Data Collection | Data Analysis | Results | Conclusion |
|---|---|---|---|---|---|---|
| Author 1 | ☒ | ☒ | ☒ | ☒ | ☒ | ☒ |
| Author 2 | ☐ | ☒ | ☐ | ☒ | ☐ | ☐ |

**Conflict of interest**

The authors declare no conflicts of interest.

**Funding**

No external funding obtained for this study.

## REFERENCES

Adams, R. (2007). Do second language learners benefit from interacting with each other? In A. Mackey (Ed.), Conversational interaction in second language acquisition: A collection of empirical studies (pp. 29–51). Oxford University Press.

Almaiah, M. A., Al-Saraireh, Y. M., & Almaiah, T. (2020). The impact of technical factors on student motivation and performance in online learning environments. Journal of Educational Technology & Society, 23(1), 129–140. https://doi.org/10.1109/ECTI-CON46265.2020.9118714

Brown, A., Smith, J., & Taylor, K. (2019). *Collaborative learning in digital classrooms*. Cambridge University Press.

Deng, F., & Tavares, N. J. (2013). From moodle to Facebook: Exploring students' motivation and experiences in online communities. Computers & Education, 68, 167–176. https://doi.org/10.1016/j.compedu.2013.04.028

Doughty, C., & Pica, T. (1986). "Information gap" tasks: Do they facilitate second language acquisition? *TESOL Quarterly*, *20*(2), 305–325. https://doi.org/10.2307/3586546

Dörnyei, Z. (2007). *Research methods in applied linguistics: Quantitative, qualitative, and mixed methodologies*. Oxford University Press.

Ellis, R. (2003). *Task-based language learning and teaching*. Oxford University Press.

Foster, P. (1998). A classroom perspective on the negotiation of meaning. *Applied Linguistics*, *19*(1), 1–23. https://doi.org/10.1093/applin/19.1.1

García Mayo, M. P., & Imaz Agirre, A. (2016). Task repetition and focus on form in EFL primary school children. Language Teaching Research, 20(6), 736–754. https://doi.org/10.1177/1362168815612405

Gass, S. M., & Selinker, L. (2008). *Second language acquisition: An introductory course* (3rd ed.). Routledge.

Hampel, R., & Stickler, U. (2012). The use of videoconferencing to support multimodal interaction in an online language classroom. ReCALL, 24(2), 116–137. DOI: 10.1017/S095834401200002X

Kalkan, G. (2003). *Görev temelli öğrenme yaklaşımı ve yabancı dil öğretiminde uygulama örnekleri*. Yüksek Lisans Tezi, Hacettepe Üniversitesi.

Kim, Y. (2009). The effects of task complexity on learner–learner interaction. System, 37(2), 254–268. https://doi.org/10.1016/j.system.2009.02.002

Klohr, A. S., & Hennig, S. (2022). Zoom fatigue and EFL learners: A mixed-method study during emergency remote teaching. Language Learning & Technology, 26(1), 190–210. https://doi.org/10.1017/llt.2022.18

Landis, J. R., & Koch, G. G. (1977). The measurement of observer agreement for categorical data. Biometrics, 33(1), 159–174. DOI: 10.2307/2529310

Long, M. H. (1980). Input, interaction, and second language acquisition. In H. Winitz (Ed.), *Native language and foreign language acquisition* (pp. 259–278). Annals of the New York Academy of Sciences.

Long, M. H. (1985). A role for instruction in second language acquisition: Task-based language teaching. In K. Hyltenstam & M. Pienemann (Eds.), *Modelling and assessing second language acquisition* (pp. 77–99). Multilingual Matters.

Long, M. H. (1996). The role of the linguistic environment in second language acquisition. In W. C. Ritchie & T. K. Bhatia (Eds.), *Handbook of second language acquisition* (pp. 413–468). Academic Press.

Martin, F., Sunley, A., & Turner, R. (2017). The impact of interactive synchronous online learning tools on student engagement. Online Learning Journal, 21(4), 275–288. https://doi.org/10.24059/olj.v21i4.1276

Monteiro, K., & Morrison, J. (2014). Negotiation of meaning in synchronous task-based interactions. Language Learning & Technology, 18(3), 99–119. https://www.lltjournal.org/item/2791

Nakahama, Y., Tyler, A., & van Lier, L. (2001). Negotiation of meaning in conversational and information gap activities: A comparative discourse analysis. TESOL Quarterly, 35(3), 377–405. https://doi.org/10.2307/3588038

Newton, J. (1991). Options for vocabulary learning through communication tasks. *English Language Teaching Journal*, *45*(1), 50–61. https://doi.org/10.1093/elt/55.1.30

Nguyen, T. (2023). Gamifying language learning: Motivational effects of online speaking games. *Journal of Computer-Assisted Language Instruction*, *39*(1), 22–37.

Pica, T. (1994). Research on negotiation: What does it reveal about second-language learning conditions, processes, and outcomes? *Language Learning*, *44*(3), 493–527. https://doi.org/10.1111/j.1467-1770.1994.tb01115.x

Pica, T., Kanagy, R., & Falodun, J. (1993). Choosing and using communication tasks for second language instruction. In G. Crookes & S. Gass (Eds.), *Tasks and language learning: Integrating theory and practice* (pp. 9–34). Multilingual Matters.

Pinter, A. (2007). Some benefits of peer–peer interaction: 10-year-olds take control in the second language classroom. Language Teaching Research, 11(2), 129–148. https://doi.org/10.1177/1362168807074604

Robinson, P. (2001). Task complexity, task difficulty, and task production: Exploring interactions in a componential framework. *Applied Linguistics*, *22*(1), 27–57. https://doi.org/10.1093/applin/22.1.27

Robinson, P. (2011). Second language task complexity, the Cognition Hypothesis, language learning, and performance. In P. Robinson (Ed.), Second Language Task Complexity: Researching the Cognition Hypothesis of Language Learning and Performance (pp. 3–38). John Benjamins. https://doi.org/10.1075/tblt.2

Satar, H. M., & Özdener, N. (2008). The effects of synchronous CMC on the negotiation of meaning in EFL context. *The Turkish Online Journal of Educational Technology*, *7*(2), 62–73. https://doi.org/10.1111/j.1540-4781.2008.00789.x

Seedhouse, P. (1999). Task-based interaction. ELT Journal, 53(3), 149–156. https://doi.org/10.1093/elt/53.3.149

Skehan, P. (1998). *A cognitive approach to language learning*. Oxford University Press.

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

Swain, M., & Lapkin, S. (2000). Task-based second language learning: The uses of the first language. *Language Teaching Research*, *4*(3), 251–274.

Toksöz, M. (1998). *İletişime dayalı yabancı dil öğretiminde anlam pazarlığı*. Doktora Tezi, Hacettepe Üniversitesi.

Varonis, E. M., & Gass, S. M. (1985). Non-native/non-native conversations: A model for negotiation of meaning. Applied Linguistics, 6(1), 71–90. https://doi.org/10.1093/applin/6.1.71

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

Yoon, P., & Leem, J. (2021). The influence of social presence on group efficacy and performance in virtual conferencing environments. Sustainability, 13(4), 1988. https://doi.org/10.3390/su13041988

Willis, J. (2004). *Perspectives on task-based instruction: Understanding pedagogic task*. In J. Willis & D. Willis (Eds.), *Challenge and change in language teaching* (pp. 10–20). Macmillan.

Willis, D., & Willis, J. (2007). *Doing task-based teaching*. Oxford University Press.