

**T.C. KOCAELİ ÜNİVERSİTESİ  
SOSYAL BİLİMLER ENSTİTÜSÜ  
YABANCI DİLLER EĞİTİMİ ANABİLİM DALI  
İNGİLİZ DİLİ EĞİTİMİ BİLİM DALI**

**DYNAMIC ASSESSMENT OF THE USE OF METADISCOURSE  
MARKERS IN EFL WRITING**

**YÜKSEK LİSANS TEZİ**

**BÜŞRA ULU**

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*There is no secret ingredient.*

Büşra Ulu  
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## ÖZET

Üstsöylem belirleyicileri, yazar ve okuyucular arasındaki iletişimi geliştiren araçlardır. Bu çalışma, Vygotsky' nin potansiyel gelişim alanı içerisindeki kooperatif diyalog fikrine dayanan etkileşimli dinamik değerlendirme yoluyla İngilizceyi yabancı dil olarak öğrenen öğrencilerin yazı içerisindeki etkileşimli üstsöylem belirleyicilerini kullanmalarındaki mikrogenetik gelişimi araştırmaktadır. Ayrıca, bu çalışma öğrencilerin dinamik değerlendirme uygulaması hakkındaki algılarını ortaya çıkarmayı amaçlamaktadır. Katılımcılar, İstanbul'daki bir vakıf üniversitenin hazırlık programına kayıtlı, İngilizce dil seviyesi orta-alt düzey olan yedi Türk öğrencidir. Veriler, öğrencilerin yazdığı düşünce paragrafları, yarı-yapılandırılmış görüşme ve yansıtma yazıları ile toplanmıştır. Elde edilen veriler mikrogenetik ve tematik analiz kullanılarak NVivo 11'de analiz edilmiştir. Bulgular dinamik değerlendirmenin öğrencilerin üst söylem belirleyicilerini kullanımı ve öz düzenlemelerini geliştirmede etkili olduğunu göstermiştir. Aynı zamanda, öğrencilerin değerlendirme ve öğretimin birleştirilmesi hakkında olumlu tutumlara sahip olduğu bulunmuştur.

**Anahtar Kelimeler:** üstsöylem belirleyicileri, İngilizceyi yabancı dil olarak öğrenenlerin yazma becerisi, dinamik değerlendirme, mikrogenetik gelişme



## ABSTRACT

Metadiscourse markers are devices that enhance the interaction between the writer and the readers. This study primarily investigates microgenetic development of EFL learners in the use of interactive metadiscourse markers in writing through interactionist dynamic assessment, which is built upon Vygotsky's idea of cooperative dialogue in Zone of Proximal Development (ZPD). It also intends to find out the perceptions of learners towards dynamic assessment implementation. The participants of the study were seven pre-intermediate Turkish students enrolled in a preparatory school of a foundational university in İstanbul. The data were collected through opinion paragraphs that students wrote, semi-structured interview and prompted reflection. The obtained data were analyzed by using microgenetic and thematic analysis in NVivo 11. The findings demonstrated that DA was effective in developing learners' use of the metadiscourse markers and their self-functioning. Also, it was found that students had favorable perceptions about integration of assessment and instruction.

**Keywords:** metadiscourse markers, EFL writing, dynamic assessment, microgenetic development

## LIST OF ABBREVIATIONS

<b>CEFR:</b>	<b>: The Common European Framework of Reference</b>
<b>BLWC</b>	<b>: Bilgi Writing and Learning Center</b>
<b>DA</b>	<b>: Dynamic Assessment</b>
<b>EFL</b>	<b>: English as a Foreign Language</b>
<b>G-DA</b>	<b>: Group-based Dynamic Assessment</b>
<b>L1</b>	<b>: First Language</b>
<b>L2</b>	<b>: Second language</b>
<b>MLE</b>	<b>: Mediated Learning Experience</b>
<b>SCT</b>	<b>: Sociocultural theory</b>
<b>SFG</b>	<b>: Systematic Functional Grammar</b>
<b>ZPD</b>	<b>: Zone of Proximal Development</b>

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## INTRODUCTION

Writing is an interaction between the writer and the readers. Metadiscourse is one of the ways that contribute to this interaction through writing. It allows the writers to organize the discourse and show their stance. With the metadiscourse devices, the writer provides hints to the readers showing the relations with the ideas, parts of the text, his or her beliefs and guidance for the interpretation of the information in the text. However, most of the language learners experience trouble with using those resources appropriately, and they tend to deviate from native conventions of writing. Despite learners' difficulties and importance of metadiscourse, it is not given adequate attention, and is not instructed at schools.

This study integrates the instruction and assessment of metadiscourse markers by using dynamic assessment (DA) that is originated in Vygotsky's Sociocultural Theory (SCT) and its tenet, Zone of Proximal Development (ZPD) in order to explore and develop learners' potential capabilities. It intends to reveal microgenetic development of pre-intermediate EFL learners regarding the use of metadiscourse markers in writing with implementation of interactionist dynamic assessment. It also aims at revealing the perception of learners about DA intervention.

In this regard, participants wrote four opinion paragraphs, along with their second drafts, which were used as assessment tasks, and mediations were given to those writing tasks depending on the notions of DA. By using a microgenetic analysis that shows changes over a short period of time, the development in learners' abilities was examined. Also, semi-structured interview and reflection were used in order to understand learners' attitudes towards DA, and the data collected from them were scrutinized with thematic analysis.

## **CHAPTER 1**

### **1. INTRODUCTION**

#### **1.1. INTRODUCTION**

This chapter aims at providing an introduction of the current research. It addresses its background, problems that led to this research and overview the research aims highlighting its significance. Subsequently, it presents the operational definitions of the vital concepts employed in the study and its limitations.

#### **1.2. BACKGROUND OF STUDY**

English has become a lingua franca in today's world, and there have been an increasing number of nonnative speakers of English. This popularization has called the attention on the importance of teaching English and raised many questions related to instruction since learners, especially in English as a foreign language (EFL) context, experience many problems in communicating in English. Along with speaking, writing is one of the most challenging skill for them since writing is a cognitive process involving generation and organization of ideas in a way that readers can understand what has been conveyed easily and clearly (Nunan, 2003). Accordingly, writing has a communicative function facilitating interaction between people, and Olshtain (2001) argues that this function should be focused on in teaching pedagogy.

Metadiscourse is one way for attaining this interactive aspect of the texts, and it is of great significance "as a means of facilitating social interactions that contribute to knowledge" and "reflecting writers attempts to negotiate the meaning" in a writing (Hyland, 1998, p.440). It includes a number of devices that organize the structure of information in the text, allow writers to show their voice and build relationship with their readers. However, as Hyland (2010) argues, learners mostly have difficulty with understanding metadiscourse and using metadiscursive resources properly. Especially, it becomes more challenging for foreign and second language learners since metadiscourse varies across cultural communities, and conventions of its use in second language (L2) might contradict with the ones in their first language (L1). As a result of this, most L2 learners have a tendency to deviate from the metadiscoursal norms of

L2 writing. Despite this problem and importance of metadiscourse, instruction of metadiscourse is not prevalent in language classrooms. Yüksel and Kavanoz (2018) assert that it is significant to know challenges learners experience and how they use metadiscourse resources in the second language

Assessment of learning is one of the ways that informs both teachers and learners about the problems occurring in both teaching and learning. However, conventional assessment practices are aloof from the integration of teaching and assessment, and so they cannot get a deeper understanding of the students' learning and performance. Due to this inefficiency, dynamic assessment (DA) is introduced which "assesses an individual's potential for future development by embedding instruction in the assessment process itself" (Lantolf & Poehner, 2010, p.13). DA is built upon the notion within Sociocultural Theory of Vygotsky (SCT) that development is regarded as the product of mediation, interaction with others and engagement with social activities. Hence, DA is a dialogic approach that aims at understanding individual differences among learners and enhancing their performance with concurrent mediation from an expert. The most important tenet of SCT that DA is grounded in is Zone of Proximal Development (ZPD) which is described as the difference between unassisted and assisted performance (Vygotsky, 1978). ZPD reveals both the actual and potential development of the learners. By focusing on the process learners go through rather than final product, DA intends to develop their ZPD. Mediation and students' responsiveness to the mediation help mediators or teachers to interpret students' needs, capabilities and allow them to adjust the mediation to their ZPD.

This study brings metadiscourse and DA together in that it unites teaching and assessment of metadiscourse markers in EFL writing. By this way, the research would reveal both the challenges of EFL students related to metadiscourse markers and help them increase their awareness of them about metadiscourse enhancing their performance with the mediation contingent on learners' ZPD.

### **1.3. STATEMENT OF THE PROBLEM**

The problems that are intended to be dealt with in this research include the challenges of EFL students in Turkey related to metadiscourse markers used in writing. There has been an increasing interest in interactive and rhetorical aspect of writing,

shifting the focus from ideational characteristics of writing (Hyland, 2004). Advocates of this change contend that a text is not solely used to inform readers, and convey propositions, but it is an intrusion of writer and readers. Through the text, the writers both express their voice, and negotiate relations with the readers. For an effective communication with their audience, they attempt to anticipate readers' ideas and engage readers in the text. Writing is, therefore, regarded as interactive communication between writers and their readers (Ädel, 2006; Hyland, 1998; Hyland, 2005; Hyland & Tse, 2004).

Metadiscourse is a relatively new term based on this interpersonal function of writing (Dafouz-Milne, 2008). It is considered to be a significant feature of writing that organizes the text, involves reader into it and expresses stance of the writer. It is, however, a feature that most L2 writers have difficulties with. Many studies have indicated the differences in the use of metadiscoursal resources between native and non-native speakers, and they have found that L2 writers experience problems in employing metadiscourse markers, and they tend to use them inappropriately (Hyland & Milton, 1997; Kobayashi, 2017; Shafique, Shahbaz & Hafeez, 2019; Qin & Ucelli; Tan & Eng, 2014). These findings entails the need for instruction of metadiscourse, yet it is quite scarce for metadiscourse “to be either explicitly taught or adequately covered in writing materials in a way which either shows the systematic effect of particular options or reveals the important interactive nature of discourse” (Hyland, 2005, p.178). As Hyland (2005) argues, it has largely been neglected in language teaching. However, if instructed, learners can improve the efficient use and the appropriateness of metadiscourse markers, and in turn it can bring about improvement in their writing. A lot of studies supported the positive effect of explicit instruction of metadiscourse markers on both their appropriateness and the quality of writing (Asadi, 2018; Intraprawat & Steffensen, 1995; Kaya, 2019; Mardani, 2014; Sancak, 2019; Shaw & Liu, 1998; Xu, 2001).

When it comes to assessing a writing, the most used method is one-way written feedback. However, such a feedback brings limitations in that it prevents teacher and students to discuss the meaning conveyed in the text with collaborative dialogues. White and Ardnt (1991) assert that scaffolding is required so that the learners could receive assistance while developing their competence in writing. Especially, such a



dialogic interaction between the learner and the teacher is essential with the metadiscourse features that learners require more guidance. On that account, this study adapts an innovative way to support EFL students' metadiscourse use and to increase their awareness by integrating instruction and assessment of metadiscourse markers with implementation of interactionist dynamic assessment (DA).

#### **1.4. THE AIMS AND RESEARCH QUESTIONS OF THE STUDY**

The major aim of this study is to investigate the effectiveness of DA in microgenetic development of the use of interactive metadiscourse markers, namely; transition markers, frame markers and code glosses in opinion paragraphs of pre-intermediate prep students. It also aims at finding out the perspectives of students about DA procedure. In order to meet the purposes highlighted, this research sought to address following research questions:

1. Is there a microgenetic development in the practicality of interactive metadiscourse markers in opinion paragraphs throughout DA implementation?
2. Does interactionist DA affect students' correct use of metadiscourse markers in opinion paragraphs?
3. What do mediation moves reveal about their microgenetic development in interactive metadiscourse markers usage?
4. What do the learners' reciprocity acts reveal about their microgenetic development in interactive metadiscourse markers usage?
5. What are the perceptions of students toward DA implementation?

#### **1.5. SIGNIFICANCE OF THE STUDY**

The present study contributes to metadiscourse, dynamic assessment and writing research in various ways. Studies investigating metadiscourse markers in learners' writings have been mostly descriptive, and there has been limited research on the instruction of metadiscourse markers and on the problems of learners in using those devices. Also, very few studies have examined the effective of DA on metadiscourse resources. Hence, its primary significance that this study integrates instruction and assessment of these markers by using DA and intends to explore the problems and development of learners. Another contribution of it is related to the number of

participants. In long-running qualitative investigations like the current study and the ones in which one of DA models was used, sample size has been mostly limited to 2-5 (Antón, 2009; Besharati, 2018; Ebadi & Rahimi, 2019; Kushki, 2012; Shrestha & Coffin, 2010; Rahimi, Kushki, & Nassaji, 2015; Vakili & Ebadi, 2019). However, this one intended to have more reliable findings by involving seven participants. Furthermore, a small number of studies about both metadiscourse markers and DA have been conducted in Turkish context. There is also very limited research investigating the writing skill of Turkish EFL learners. Thus, this study has significance regarding its contribution to the literature in Turkey.

## **1.6. OPERATIONAL DEFINITIONS**

Concepts or terms can be defined in different ways depending on the aims of the study, and these diverse conceptualizations might yield misleading findings. Hence, for a clear interpretation, it is essential to provide operational definitions of the concepts used in this study. The following concepts are mainly used:

### *Metadiscourse*

For purposes of this research, I adopt the definition of metadiscourse put forward by Hyland (2005), whose claims were built on a Hallidayan functional approach to language. For him, “metadiscourse is the cover term for the self-reflective expressions used to negotiate interactional meanings in the text, assisting the writer to express a viewpoint and engage with readers as members of a particular community” (Hyland, 2005, p. 37).

### *Interactive metadiscourse*

In this study, Hyland’s (2005) categorization of metadiscourse markers was used, and interactive metadiscourse helps to organize the information in the text so that the reader can follow the ideas coherently.

### *Zone of proximal development (ZPD)*

Being one of the most significant tenets of SCT, ZPD is the difference between “what a learner can do by himself or herself and what he or she can do with guidance from a teacher or in collaboration with a more capable peer” (Richards & Schmidt, 2010, p.644).

### *Dynamic assessment*

The current study adopts the definition of dynamic assessment that is directly built upon SCT. As Lantolf and Poehner (2004) highlight, “DA is a procedure for simultaneously assessing and promoting development that takes account of the individual ‘s (or group’s) zone of proximal development” (p.50). That is, by integrating assessment and instruction, DA intends to enhance learner’s development through mediation that is responsive to ZPD of a learner. This perspective is chosen since it embodies the focal facets of SCT such as ZPD, mediation and development.

### *Interactionist dynamic assessment*

Drawing on Vygotsky’s idea of cooperative dialoging, interactionist DA emphasizes the development of learner with a qualitative assessment of his or her performance. In this approach, the assistance to be provided is regulated by dialogic interaction between mediator and the learner.

### *Mediation*

It can be defined as the assistance from a more capable peer or an adult, and this kind of help is the most effective one for pedagogical purposes (Kozulin, 2002).

## **1.7. LIMITATIONS**

Even though the study has proved the effectiveness of interactionist DA model on the use of metadiscourse markers, it has a number of limitations that could pave the way for further research.

Firstly, the duration of dynamic assessment implementation was four successive weeks for each student since one term lasted four weeks at the university where the study was conducted. This period was short, and therefore a study with a longer duration of time might yield more reliable findings.

Another aspect that needs improvement is that only certain types of metadiscourse markers, namely transitions makers, frame makers and code glosses, were focused on and analyzed in students’ paragraphs. As the other types of interactive and interactional metadiscourse markers were scarcely found, they were excluded from the study.

Lastly, this study was unable to encompass equal number of participants in the same gender. Due to high mortality rate, only one male student completed the study though it started with a higher number of male students. In addition, the participants included only pre-intermediate prep school EFL students who were selected considering the aims of the present study.



## **CHAPTER 2**

### **2. LITERATURE REVIEW**

#### **2.1. INTRODUCTION**

This chapter presents a review of literature related to concepts, metadiscourse and dynamic assessment (DA), which are the foci of this study. The review begins with general definitions of metadiscourse offered by preliminary researchers and continues with the leading models of metadiscourse along with a special focus on Hyland's taxonomy. It continues with an overview of earlier studies investigating the instruction of metadiscourse markers and its effects. Further, the chapter provides an overview of Vygotsky's Sociocultural Theory (SCT) and its basic principles, which forms theoretical underpinnings of dynamic assessment (DA). Final part of the chapter gives the leading DA approaches along and early DA studies on metadiscourse and writing conducted in L2 contexts.

#### **2.2. METADISCOURSE**

##### **2.2.1. Definitions of Metadiscourse**

Metadiscourse is a term used mostly in discourse analysis offering a different perspective for the interaction between writer, reader and text. It was first coined by Beauvais (1989), and Harris (1959) explained it as a concept to explain how writer uses language to influence reader and to express this pragmatic relationship. There have been other researchers who have contributed to its development including Williams (1981), Vande Kopple (1985), Crismore (1989), Hyland (2005) and Ädel (2006). However, it has remained as a "fuzzy term" and often simply described as "discourse about discourse" or "talk about talk" which only foregrounds the features of text. Swales (1990) and Nash (1992) point out that "concept is easy to accept in principle; it is more difficult to establish its boundaries." (as cited in Hyland, 2005, p. 16). This fuzziness makes it difficult to define what metadiscourse is and therefore the term has been characterized in various ways.

As Ädel and Mauranen (2010) mention, the discussions over the concept brought about two distinct approaches to metadiscourse, namely, “integrative” and “nonintegrative” (Mauranen, 1993b, p.145) or “narrow” and “broad” approaches (Ädel, 2006, p.168). Ädel (2010) also renamed them as “interactive” and “reflective” perspectives (p.70). Nonintegrative or narrow approach puts emphasis on a variety of textual features for the definition of metadiscourse. It examines mainly organization of the text by leaving aside interpersonal features. Accordingly, by taking this perspective toward metadiscourse, some researchers (Bunton, 1999; Dahl, 2004; Mauranen, 1993a; Valore-Garces, 1996) have described the concept as meta-text which was coined by Enkvist (1975). On the contrary, in the broad approach, metadiscourse is referred as *metatalk* or *metacommunication* and is thought to include both textual and interpersonal functions (Ädel, 2006). Proponents of this approach including Vande Kopple (1985), Crismore, Markkanen and Steffensen (1993) and Hyland (2005) view metadiscourse as a variety of devices used for guidance of the readers through a text and demonstration of author’s stance. To put it succinctly, metadiscourse is the writer’s statements to “bracket the discourse organization and the expressive implications of what is being said” (Schiffrin, 1980, p. 231).

The underlying reason for emergence of these research strands lies in the attempts to distinguish metadiscourse from propositional content which is defined by Halliday (1994) as “something that can be argued about, affirmed, denied, doubted, insisted upon, qualified, tempered, regretted and so on” (p.70). Vande Kopple (1985) asserts that communication takes place in two levels; propositional level concerned with giving information about the subject and non-propositional or metadiscoursal level that assists reader through the text. This distinction between propositional and metadiscourse has formed basis of several preliminary definitions. For example, Williams (1981) defines metadiscourse as “writing about writing, whatever does not refer to the subject matter being addressed” (p. 226). Similarly, Vande Kopple (1985) describes it as “the linguistic material which does not add propositional information, but which signals the presence of an author” (p. 85). With the same focus, Crismore (1983) states that it is “the author’s intrusion into the discourse, either explicitly or non-explicitly, to direct rather than inform, showing readers how to understand what is said and meant in the primary discourse and how to take the author” (p.2). Furthermore, Crismore et al. (1993) refer to “non-propositional aspects of discourse

which help to organize the prose as a coherent text and convey a writer's personality, credibility, reader sensitivity and relationship to the message" (as cited in Hyland, 1998, p.438). Each of these definitions gives a clear distinction between metadiscourse and propositional meaning which generally refers to information about real life.

However, some researchers into metadiscourse have questioned this clear-cut distinction between propositional and non-propositional meaning. For instance, Ädel (2006) argues that "defining metadiscourse as 'non-propositional material' is untenable" (p.212), and she suggests loosening the criterion and saying that "metadiscourse is most often distinct from the subject matter" (p. 212). One solution for this problem she offers is inclusion of linguistic functions in metadiscourse. Interestingly, Hyland (2005) makes a similar point despite the differences in their theoretical frameworks. He rejects the division into primary, propositional, and secondary, metadiscourse, arguing that metadiscourse is "the means by which propositional content is made coherent, intelligible and persuasive to a particular audience" (Hyland 2005, p. 39). He further points that propositional and metadiscoursal functions coexist in a text, and both elements are necessary to ensure coherence in the text and comprehension of the reader.

### **2.2.2. Models of Metadiscourse**

As a consequence of various understandings of metadiscourse, several categorizations have been proposed to identify boundaries of the concept based on the form, meaning and function. One issue metadiscourse analysts have problem with is whether syntactic or functional criteria is used in order to distinguish metadiscourse from propositional meaning and categorize the metadiscoursal elements. According to Hyland (2005) "there can be no simple linguistic criteria for unambiguously identifying metadiscourse as many items can be either propositional or metafunctional depending on their role in context" (p.25), and therefore it is important to include an item as metadiscourse marker based on its function in the text. As metadiscourse studies involve taking a functional approach to the text, researchers adopting this approach have tended to build on Systemic Functional Theory of Language (SFG) introduced by Halliday in 1970s. According to this model, there are three linguistics functions of language: ideational (propositional), interpersonal and textual functions (Halliday, 1994). While *Ideational function* refers to the use of language to explain

content of communication, *interpersonal function* enables people to involve others in communication and express their feeling and attitudes. *Textual function* is about the organization of the text in a coherent way (Halliday, 1994). For Halliday (1994), these metafunctions of language occur at the same time in every sentence and for the meaning of text all three functions need to be integrated. Many researchers follow this Hallidayan distinction of metafunctions to identify and classify metadiscoursal elements including Vande Kopple (1985), Crismore et al. (1993) and Hyland (2005).

### 2.2.2.1. Vande Kopple's (1985) and Crismore et al.'s (1993) Models

A framework of metadiscourse that has been highly prominent and widely used in later studies is the taxonomy proposed by Vande Kopple (1985). This model is built on Williams' (1981) metadiscourse as "text about text", and therefore it suggests that metadiscourse does not expand propositional meaning. Rather, it deals with organization of the text, the author and the reader. Using the metafunctions presented in Halliday's Systemic Functional Grammar (SFG), Vande Kopple (1985) classifies devices as showing either textual or interpersonal metadiscourse. Textual metadiscourse is about organization and coherence in the text while interpersonal is concerned with the authors' attempts to build relationship with the reader. In this vein, the former consists of four subgroups; text connectives, code glosses, illocution markers and narrators, and the latter includes three subcategories; validity markers, attitude markers and commentaries. In Table 1, the summary of Vande-Kopple' (1985) taxonomy is given.

Table 1  
*Vande Kopple's (1985) Taxonomy*

<b>Textual metadiscourse</b>	<p><b>Text connectives-</b> used to help show how parts of a text are connected to one another. Includes sequencers (<i>first, next, in the second place</i>), reminders (as / <i>mentioned in Chapter 2</i>), and topicalizers, which focus attention on the topic of a text segment (<i>with regard to, in connection with</i>).</p> <p><b>Code glosses-</b> used to help readers to grasp the writer's intended meaning. Based on the writer's assessment of the reader's knowledge, these devices reword, explain, define or clarify the sense of a usage, sometimes putting the reformulation in parentheses or marking it as an example, etc.</p> <p><b>Validity markers</b> - used to express the writer's commitment to the probability or truth of a statement. These include hedges (<i>perhaps, might, may</i>), emphatics (<i>clearly, undoubtedly</i>), and attributors which enhance a position by claiming the support of a credible other (<i>according to Einstein</i>).</p>
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Table 1 (continued)

<b>Textual metadiscourse</b>	<p><b>Narrators</b> - used to inform readers of the source of the information presented - who said or wrote something (<i>according to Smith, the Prime Minister announced that</i>).</p>
<b>Interpersonal metadiscourse</b>	<p><b>Illocution markers</b> - used to make explicit the discourse act the writer is performing at certain points (to <i>conclude, I hypothesize, to sum up, we predict</i>).</p> <p><b>Attitude markers</b> – used to express the writer's attitudes to the propositional material he or she presents (<i>unfortunately, interestingly, I wish that, how awful that</i>).</p> <p><b>Commentaries</b> - used to address readers directly, drawing them into an implicit dialogue by commenting on the reader's probable mood or possible reaction to the text (<i>you will certainly agree that, you might want to read the third chapter first</i></p>

(Vande Kopple, 1985, as cited in Hyland, 2005, p.32)

This model proposed by Vande Kopple (1985) is of great significance as he attempts to organize metadiscoursal elements in a systematic way, and it has led to development of new taxonomies. It has been employed by some following researchers such as Crismore and Farnsworth (1990) and Intaraprawat and Steffensen (1995). However, Hyland (2005) asserts that Vande Kopple's taxonomy is problematic due to lack of precision and overlaps between functions of categories. For instance, citation can be classified both as narrator to give the source of information and as a validity marker to enhance a position by addressing other researchers (Hyland, 2005). Hence, including Vande Kopple (2002) himself, researchers such as Nash, (1992), Xu (2001) and Crismore et al. (1993) have made some modifications in this taxonomy.

Hyland (2005) asserts that the most notable revisions have been made in the model introduced by Crismore et al. (1993) who “collapsed, separated and reorganized Vande Kopple's categories” (p. 46). In their model, they retained two major categories, textual and interpersonal, but alterations were made within the subcategories. The textual metadiscourse was further divided into two subcategories of textual and interpretive in order to distinguish organizational and evaluative functions of metadiscoursal elements. Textual markers are those features used to assist organization of the discourse in the text, and interpretive markers functions to help readers to have a better understanding of the writer's intention and strategies (Crismore et al., 1993). Table 2 presents the summary of this taxonomy.

Table 2

*Crismore et al.'s (1993) Categorization of Metadiscourse*

	<b>Category</b>	<b>Function</b>	<b>Example</b>
	<b>Textual metadiscourse</b>		
<b>Textual metadiscourse</b>	Logical connectives	Show connection between ideas	therefore, so; in addition; and
	Sequencers	Indicates sequence/ordering of material	first, next, finally
	Reminders	Refer to earlier text material	as we saw in chapter one
	Topicalizers	Indicate a shift in topic	well, now I will discuss...
	<b>Interpretive metadiscourse</b>		
<b>Interpersonal metadiscourse</b>	Code glosses	Explain text material	For example, that is
	Illocution markers	Name the act performed	To conclude, in sum, I predict
	Announcements	Announce upcoming material	In the next session
	Hedges	Show uncertainty to truth of assertion	might; possible; likely. .
	Certainty markers	Express full commitment to assertion	certainly, know; shows
	Attributors	Give source/support of information	Smith claims that . . .
	Attitude markers	Display writer's affective values	I hope/agree; surprisingly ...
Commentary	Build relationship with reader	you may not agree that ...	

(Crismore et al., 1993, p. 47)

Crismore et al. (1993) attempted to revise problematic areas of Vande Kopple's (1985) taxonomy and they achieved this to some extent. However, Hyland (2005) argues that despite some improvements, some problems retained in the revised categorization. As an example, they do not provide a clear explanation for the further division of textual metadiscourse into textual and interpretive. Also, the classification of reminders referring to matter earlier and announcements referring to the next matter is confusing as they classify the former as textual metadiscourse and the latter as interpretive. Another problem Hyland (2005) points out is that they take logical connectives that connect ideas as metadiscourse, but it is not in agreement with their non-propositional definition of metadiscourse.

#### 2.2.2.2. Hyland's (2005) Model

As opposed to Vande Kopple's (1985) and Crismore et al.'s (1993) models, Hyland (2005) proposed a new model rejecting textual-interpersonal metadiscourse division. He states that textual metadiscourse is not clearly separated from

propositional and interpersonal functions (Hyland, 2004). Instead, it has an interactional aspect since it is concerned with effective communication between authors and readers through text offering vast number of rhetorical elements for writer (Hyland, 2005). Interpersonal character of metadiscourse was a neglected aspect in the categorizations of Vande Kopple (1985) and Crismore et al. (1993). According to Hyland and Tse (2004), those researchers misinterpreted Halliday's functions of language. By classifying metadiscourse into textual and interpersonal and identifying them with certain lexical elements, they ignore Halliday's assumption that those functions coexist in an utterance and cannot be split into different segments (Hyland, 2005). Following Halliday's argument, in Hyland's (2005) model it is suggested that textual markers can be used as both interpersonal and propositional. In other words, textual function is internal to language, and it functions as a facilitator for interpretation of the other two functions. Hence, Hyland and Tse (2004) suggested novel labels for two main dimensions of metadiscourse: *interactive* and *interactional* drawing on Thompson and Thetela's (1995) distinction of modes of interaction. This categorization is shown in Table 3 (Hyland, 2005, p. 49).

Table 3  
Hyland's (2005) Model of Metadiscourse

Category	Function	Example
<b>Interactive metadiscourse</b>		
Transitions	express relations between main clauses	In addition, but, thus
Frame markers	refer to discourse acts, sequences, or stages	finally, to conclude, my purpose is
Code glosses	Elaborate propositional meanings	Namely, e.g., such as, in other words
Endophoric markers	refer to information in other parts of the text	As noted above, see Fig., in section 2
Evidentials	refer to source of information from other texts	according to X, Z states
<b>Interactional metadiscourse</b>		
Hedges	withhold commitment to open dialogue	might, perhaps, possible, about
Boosters	emphasize certainty or close dialogue	in fact, definitely, it is clear that
Attitude markers	emphasize writers' attitude to proposition	unfortunately, I agree, X claims
Self-mentions	refer explicitly to author(s)	I, we, my, mine, our
Engagement markers	explicitly build relationship with reader	consider, note, you can see that

### 2.2.2.2.1. Interactive Metadiscourse

Interactive dimension is concerned with the writer's awareness of audience and the features that need to be adjusted for the benefit of readers. Interactive resources are used to organize the discourse of text considering the readers' needs. It comprises five subcategories, transitional markers, frame markers, endophoric markers, evidentials, and code glosses.

*Transition markers* facilitate the interpretation of connections between ideas in the text, mostly encompassing conjunctions and adverbial phrases. They express additive, causative and contrastive relations in writer's arguments. The important point Hyland (2005) highlights is that it is essential to draw a distinction between internal (interpersonal) and external (propositional) function that those markers perform. He puts forward that an item is considered as metadiscourse only if it fulfills an internal role to discourse of the text rather than the external text. That is to say, a metadiscourse must have the function of expressing the link between ideas in the text, not the connections outside of the text. In order to provide a criterion to distinguish metadiscourse from propositional meaning, Hyland (2005) uses the division made by Martin and Rose (2003). Table 4 illustrates the differences between these two functions.

Table 4  
*External and Internal Functions*

<b>Relation</b>	<b>External</b>	<b>Internal</b>
Additive	adding activities	adding arguments
Comparison	Comparing and contrasting events	comparing and contrasting argument
Consequence	explaining why and how things happen	drawing conclusions or countering arguments

(Martin & Rose, 2003, p. 127 as cited in Hyland, 2005, p.51).

*Frame markers* indicate the transitions between parts of the text and perform the role of signposting of arguments in the text. They can be used for various functions; *sequencing* (first, then, next), *labelling* (in sum, to summarize), *stating discourse goals* (my purpose is that, there are several reasons why) and *shifting the topic* (well, right, now let us turn to) (Hyland, 2005, 51). Accordingly, items in this category frame the information given in the text.

*Code glosses* function to give further information by rephrasing, explaining, and expanding on what has been said before. They are used to ensure that the reader interprets what the writer has meant. Some of these markers are *this is called, in other words, that is, this can be defined as, for example*, etc. (Hyland, 2005, 51).

*Endophoric markers* are the words that refer to information given in any parts of the text. They facilitate reader's comprehension of the text by making the additional information evident. These markers include expressions such as *see Figure 2, refer to the next section* and *as noted above* (Hyland, 2005, 51).

*Evidentials* are "metalinguistic representations of an idea from another source" (Hyland, 2005, p.51). They signal to the information that is obtained from external sources and is used to support the arguments. The category includes markers such as *according to X, (X, year)* and *X states that* (Hyland, 2005, p. 51).

#### **2.2.2.2.2. Interactional Metadiscourse**

*Interactional metadiscourse* facilitates involvement of the readers in the text and enables them to understand writers' stance toward propositions and the readers. It includes hedges, boosters, attitude markers, engagement markers and self-mentions.

*Hedges* indicates the degree of precision(certainty) the writer has about the proposition. Those items imply that a stated proposition is the opinion of the writer rather than certain knowledge. Hyland (1995) states that "the need to present claims with precision and caution means that hedges are a significant resource for academics in anticipating the reader's possible rejection of their propositions" (p.33). They include devices such as *may, might, perhaps and possible* (Hyland, 2005, p. 53).

Contrarily, *boosters* point to the certainty of the writer about the claim, and therefore they reject the alternatives that reader might have. Some of these devices are *certainly, definitely* and *precisely* (Hyland, 2005, p. 53)

*Attitude markers* convey the affective judgements of the writer about the content. They can be expressed by verbs like *agree*, adverbs like *hopefully* and adjectives such as *logical* and *remarkable* (Hyland, 2005, p. 54)

*Self-mentions* are the explicit references to writer's presence in the text, and it is highlighted by the usage of first-person pronouns and possessive adjectives.

*Engagement markers* are used to address readers through second person pronouns, imperatives, and questions forms. They contribute to the writer-reader interaction by involving reader in the text.

### **2.2.3. Research on Metadiscourse**

In the last two decades, there has been an increasing interest in written communication, especially in academic writing. As metadiscourse markers facilitate this communication between reader, writer and the text, researchers have started to examine how writers use them. A good number of studies have been carried out to investigate the use of metadiscourse markers in essays, research articles and theses. Most of these studies have been descriptive which examined the frequency of metadiscourse markers in written texts. Those studies have mostly adopted cross-cultural (Kobayashi, 2017), cross-disciplinary (Estaji & Vafaeimehr, 2015) and more recently a cross-generic perspective (Ädel, 2018) to analyze metadiscourse markers. In addition to these descriptive studies, there has been an increase in the number of experimental studies that intervenes with the instruction of metadiscourse markers. Such studies investigate how metadiscourse training affects students' writing (Farhadi, Aidinloo & Talebi, 2016; Asadi, 2018; Dastjerdi & Shirzad, 2010; Steffensen & Cheng, 1996; Taghizadeh & Tajabadi, 2013; Tavakoli, Bahrami & Amirian, 2012). In relation to the aims of this study, these studies were explained in detail.

#### **2.2.3.1. Research on the Instruction of Metadiscourse Markers**

In recent years, researchers have paid attention to teaching of metadiscourse markers, and they have investigated whether instruction of metadiscourse markers have an influence on writing and use of metadiscourse markers.

A preliminary study was conducted by Steffensen and Cheng (1996) to investigate effects of metadiscourse instruction on students' writing. The study adopted experimental research design and two writing classes with mainly native speakers of English were randomly assigned to control or experimental groups. While control group followed process method which put emphasis on propositional meaning in the essays, experimental group studied metadiscourse markers and did exercises about them throughout a semester. The findings revealed that students in the latter group used metadiscourse markers more efficiently in their posttest writing. During

peer review sessions, it was also observed that those students increased their awareness about the pragmatic function of metadiscourse markers. Specifically, their comments displayed that they realized the function of hedges and attitude markers and interaction between them, which enabled them to express their stance in the text.

Using qualitative and exploratory research methods, Tavakoli, Bahrami and Amiria (2012) examined both students' progress in use of interactive metadiscourse devices and their self-confidence in writing. 30 Intermediate EFL learners were provided with feedback about metadiscourse markers they employed in drafting and revising process. They were required to write three argumentative essays on given topics including three drafts for each essay. In order to find out their perceptions, students were interviewed at the end of the semester. All writings were analyzed regarding the appropriacy of interactive metadiscourse markers. The analysis of earlier and final drafts revealed that appropriate use of interactive metadiscourse markers increased significantly throughout drafting, and inappropriateness rate showed a gradual decrease. Also, in the interviews, most of the students stated that they held positive attitudes, and they enhanced confidence about their ability to use those devices. As a result, they were able to get rid of anxiety writing causes and so wrote easily.

Dastjerd and Shirzad (2010) also studied how explicit instruction of metadiscourse markers affects advanced, intermediate, and elementary level students' writing skill. After taking a pretest in which students wrote an essay, all groups got explicit instruction about metadiscourse markers for six sessions. The results showed that there was a significant difference between students' pretest and posttest scores in all levels. Surprisingly, intermediate students had the highest development whereas the least development was observed in advanced students. Hence, they concluded that the instruction was the most effective for intermediate group.

Similarly, another study carried out by Asadi (2018) intended to explore impacts of teaching metadiscourse markers on students' writing performance. Participants in control and experimental groups were trained for academic writing, but the latter group also received training about metadiscourse markers, and they were given the opportunity to practice them. The comparison of pretest and posttest results indicated

that both groups showed improvement thanks to writing training. However, learners in the experimental group had significantly better scores in writing.

The study of Taghizadeh and Tajabadi (2013) yielded the same results. Mechanical engineering students were exposed to metadiscourse training for four successive weeks in relation to Hyland (2005) model. In posttest writing, students performed better, and therefore they noted that training students for metadiscourse markers helps them improve their writing ability. Furthermore, in the recent study of Farhadi, Aidinloo and Talebi (2016) the same research design with participants in a language institute were used. The findings of the study supported the results of Taghizadeh and Tajabadi's (2013) study as students showed better performance in writing and using metadiscourse markers.

#### **2.2.3.2. Studies in Turkish EFL Context**

A growing body of literature has investigated the use of metadiscourse markers in the Turkish context. Much of this literature on Turkish EFL learners pays particular attention to interactional metadiscourse markers, especially hedges and boosters in research articles (Çapar & Turan, 2019; Demir, 2018; Hatipoğlu & Algı, 2018; Kafes, 2017) and dissertations (Akbaş, 2012; Akbaş & Hardman, 2018; Atmaca, 2016; Ekoç, 2010). There have been few studies about the instruction of metadiscourse markers (Kaya, 2019; Sancak, 2019).

In her recent study, Kaya (2019) examined the effects of metadiscourse instruction on writing proficiency of 21 learners studying in English language teaching department. Pretest and post tests were given before and after the treatment to explore influence of training in addition to interviews and reflections that were used to get students' opinions. As pretest and posttests, the tests designed by researcher and students' argumentative essays were used in order to assess their knowledge of metadiscourse markers. Through a process-based writing syllabus, students were explicitly taught metadiscourse markers during a semester. The analysis of knowledge tests showed that students developed their ability to recognize the functions of metadiscourse markers and use them effectively. Besides, the essays of students revealed that the number of metadiscourse markers increased significantly, especially the use of boosters, and development was observed in posttest essays in terms of



coherence and cohesion. The qualitative data analysis obtained through interviews and reflections also indicated that students became aware of the quality of writing, and they had favorable attitudes towards explicit instruction of metadiscourse markers.

The other study was conducted recently by Sancak (2019) to identify the effect of teaching on frequencies and functions of transitions, frame markers and code glosses and the reasons for their uses in opinion paragraphs of 50 intermediate pre-school students. For the data, students' opinion paragraphs were used as pretest and pos-test as well as think-aloud sessions. Similar to Kaya's study (2019), the findings revealed the positive effects of teaching on the use of interactive metadiscourse markers. The students were able to use various metadiscourse markers successfully. Furthermore, in posttest essays, it was found that the overreliance on transition markers observed in pretests decreased, and the number of frame markers and codes glosses increased to a great extent. In think-aloud sessions, students reported that overreliance on a specific marker was due to lack of confidence in using distinct metadiscourse markers. This pointed out the importance of encouraging students to use learned items and giving the chance to practice more.

## **2.3. FOUNDATIONS OF DYNAMIC ASSESSMENT**

### **2.3.1. Sociocultural Theory (SCT)**

Sociocultural Theory (SCT) is the theoretical framework that forms the basis of dynamic assessment, and it was put forward by a Russian psychologist Vygotsky and his colleagues around 1920s and 1930s. It has its roots in the ideas of Marxism, and actually Vygotsky constructed "a psychology grounded in Marxism" (Wertsch, 1995, p.7). Vygotsky took inspiration from the principle of Marxism that "human beings shape and are shaped by their environment through concrete activity mediated by physical tool" (Poehner, 2008, p.25), and they incorporated this into psychology suggesting that mental functioning of humans is also mediated. Hence, SCT is based on the primary tenet that human's cognitive development is mediated by cultural artifacts and concepts. As Vygotsky (1978) acknowledges, engagement in activities mediated by others and cultural artifacts helps them to develop their consciousness by becoming aware of and taking control over their mental processes.

SCT mostly describes social interaction as mediation that involves *physical* and *symbolic* tools (Duff & Surtess, 2018). Using physical tools, human beings mediate their relationship with environment in a concrete way. The examples of such materials are technological devices such as computers, hearing aids and eyeglasses which allow individual to go beyond their limits. In addition to those, individual can create some symbolic tools which are abstract and commonly represent *cultural artifacts*. (Poehner, 2008). As Kozulin (2003) illustrated, various numeric and writing systems, namely languages, are examples of symbolic tools (p. 8). Vygotsky suggested that “while physical tools are outwardly directed, symbolic tools are inwardly or cognitively directed” (Lantolf & Thorne, 2007, p.201). Through those abstract artifacts, individuals get awareness of their innate mental functions and make changes on them. By taking control of their cognition, they can impede preprogrammed cognitive processes. Instead of taking an automatic action, individuals plan the action through symbolic tools and then carry out the actions physically. This planning allows individuals to save cognitive resources and minimize the risks that can appear (Lantolf & Poehner, 2004). The most prevalent and strong cultural artifact is language, which enables individuals to be free from the immediate effect of environment and to think about any events in past, present and future (Aimin, 2013). It empowers humans to mediate their relationship with the world, others, and themselves. It also functions both inter-psychologically “as a unit of social interaction” and intra-psychologically “as a unit of thinking” (Lantolf & Thorne, 2007, p. 211).

Lantolf and Thorne (2006) point out that mediation is seen as “the process through which humans deploy culturally constructed artifacts, concepts, and activities to regulate the material world or their own and each other’s social and mental activity” in SCT (p.79). This description leads us to the term, *regulation*, which is one of the significant forms of mediation referring the capacity of humans to regulate their physical world and mental activities. This cognitive development process goes through three main developmental stages. The first stage is known as *object regulation* in which human’s behaviors are regulated by objects themselves or by using them. The second stage, named as *other regulation* involves a variety of mediation from other people around us, and it can include implicit or explicit corrective feedback and assistance from an adult. In the last stage, *self-regulation*, an individual needs very little or no assistance from others to regulate their mental processes as they become

self-mitigated. The control of mental activities shifts from complete dependence on others to self-regulation (Summer, 2008). Thus, Thorne and Tasker (2011) states that SCT views this cognitive development as “process of gaining greater voluntary control over one’s capacity to think and act either by becoming more proficient in the use of meditational resources, or through a lessening or severed reliance on external meditational means” (p. 496).

The forward progress toward self-regulation takes place through internalization that is defined as the process of “reconstruction on the inner, psychological plane, of socially mediated forms of goal-directed activity” (Lantolf, 2000, p.13). To put it in another way, internalization transfers cultural artifacts such as language from social plane to psychological plane and makes them internally available. Vygotsky (1981) points out that “voluntary attention, logical memory, the formation of concepts, and the development of volition” are first initiated by others and subsequently internalized to be used as cognitive resources (p. 163). In this regard, it is implied that human beings develop higher order cognitive skills with increasing reliance on internal mediation.

### **2.3.2. Zone of Proximal Development (ZPD)**

A fundamental tenet of Sociocultural Theory (SCT) is zone of proximal development (ZPD). According to Wertsch (1985) and Shayer (2003), Vygotsky’s introduction of ZPD was the result of his dissatisfaction with the instructional practices and assessment of a child’s intellectual abilities. Vygotsky (1998) criticized that conventional tests for ability reveal only the actual development, which has been obvious to others having observed the learner before. However, he argues that instructions should also provide information about maturing and futures abilities of the learner. Also, Vygotsky (1986) stated that it important that instruction is “oriented toward the future, not the past” (p.189) and its target should be directed at not the current capabilities of children but the potential abilities of them. Therefore, Vygotsky (1978) termed the concept of ZPD defining it as “the distance between the actual development level as determined by independent problem solving and the level of potential development as determined through problem solving under adult guidance or in collaboration with more capable peer” (p.86). In other words, actual zone of development includes mature cognitive functions observed in self-reliant problem solving while potential development refers immature cognitive functions which are in

the course of maturing and understood by responsiveness to adults' assistance during problem solving. Hence, what a learner can achieve in a learning activity with the guidance of a more skilled person comprises zone of proximal development. It allows us to shape the mental functions of a child which are in the process of maturing.

Relying on the earlier studies on ZPD, Vygotsky (1987) highlighted the significance of the ZPD in instructional practices. An instruction is only effective when it promotes the development of learners and stimulates the functions that have been maturing in ZPD. He asserts that ZPD "has more significance for the dynamics of intellectual development and for the success of instruction than does the actual development" (Vygotsky, 1987, p. 209). That is, the instruction should be fine-tuned to learners' ZPD rather than their already developed capabilities. In this way, the instruction in line with ZPD makes them aware of their emerging abilities.

Furthermore, ZPD is based on the principle that higher mental functions need constant mediation from the environment. Similarly, Cook (2008) asserts that an essential aspect of ZPD is that "the gap between the learner's current state and their future knowledge is bridged by assistance from others; learning demands social interaction so that the learner can internalize knowledge out of external action" (p. 229). The cognitive functions are mediated through interactions with other people. These interactions in ZPD contribute to transition from interpsychological functioning to intrapsychological functioning, and the internalization of learning takes place. Also, it brings about novel mental functions. Dixon-Krau (1996) states that this social interaction forming the basis of ZPD gives a dynamic aspect to it. This dynamic characteristic of ZPD entails a new way of measurement to interpret development in such a dynamic context (Mardani & Tavakoli, 2011). Both Vygotsky (1978) and Feuerstein (1970) have demanded for such a type of assessment, which has brought in the notion DA.

#### **2.4. DYNAMIC ASSESSMENT (DA)**

Dynamic assessment is grounded in Vygotskian zone of proximal development. Even though Sociocultural Theory of Vygotsky underpinned this type of assessment, Vygotsky never used the term, but he suggested the use of the ZPD as a tool to interpret abilities of an individual. He also provided "the whole range of possible interactive

interventions to be used during ZPD assessment, such as leading questions, modeling, starting to solve the tasks and asking students to continue” (Kozulin & Garb, 2002, p.113).

Luria’s work (1961) is the earliest reference for a type of assessment analyzing adaptation of ZPD, which has subsequently come to be known as DA. The term was first introduced to the field by Luria (1961) to compare “statistical with dynamic approaches to assessment” (Thouësny, 2010, p. 3517). Poehner and Lantolf (2005) argue that a statistical approach to assessment “inappropriately assumes that a person’s solo performance on a test represents a complete picture of the individual’s capabilities” whereas a dynamic approach is “a full picture requires two additional bits of information: the person’s performance with assistance from someone else and the extent to which the person can benefit from this assistance” (p. 234). Vygotsky was in favor of such dynamic procedures in which mediator collaborates with the learner providing support when difficulties arise and tries to understand the potential zone of development of the learner and responsiveness to mediation (Poehner, Davin & Lantolf, 2017). Henceforth, he advocated that this approach requires assessment and instruction to be integrated targeting the emerging abilities instead of fully developed ones. Following the notions of Vygotsky’s SCT, DA has emerged as an alternative form of assessment which promotes maturing capabilities of a learner by giving appropriate support during the instruction.

Sternberg and Grigorenko (2002) state that “DA represents a paradigm shift toward a new philosophy of assessment that refocuses assessment on helping individuals to develop through intervention” (as cited in Poehner, 2008, p.13). Offering a concrete definition, Sternberg and Grigorenko (2002) point out that DA is a method of assessment that:

.... takes into account the results of an intervention. In this intervention, the examiner teaches the examinee how to perform better on individual items or on the test as a whole. The final score may be a learning score representing the difference between pretest (before learning) and posttest (after learning) scores, or it may be the score on the posttest considered alone. (as cited in Lantolf & Poehner, 2005, p. 234)

However, according to Lantolf and Poehner (2005), this definition does not fully embrace the Vygotskian understanding of ZPD. They proclaim that Vygotsky's view of development is not limited to one task or item, instead it considers the whole process of internalization with mediation and adaptation of what has been internalized in other tasks. Moreover, Lantolf and Thorne (2007) states that the aim of DA is to alter learner's performance through a dialogic interaction with others taking place either exam or between pretest and posttest. In accordance with these ideas, Lidz and Gindis (2003) describe DA as "an approach to understanding individual differences and their implications for instruction that embeds intervention within the assessment procedure" (p. 99). In a similar vein, Haywood and Lidz (2007) define it as "an interactive approach to conducting assessments within the domains of psychology, speech/language, or education that focuses on the ability of the learner to respond to intervention" (p.1). That is, the mediator aims at improving learners' performance by altering actions. This interaction between mediator and learner gives prominence to learners' receptivity to mediation. A more detailed definition is offered by Lantolf and Poehner (2004) following the Vygotskian conceptualization of the ZPD:

Dynamic assessment integrates assessment and instruction into a seamless, unified activity aimed at promoting learner development through appropriate forms of mediation that are sensitive to the individual's (or in some cases a group's) current abilities. In essence, DA is a procedure for simultaneously assessing and promoting. (p.50)

As stated in these descriptions of DA, the most important feature of DA is "interactive relationship between the assessor and the assessee" (Lidz & Elliot, 2000, p.6). This relationship is apparent in the replacement of the terms *examiner* and *examinee* with mediator and the learner (Poehner, 2008). The assessor's role is not to record the events taking place during the learning process, but to bring about changes in students' performance. Assessee is also seen as a learner who is likely to show changes and whose responsiveness to mediations will differ from the other peers. These two people collaborate with each other in order to make changes on a learner's performance. The mediator provides support to the learner when learner experiences any difficulties. The mediations and the responsiveness of the learner to them result in diagnosis of learner abilities that have fully developed and that are still emerging. This

interaction with the mediator helps learners go beyond their current capabilities. Also, for Feuerstein and Feuerstein (1991), the mediator has a similar role in Mediated Learning Experience (MLE) in which the mediator facilitates the learners' internalization.

#### **2.4.1. Interventionist and Interactionist Approaches to DA**

Researchers studying dynamic assessment have different preferences about what type of mediation is given during the process. Some tend to pursue the work of researchers such as Budoff (1968) and make use of fixed hints while others show an orientation to a dialogic mediation which is in line with Vygotsky's (1998) notion of development. Lantolf and Poehner (2004) termed these two main kinds of mediation *interventionist* and *interactionist* and they assert that these two approaches differ in terms of the type of mediation given to learners.

The interventionist originates from the work of Vygotsky with IQ testing that involves "quantitative interpretation of the ZPD as a "difference score" (Poehner & Lantolf, 2005, p. 239). The main concern is to obtain a quantitative data about the amount of help that a learner required to arrive at a determined endpoint (Poehner, 2008). Consequently, administration procedures and the assistance provided to learners are all standardized and determined in advance. It entails that the mediator is not allowed to "respond learners' needs as these become apparent during the procedure but must instead follow a highly scripted approach to mediation" (Poehner, 2008, p. 44). This approach comprises predetermined hints and prompts to be provided which are all arranged hierarchically from implicit to explicit. The distinction between implicit and explicit prompts is grounded in the assumption that the more competence learners have on the target subject, the more appropriate responses they can give to the implicit mediation (Lantolf & Poehner, 2010). Poehner and Lantolf (2005) also mention that the interventionist DA can be implemented in cake format that involves mediation with prefabricated hints and sandwich format which is based on a pretest-treatment-posttest method.

As opposed to interventionist approach, interactionist approach is more in line with the Vygotsky's idea of dialogic interaction in which "both participants share the responsibility of development" (Vygotsky, 1998, p.201). Mediated learning

experience (MLE) seen as Feuerstein's approach to DA is in line with interactionist DA, and sometimes the concepts have been used interchangeably. This approach does not focus on the amount of effort learner put in, but endpoint the learner is supposed to reach, and therefore it does not aim at generating numerical data. Instead, it is a "qualitative assessment of psychological processes and dynamics of the learner development" (Minick, 1987, p.119). Its goal is to assess learners' development qualitatively. In addition, because of its dialogic feature the mediator takes immediate actions depending on the learners' needs emerging during sessions, and it allows learners to ask questions. Accordingly, the hints, questions and prompts provided in DA sessions are not pre-planned, and mediation emerges from the negotiations between mediator and the learner. The assistance is constantly fine-tuned in accordance with the learner's responses (Lantolf, 2009), which makes it responsive to learners' ZPD.

Thouësnny (2010) further provides more differences between these approaches. As he states, when the quantifiable results in the form of a score are considered, interventionist DA follows the measures of psychometric testing such as reliability, validity, and generalizability. This approach can be easily adapted to settings using conventional assessment. Furthermore, interventionist can be used in a large scale as it uses standardized prompts for every learner, and thereby it can be implemented within groups settings. However, due to its dialogic nature interactionist DA needs to be implemented with only individuals, and differing from the former, it requires spoken mediation instead of written one. As it requires special attention to the learner who is assessed and his or her responsivity to the mediation, it can also be time consuming.

#### **2.4.2. Sandwich and Cake Formats of DA**

Sternberg and Grigorenko (2002) have also proposed *sandwich* and *cake* formats to implement in DA procedures. Sandwich format adopts a pretest and posttest design following traditional experimental research. Pretest is first given to learners to interpret their difficulties and establish a standard measure. Upon that initial test, they are provided with instruction which is fine-tuned depending on the learners' performance in pretest. In order to assure the effectiveness of given mediation, a final posttest is given. The comparison of the results of these tests is supposed to yield information



about the improvement that learners have made thanks to treatment. As the order of these stages is static, mediation is *sandwiched* between two tests, which gives the format its name. Sternberg and Grigorenko (2002) point that this format can be used with both individual and groups of participants.

On the other hand, within cake format, mediation is given during the assessment procedure. Learners go one by one with the times, and mediator offers them mediation in the form of hints from implicit to explicit whenever they face a difficulty with the assessment items. Sternberg and Grigorenko (2002) explain it that “the successive hints are presented like successive layers of icing on a cake and the number of hints varies across examinees, but not the content of them” (p.27). That is, the mediator provides standardized hints to learners, and the number of those hints changes based on learners’ needs. The advantage of this format is that it makes the assessment procedure more efficient and introduces mediation immediately after a difficulty is observed (Poehner et al., 2017).

#### **2.4.3. Microgenesis in Dynamic Assessment**

Microgenesis is a method that is proposed by Vygotsky and other SCT-oriented researchers and underlies principles of DA methodology (Ableeva & Lantolf, 2011). It is termed as microgenesis by Wertsch (1985) referring to “very short-term longitudinal study” (p.55). In his works, Vygotsky (1978) puts emphasis on the importance of tracing cognitive development with a focus on “the very process by which higher forms are established” (p.64) by suggesting using a genetic and developmental method which uncover changes in mental functioning over time. Micro perspective of this genetic method mainly deals with “the reorganization and development of mediation over a relatively short span of time (for example...learning a word, a sound, or a grammatical feature of a language” (Lantolf, 2000, p.3). In this approach, moment-to-moment changes in the learners’ behavior are traced and noted for further examination. It allows to detect an individual’s qualitative and quantitative changes and variability of them during a process over a short time (Miller & Coyle, 1999). Gánem-Gutiérrez (2007) puts forward that microgenesis is a both a method and object of the study, which makes it effective for the examination of learning that emerges during interaction.

Ableeva and Lantolf (1994) state that microgenesis displays how error correction and the L2 learning interact with each other. They point out that learners display more microgenetic development when they need fewer explicit mediation and become more responsive to mediation. In order to detect and examine this kind of development, Poehner (2005) advocates the use of mediational moves of the tutor and learner reciprocity moves described as learners' responsivity to mediation.

#### **2.4.4. DA in L2 Contexts**

DA has gained a lot of attention in L2 learning. Ableeva (2010) states that Lantolf and Poehner have made major contribution to the field by introducing theoretical concepts of DA to the field and promoting DA as a pedagogical tool. Since then, there have been an increasing number of studies investigating implementation of DA in L2 pedagogy. As a result, a great number of studies have been conducted aiming at probing the effects of dynamic assessment on different aspects of language learning including reading comprehension (Ajideh & Nourdad, 2012; Guterman, 2010; Mardani & Tavakoli, 2011), listening comprehension (Ableeva, 2010; Hidri, 2014; Wang, 2015), vocabulary learning (Hessamy & Ghaderi, 2014; Veen, Dobber & Oers, 2016), speaking (Lu & Hu, 2019; Siwathaworn & Wudhayagorn, 2018), grammar (Malmeer & Zogh, 2014; Mohammadimoghadama, 2015). Most of the studies conducted on applying dynamic assessment in teaching second or foreign language learning features have reported the relative successfulness of the approach in language learning classrooms.

##### **2.4.4.1. Research on Dynamic Assessment in Writing**

Regarding the issue of application of DA in use of metadiscourse markers in writing, the number of studies has been scarce. However, a lot of research has been conducted to explore DA in writing, and some of the works are explained in detail as the focus of study is related to metadiscourse markers used in students' writing.

The only study investigating implementation of DA in metadiscourse markers was conducted by Taghizadeh (2017) in Iranian EFL context. She aimed at examining how DA influence student's mastery of transition markers, code glosses, frame markers, hedges, and boosters. Seventy undergraduate female students took part in study. Two groups were formed, and one of them received feedback from their teacher

whereas the other one was given by their peers. Pretest-intervention-posttest format was applied, and during the intervention, hints ordered from implicit to explicit were provided to each group. The findings revealed the positive impact of DA on internalization of metadiscourse markers since participants' performance on the pretest and posttest differed significantly. Also, it was found that the learner receiving feedback from teachers outperformed the ones who studied with their peers. The former better improved use of frame markers and transition markers respectively, while the latter was observed to better internalize transition marker, code glosses and frame markers.

Regarding DA in writing, Antón (2009) carried out a study to investigate the language skills development of advanced level English-speaking Spanish learners at university. A five-part diagnostic test was given in grammar, vocabulary, listening comprehension, reading comprehension, writing, and speaking. With productive skills, writing and speaking, interactionist DA procedure was implemented in that the tests were given after DA mediations. Regarding writing, students wrote about a given prompt, and then in the presence of examiner, the learner read the essay and consulted the examiner when needed. Following Aljaafreh & Lantolf (1994), the examiner gave mediation to the learner. The analysis illustrated the benefits of giving mediation during assessment. Also, the mediator was able to gain a deeper understating of learners' abilities, which would help to design individualized plans.

In their qualitative case study, Rahimi, Kushki and Nassaji (2015) examined the role of interactionist DA in writing development. Three advanced EFL learners enrolled in English literature major were chosen based on their performance in writing course. Each learner produced ten essays about a topic assigned by mediator in individualized sessions for ten weeks. After each essay, the mediator and learner collaboratively reviewed them in individual tutorials lasting about 50 minutes, and when necessary, mediator provided feedback in line with DA principles. Findings of the study showed the benefits of interactionist DA for diagnostic and developmental purposes. Also, learners overcame these problems until the final session and improved their writing skill, which supported the idea that DA helps to find out and solve problems.

Some researchers have preferred using group-based dynamic assessment (G-DA). To illustrate, Xiaoxiao & Yan (2010) examined the effects of writing instruction through dynamic assessment on writing performance and motivation for this skill. The study was conducted with an intact class consisting 30 sophomores at foreign languages department for 3 weeks including two hours per week. The mediator provided assistance to the whole class during topic choice, idea-generation, idea structuring and revising phases. After each part, the teacher and the student reflected upon the mediation process. The qualitative analysis of reflections revealed that writing ability of learners substantially improved, and it positively influenced the interest and confidence in writing.

In a similar vein, Rashidi & Bahadori-Nejad (2018) explored the impact of DA on L2 writing ability of 17 Iranian EFL learners using an experimental research design. The participants were divided into control and experimental group through random assignment. For pretest, all students wrote an essay about a topic chosen among given IELTS writing topics. During intervention process, the control group was taught rules and standards in IELTS writing while experimental group underwent group mediation throughout topic choice, idea-generation and revising stages. To evaluate DA effect, pretest and posttest results were compared between groups and within individuals. The results indicated that writing scores significantly increased enhancing writing skill, and experimental group's scores were higher than the control group's scores. Specifically, it was observed that students made considerable progress in organization rather than content. Their reflections on DA procedure supported this result.

Another study using G-DA in writing comes from Shabani (2018) who also used pretest and posttest design. Based on the results of a homogeneity test, 44 students were chosen, and those were assigned to experimental and control groups in equal numbers. A writing task used as pretest was implemented non-dynamically to all participants. Following the pretest, experimental group received G-DA instruction 12 weeks during writing stages whereas the other groups were trained in traditional way without any dialogic interaction. After implementation of DA, a posttest writing was given to students to find out any influence. Those two writings collected at the beginning and end of procedure were scored by two teachers considering five aspects namely, content, vocabulary, language, organization, and mechanics. The comparison

of two different scores revealed that experimental group outperformed control group in posttest writing proving positive effect of DA. In addition, microgenetic analysis was done to find out more about the other components of process such as mediational strategies and learner reciprocity. It was explored that the number of explicit strategies decreased giving its place to more implicit ones. In terms of reciprocity moves, the learners gained autonomy abandoning unresponsive moves during the treatment. These findings provided evidence for learners' microgenetic development.

Furthermore, a few researchers integrated technology in DA procedures. Shrestha and Coffin (2012) attempted to look into impacts of DA on improvement of writing in open and distance learning. The data was collected from two undergraduate business students in England, which constituted the pilot study of a research project. Eight essays by each participant were posted on a Wiki website that was created for the project. Unlike face to face procedure, the feedback based on interactionist DA was not given as spontaneous speech, but rather via written comments. The mediator posted the feedback in the form of text-mediation on the Wiki page or sent them in a word document. Taking those remarks into consideration, learners wrote the drafts for each essay. Using microgenetic analysis, the tutor's mediational moves and learner reciprocity moves were analyzed. When the frequency and the quality of tutor mediation were examined, it was seen that the mediator used different mediational strategies for each learner. They suggested that by using DA it was possible to identify and respond to the areas that learners needed the most support. Also, the types and frequency of reciprocity moves showed differences among learners. This indicated the distinct development of each learner's ZPDs in writing ability.

In their study, Ebadi and Rahimi (2019) investigated the influence of online DA on three EFL learners' academic writing and their perceptions of DA sessions. DA assessment was implemented through individually and synchronously over Google Docs. Two IELTS writing tasks were given to assess their writing abilities. In task, the learners were required to write 150-word essay using a chart, and in the second one they wrote an argumentative 250-word essay about a problem. In order to trace the microgenetic development, the mediation moves and learners' responsiveness were scrutinized. It was found that the frequency of implicit mediation reduced when learners started to develop. Regarding reciprocity, the findings revealed that low

reciprocal moves such as overgeneralization decreased while the high ones such as correcting on your own increased. Thus, it was suggested that learners ask for fewer mediation and become less responsive to the mediation when they make progress.

The other study was conducted by Davoudi and Ataie-Tabar (2015) using computerized dynamic assessment of writing with 60 upper-intermediate Iranian EFL learners from various universities. The proficiency level of participants was determined by a TOEFL test. Sandwich format of DA was embedded within interventionist approach, so pretest-intervention-posttest format was followed. A writing topic taken from an IELTS book was given to learners to measure their first score. During treatment stage, preformulated prompts derived from results of piloting were offered to three essays of the students through a software that was designed for the study. The hints were provided for introduction, body parts and conclusion regarding organization, coherence, fluency, and accuracy in pre-writing, drafting, and reformulation stages. The findings highlighted the positive influence of computerized DA on improvement of writing and enhancement of achievement. The participants became more self-aware of their problems and overcame them. The results of the questionnaire about the effectiveness of the procedure confirmed that the students had favorable attitudes toward the mediator and the DA mediations.

Likewise, in Besharati's (2018) study with three Iranian learners, an application called Google docs was used to provide dialogic mediation to learners in line with interactionist DA approach. The study yielded similar results about efficacy of DA procedure integrated with technology. The analysis of prompts indicated the substantial change in responsivity and autonomy of learners. A different finding was that the participants were able to use what they had learned in new writing tasks.

#### **2.4.4.2. The Research on DA in Turkish EFL Context**

DA as a field of research has been neglected in Turkey, and the number of studies investigating implementation of DA in L2 learning contexts is quite limited. Much of recent DA research undertaken in Turkish EFL context has largely focused on similar language skills. Those studies have examined the effectiveness of DA on speaking skill (Çetin-Koroğlu, 2019; Yılmaz-Yakışık, 2012; Yılmaz-Yakışık & Çakır, 2017) and grammar awareness of learners (Çalış, 2018; Şentürk, 2019). Based on the

analyses of both quantitative and qualitative data, the studies yielded similar results. They supported the positive effect DA on improving speaking and grammar of learners and indicated the favorable attitudes of learners toward the dialogic interaction occurring in DA procedure. Notwithstanding, there is still no emphasis on DA application in writing and aspects of writing, and no research has been done on the issue.

## **2.5. METADISCOURSE AND DYNAMIC ASSESSMENT**

Writing is not only about grammar points or a set of sentences; instead, it is communication between the audience and the writer. Written communication involves conveying messages to distinctive audiences through written language (Markle, Brenneman, Jackson, Burrus, & Robbins, 2013). Using metadiscourse markers is essential for an effective written communication. Hyland (2005) states that metadiscourse “reveals the interactions which underlie all communication and help us see how discourses are community specific, historically situated cultural products” (p. 203). That is, metadiscourse markers specify pragmatic and social aspects of written or spoken discourses. It allows writers to build a good relationship with the readers and accommodate the text to the readers’ understanding.

However, most second language writers use metadiscourse markers more differently than native speakers. They fail to express their ideas effectively and therefore their writing sometimes appears “uncontextualized, incoherent and inappropriately reader-focused” (Hyland, 2005, p.175), resulting in a communication breakdown between authors and readers. To overcome such difficulties in writing, students should have an awareness of those markers as it is effective in second language classrooms (Crismore, 1985). Thus, it is necessary that learner should be trained about metadiscourse by modeling rhetorical use of the target language (Hyland & Tse, 2004). Providing explicit instruction is one of the ways to develop learners’ competence and to equip them with proper knowledge of metadiscourse markers. Nevertheless, the significance of social interaction in learning is emphasized in the sociocultural theories that view the development of thought to be mediated by interaction (Vygotsky, 1978). Thus, following these approaches to learning, this study made use of dynamic assessment drawing upon Vygotskian Sociocultural Theory (SCT) to train learners over metadiscoursal devices as dynamic assessment could

provide opportunities for “the teacher and the student to negotiate the meaning of a text through dialogue” (McCartney, 1992, p.1). Incorporating DA into instruction of metadiscourse markers allows teacher and students to discuss the markers choices, alternative ones and clarify meaning they express, and become aware of the problems.





## **CHAPTER 3**

### **3. METHODOLOGY**

#### **3.1. INTRODUCTION**

The purpose of this chapter is to present the methodology of the study. It provides details about research design, setting and participants. Moreover, it describes the instruments used in data collection, implementation of the study and how obtained data were analyzed.

#### **3.2. RESEARCH DESIGN**

Following the framework of DA, the current study made use of qualitative inquiry both in the data collection and analysis. As Dörnyei (2007) states, qualitative research enlarges the potential interpretations of what people experience, and intensive qualitative data “can widen scope of our understanding and can add data driven depth to analysis of phenomena” (p.40). Specifically, this study can be called as a collective case study as it included a number of cases that were studied simultaneously and collectively to examine a phenomenon (Stake, 2005).

#### **3.3. SETTING**

This study was carried out with pre-intermediate students studying in the English Preparatory Program of a foundational university in Istanbul, Turkey. This program is of great significance to prepare learners for their academic studies by assisting them to attain and develop necessary language skills.

At this university, the medium of instruction in many departments is English. Therefore, students accepted to the English medium departments are required to take a two-stage test, which is made up of one placement and one exemption test before the beginning of academic year. This test is intended to assess whether they are competent enough in English to pursue their academic studies. Those who attain the required score in the exemption test are regarded as eligible to continue in their departments without attending the program. However, those who cannot get satisfactory scores from any of two exams are subjected to English education for four terms. English

Preparatory Program comprises five levels adapted from the Common European Framework of Reference (CEFR): starter (Level 1), elementary (Level 2), pre-intermediate (Level 3), intermediate (Level 4) and upper intermediate (Level 5). Students required to attend the prep program are placed in those levels depending on the scores of placement exam. After taking eight weeks of English education for four skills in their appropriate levels, students proceed to the next level if they are found to be successful in the final exam.

The target level in this study is pre-intermediate (Level 3) and therefore, it is important to give detailed description of the level, especially the writing classes. Aim of Level 3 is to make students who have successfully completed Level 2 reach at pre-intermediate level. In Level 2, students gain awareness about how to plan and organize a paragraph. They are trained in how to connect ideas with basic linkers such as *and*, *but* and *because*, to give examples with *for example* and to list ideas using *firstly*, *secondly*, and *finally*. Also, descriptive, narrative and opinion paragraphs are introduced in this level. Students write short unified paragraphs in around 150 words by describing or narrating an event and giving their opinions about a given topic with appropriate vocabulary. Regarding the writing syllabus of Level 3, students analyze and identify organization of cause-effect paragraphs with a focus on opening, closing, supporting ideas and details about them in the first week. In week two, student practice using structures and vocabulary items used to express cause and effects, give examples, to explain an idea and give additional support and idea. The next week, they try to write effective supports by giving explanations examples, effect, advices and making comparisons. At the end of this week, they write first process writing paragraphs using what they have learned. In the following weeks students practice writing more paragraphs and drafting process continues. The instructors collect the students' writings and give feedback on organization, content and grammar using error correction codes applied in writing courses. After taking feedback, students are expected to write a second draft of the paragraph.

In order to help students during this learning process, instructors allocate two hours for tutorials each week to work with students one to one. In addition to this, BİLGİ Writing and Learning Center (BWLC) affiliated with the preparatory program assists learners to improve their spoken and written English. It provides a supportive

learning environment to students. As studies have indicated, such centers are important to increase students' awareness of their individual needs and develop writing proficiency (Bielinska-Kwapisz, 2015; Bredtmann, Crede & Otten, 2013). Each term, the number of students using this center increases, and the survey for the evaluation of the center has revealed positive opinions of students about the program, tutors, and feedback. In BWLC, writing topics appropriate for each level are provided. After writing an English paragraph or essay about a topic they choose among given ones, a professional instructor or trained peer tutor in the office help the learners to discover and work on areas that need developments.

### **3.4. PARTICIPANTS**

The target population of this research is EFL learners, and the accessible population is the students enrolled in the preparatory school of a foundational university in Istanbul. The participants were seven pre-intermediate EFL learners enrolled in the preparatory school of the same foundational university. In order to select participants, purposive sampling was used. Especially, typical sampling was applied, which requires "selecting participants whose experience is typical with regard to research focus" (Dörnyei, 2007, p.128). Therefore, preparatory school EFL students with same mother tongue, Turkish, and same English proficiency level, pre-intermediate, were chosen. The reasons for selecting only Turkish speaking students were that learners' native language might interfere with writing performance (Ridha, 2012), and students sharing same mother tongue tend to make similar mistakes in writing. To illustrate, Elkılıç (2012) found common inter-lingual errors in composition papers of Turkish EFL learners. Hence, the confounding variable, mother tongue, was eliminated, and only Turkish speaking learners were accepted for the study. Another important feature considered in the selection of the participants was their English proficiency level. As the target group, pre-intermediate learners were selected purposefully since learners forming this group had targeted characteristics. In this level, students started to write coherent opinion paragraphs by connecting ideas, making transition between parts of the paragraph, giving examples and further explanations. Since it was the first time that they learned many markers fulfilling these functions, they tended to make mistakes related to them. As this study aimed at training

learner over such metadiscourse markers, pre-intermediate level was found to be appropriate for the study.

Furthermore, the participants were selected from the students who came to BWLC seeking help to develop their writing skill. Those students coming to the writing center were generally students whose grades were around 45-55 in the writing part of the final exam. Similar to what William and Alden (1983) suggested, they were mostly extrinsically motivated. That is, when asked why they applied to BWLC, all participants told that their score in writing exams in previous level, Level 2, was lower and they had difficulty in writing appropriately in their current level. Therefore, the writing grades of the participants were mostly around between 45 and 55. For the participants, all Level 3 students who came to BWLC were explained the purposes and asked whether they were willing to participate in the study. The participation in the study was on voluntary basis, and the study started with those willing to participate in this process.

At the beginning, 13 participants volunteered to take part in the study, but six of them dropped out as they did not complete all the assessment tasks, and only seven of them completed the study. The mortality rate for male participants was significantly higher, and out of six who withdrew from the study, four of them were male learners. The number of female and male participants within the remaining students was six and one, respectively. Gender was not a focus in this study, so it was not taken as a variable and ignored in the sampling process. The ages of participants ranged from 18-20, and the average of their age was 19. All of them were native speakers of Turkish, and they were monolinguals. Except Ada, they all graduated from a public high school located in different cities of Turkey. Most stated that they had started learning English in primary school. However, none of the participants have been to an English-speaking country before. When asked about private courses for writing, they reported taking no courses. Even though they used BWLC to get feedback for their writing in previous level, they stated that they had never been in an intensive training before as this study aimed.

Pseudonyms were given to those participants for the confidentiality. The first participant, Elif was very willing to take part as her scores in writing exams were low when she was informed about this kind of study. The second participant, Ada,

graduated from a private high school, but her English was not as good as it was expected to be. Also, Ada was fed up with the preparatory school, and she wanted to finish it quickly despite that fact that she had to complete the next two levels successfully. Third participant, Bahar graduated from a public high school where English classes were paid no attention. Because of this, she did not get an efficient education related to English even though she had started learning it in the fourth grade. Compared to other participants, her grammar was the worst. She had quite a lot of basic grammar mistakes. Also, Bahar was so pessimistic about her proficiency in English, and it was observed that she was always demotivated. She believed that she could not improve her productive skills and grammar. Other than giving mediation to her writing, the mediator sought to increase her motivation and confidence in her abilities. The fourth participant, Mine was the most eager student in the study, and she put a lot of effort in developing herself. The fifth participant, Nil was also very enthusiastic about the study. Compared to other participants, she was the most successful and hardworking one. The sixth participant, Seda was oldest and experienced student in the study. She had graduated from a university before, but she wanted to follow a different career path, which led her to her current department. However, she stated that her English was not good even though she had had basic English courses. The last participant, Umut, is the only male participant in the study. Unlike other male volunteer students, he did not withdraw from the study and studied hard to develop himself.

### **3.5. DATA COLLECTION INSTRUMENTS**

Concerning data collection, this study was based on three research tools which were opinions paragraphs produced by the participants and used as assessment tasks, interviews and a reflection on DA implementation written by the participants.

#### **3.5.1. Background Questionnaire**

With a background questionnaire before the study, it was intended to obtain data about participants, which the researcher used to interpret characteristics of them. Factual questions (Dörnyei, & Csizér, 2012) were posed to find out demographic features such as age, gender, languages they can speak, history of English language learning, their residency in English-speaking countries and private lessons taken for

writing. The information collected through the questionnaire was explained in participants section to depict a picture of the study's participants.

### **3.5.2. Opinion Paragraphs (Assessment Tasks)**

This study was intended to train participants for the use of metadiscourse markers in their writings using interactionist dynamic assessment, and for this purpose, students' opinion paragraphs were used as assessment tasks on which the researcher gave mediation in terms of interactive metadiscourse markers. In line with Level 3 writing objectives, students were expected to write four 250-word opinion paragraphs in a coherent way by giving reasons, causes or effects of a topic along with second drafts. As the syllabus of writing courses for this level demands, opinion paragraphs included one topic sentence, two or three supporting ideas with explanation and examples, and a concluding part. They were also encouraged to use level appropriate language with target grammar structures and vocabulary.

Due to the regulations of the university where study was carried out, the researcher was not allowed to give writing topics to students in case the assigned topics could be used in common quizzes or the final achievement exam. Therefore, the topics provided in BWLC for Level 3 had to be used. There were ten different topics with three or four prompts, which were determined by a task group consisting of professional instructors before the start of academic year. The participants of the study were free to select topics themselves among those in BWLC. The willingness of students to write about a topic was important as self-selected topics have a positive effect on writing performance (Bonyadi, 2014), and students feel more motivated and confident when given the right to choose the topic on their own (Bonyadi & Zeinalpur, 2014).

After topic selection, participants wrote their 250-words opinion paragraphs at home, and they were encouraged to use writing materials covered in classes and other resources such as online dictionaries. The researcher and the participants met during lunch break in BWLC office, and the researcher gave mediation to students' paragraphs for metadiscourse markers using interactionist dynamic assessment. With the mediation given in dynamic assessment sessions, participants wrote the second draft of the same essay. Throughout the process, each student wrote four different

paragraphs including second drafts of each. Overall, 56 writings, 28 first and 28 second drafts were obtained from students.

### **3.5.3. Interviews**

As one of the most significant tools used in qualitative research, interviews enable researchers to obtain data that cannot be directly observed. (Griffie, 2012). Their findings can also enrich the interpretations of the study. Therefore, semi-structured interviews were used in order to gain a deeper understanding of participants' attitudes towards DA implementation. Concerning English proficiency level of students, they were conducted in students' first language, Turkish, since use of English might intervene with the quality and quantity of collected data (Mackey & Gass, 2012). The following questions were addressed to students in the interviews:

1. Did this study contribute to the improvement of your writing?
2. Your teacher gave mediation to your errors. Were they beneficial?
3. Do you think guidance of teacher helped you realize your mistakes?
4. Did you learn anything from the instructor's mediation? If so, what?

### **3.5.4. Reflections**

Mackey and Gass (2012) point out that written or spoken reflections can reveal unknown information related to perspectives of participants and problems they face. Daniels (2007) also states that examining affective aspect is vital to obtain "a complete analysis of processes of development and learning" (p.308). Hence, to understand students' feelings and experiences in DA implementation process, participants were asked to write a prompted reflection about the study in the seventh week. Some prompts were provided to students to take into consideration while writing, and the language of reflections was Turkish as students can express themselves better in L1. The reflection paper was sent to all the participants via email, and they sent it back in either word or PDF format.

## **3.6. DATA COLLECTION PROCEDURE**

The data collection procedure lasted six weeks, and the following table provides a weekly schedule of it.

Table 5

*Weekly Plan of the Procedure*

Week 2	Selection of the participants Informed consent form /Background questionnaire
Week 3 & 6	Assessment tasks and DA sessions
Week 7	Interviews and reflections

In second week of the term, pre-intermediate students who sought help from BWLC to improve their writing were explained the aims and process of the study. Students who volunteered to take part in the study, were given informed consent form and background questionnaire to get more information about them in the same week. From the start of the third week to the sixth week, DA implementation process continued. Participants started to write essays in the third week of the term and wrote the last essay on the sixth week. They selected the topics from the ones provided for pre-intermediate students in BWLC. When students wrote an essay, they sent a photo of it to the mediator, and she identified the mistakes related to metadiscourse markers employing Hyland's (2005) taxonomy. The mediator and the student met at BWLC office during the lunch break of that level on the other day. Using the mediations steps adapted from the regulatory scale of Aljaafreh and Lantolf (1994), hints from implicit to explicit were provided to students so that they could notice their mistakes and correct it. DA sessions lasted around 20-30 minutes, and all were recorded with voice recorder through the researcher's phone. Moreover, following the dialogic nature of interactionist DA, they were allowed to ask questions, and whenever needed the researcher asked follow-up questions to understand ZPD of the learner. Besides, mediation was given in in their L1, Turkish, to have an effective interaction with the learners. Darhower (2002) stresses the significance of L1 in cognitive processing of L2 as language is the primary symbolic artifact that mediates humans' thoughts. Thus, Ebadi and Saeedian (2014) suggest using L1 as a facilitative tool to meet the demands of second language learning.

Upon the mediation for the first draft of an opinion paragraph, students were asked to write its second draft as drafting is an essential strategy that is used to make writing instruction effective and to enhance the development of the skill (Cho & MacArthur, 2010; Hyland, 2003). Thus, in the following week, students came with the second draft of the previous paragraph and another novel one. The researcher gave



mediation to both the second draft and first draft of the new paragraph. The same process was repeated for each of the four opinion paragraphs that were used as assessment tasks. After the mediation process finished in week six, students were interviewed and wrote their reflections about the process.

Table 6 shows mediation moves adapted from the regulatory scale of Aljaafreh and Lantolf (1994) that was created based on tutor-learner interaction (p. 471).

Table 6

*DA Mediation Moves*

Step	Mediation
1	The mediator asks students to read the sentence, and the student realizes and corrects the mistake.
2	The mediator indicates that something can be wrong in the sentence
3	The mediator points to the erroneous part of the sentence
4	The mediator gives clues to help learner correct the error.
5	The mediator provides the answer with some explanation

Through the intervention process, it was borne in mind that mediation provided to learners needs to be *graduated* and *contingent* (Aljaafreh & Lantolf, 1994). Graduation means that help from a more knowledgeable one moves from the implicit hints to more explicit and concrete ones gradually, which hinges upon a learner' ZPD. By contingency, it is meant that mediation should be given "only when it is needed and withdrawn as soon as the learner shows signs of self-control and ability to function independently" (Aljaafreh & Lantolf, 1994, p.468). Accordingly, the mediational steps given in Table 6 were prepared from implicit to explicit and offered to the learners sequentially.

DA implementation is primarily dependent on the mediator, and during the data collection process, the researcher played the role of mediator and took the responsibility of implementing DA. As Vygotsky suggested, she took the role of tram-driver who organized the social environment for learning. She was responsible for finetuning the mediation based on the learners' needs and their responsiveness, encouraging learner to engage with the target structures, motivating them to self-regulate and deciding when and how to offer mediation by working together with the learners. Hence, she worked collaboratively with the learners to promote the development in their ZPD. Also, as the intervention in DA depends on the assistance provided by the researcher, and the styles of the mediators might promote certain

abilities of the learners, the mediator read a lot to have a deeper understanding of the relation between assessment and learning, and DA was implemented carefully in order to ensure its efficiency.

### **3.7. DATA ANALYSIS**

#### **3.7.1. Analysis of the Opinion Paragraphs**

Hyland's (2005) metadiscourse taxonomy was used in order to analyze interactive metadiscourse markers employed in the students' opinion paragraphs. In his model, interactive metadiscourse consists of five subcategories; transition, frame markers, code glosses, endophoric markers and evidentials. However, endophoric markers and evidentials were excluded from the analysis as the data included only 250-word short opinions paragraphs in which endophoric markers, referring to information in other parts of the text, and evidentials, showing the source of information from other texts, were hardly observed. Steps that are about to mentioned were followed in order to analyze 56 paragraphs including 28 first drafts and 28 second drafts.

Firstly, a list of potential interactive metadiscourse markers was needed to be used as a reference in the coding process. Therefore, along with Hyland's research (2005), other studies (Cao & Hu, 2014; Ho & Li, 2018; Hyland, 2007; Mina & Biria, 2017; Sancak, 2019) were benefited for the identification and classification of metadiscourse markers. Examining those studies thoroughly, a detailed list of transition, frame markers and code glosses were compiled. The researcher did not only rely on the list of metadiscursive words proposed by Hyland (2005) since his list is not inclusive.

In second step, as all first and second paragraphs were obtained in handwritten format throughout the process, they were all typed in a word document by the researcher and saved with pseudonyms to protect the confidentiality of participants. The paragraphs were typed without any correction so as not to intervene with the data.

Later, opinion paragraphs in the form of first and second drafts were entered individually for each participant in NVivo 11 which is a software program that can manage large amount of qualitative data (Richards, 1999). In NVivo, a directed content analysis that approaches the data with initial codes recorded in earlier studies (Hsieh & Shannon, 2005) was carried out to identify, organize and code the interactive

metadiscourse markers found within the paragraphs. During coding process, it was kept in mind that expressions can have metadiscoursal meanings “connecting steps in an argument” or propositional meanings associating “events outside of the world” (Hyland, 2017, p.18). Hence, each metadiscourse marker noticed in the paragraphs were scrutinized with great attention so as to ascertain their metadiscursive function in that context. In the following sentences, these functions were exemplified with the use of the metadiscourse marker, *and*.

Example 1. Distinctive functions of *and*

1) Two benefits of travelling alone are opportunity to meet new people and building self-confidence (Seda, 3<sup>rd</sup> essay)

2) In fact, travelling alone helps them for discovering themselves, and discovering themselves make they build self-confidence (Seda, 3<sup>rd</sup> essay)

In the first sentence *and* has a propositional function as it just adds activities. However, in the second sentence it fulfils a metadiscoursal function since it connects two arguments that are internal to the text.

In addition to the categorization of metadiscourse markers into transition, frame marker and code glosses, incorrect uses of those interactive markers were analyzed by creating nodes. Examining the errors were significant as the mediator gave mediation to learners to them, and there were different types of errors. Errors were identified and classified building on misuses suggested by of Gholami, Nejad and Pour (2014). Seven different types of metadiscourse marker errors were found in students’ opinions paragraphs, and they were missing metadiscourse marker, overuse, punctuation, spelling, structure, unnecessary use and wrong metadiscourse marker.

Furthermore, reliability is an important criterion to ensure the value of a qualitative research. Mays and Pope (1995) asserts that “the analysis of qualitative data can be enhanced by organizing an independent assessment of transcripts by additional skilled qualitative researchers and comparing agreement between the raters” (p. 110), which might also help to reduce the interpretation bias. Hence, trustworthiness of interactive metadiscourse markers and error coding in the study was crucial to be assessed through peer inspection. The inter-rater was an English instructor at the same foundational university where the study was conducted, and she had 15-years of experience in teaching English. 20% of the collected paragraphs were independently analyzed by her in terms of transition markers, frame markers, code glosses and error

types. In order to measure the consistency, the formula (reliability = number of agreements /number of agreements + disagreements) suggested by Miles and Huberman (1994) was adopted. Reliability for interactive metadiscourse markers was 90% while it was 86% for errors. As some researchers describe 75% to 90% consistency as an acceptable level of agreement (Hartmann, 1977; Miles & Huberman, 1994; Stemler, 2004), it can be said that these percentages demonstrate a good qualitative reliability.

### **3.7.2. Analysis of Microgenetic Development**

A microgenetic approach was adopted to analyze development in learners' ZPD towards self-regulated functioning and enhanced performance. It was chosen as the analytic framework since it allows tracking changes in learners' progress over a short time during dialogic interactions between mediator and learner that takes place in DA sessions. Following the studies of Aljaafreh and Lantolf (1994), Poehner (2005) and Shabani (2018), microgenetic development from other regulation to self-regulation was determined by two criteria. First one was the quantity of assistance given through mediation when learners went through the mediation steps presented in Table 6. The other one was quality and frequency of learners' responsivity to mediation which is also called reciprocity.

In order to understand the amount of mediation that a learner needs, each DA assessment session which was audio-recorded, was transcribed and coded based on the five mediation steps given in Table 6. Those five steps were developed based on the degree of their implicitness or explicitness. Step 1 represented the correction made by the student immediately after he or she read the sentence. The mediator started giving mediation in step 2 by indicating that there can be a mistake about metadiscourse marker in that sentence. In step 3, the mediator showed where the mistake was, and she provided some clues to assist the learner to correct the error in step 4. When there was not any correction by student through all four steps, the mediator explained the answer in the final step. The learners' responsiveness in those mediation steps were analyzed both individually in first and second drafts of paragraphs used as assessment tasks.

Lidz (1991) advocates that not only the amount of mediation but also the learners' responsivity to mediation is vital to understand their performance. The term reciprocity referring the students' responsivity is suggested as an important criterion for MLE by Feuerstein to describe learners' interaction with the mediator and to emphasize the active role of the learners in the construction of the knowledge (Feuerstein, Rand, Hoffman, and Miller, 1979; Jensen & Feuerstein, 1987). Then, Lidz (1991) expands on this idea of reciprocity. Reciprocity moves or acts are dependent on the amount of responsibility a learner takes to respond (Shrestha & Coffin, 2012). In this study, they were considered as an indication of students' progress towards self-regulated processing. For their analysis, reciprocity moves were identified using reciprocity typology developed by Poehner (2005) and Shabani (2018). However, their typologies were modified since Poehner's study (2005) focused on listening skill, and Shabani's study (2018) used group-based DA. Table 7 displays learners reciprocity moves that progress from low reciprocity moves to high reciprocity ones.

Table 7

*Reciprocity Moves*

1	Taking no action after receiving the first meditations
2	Giving incorrect response
3	Asking for more hints
4	Using mediator as evaluator
5	Providing the correct response alone after the mediations
6	Providing the correct response independently
7	Offering explanation

By using reciprocity typology presented above, the transcribed DA sessions were examined thoroughly to identify the reciprocity acts that each learner had taken. They were coded, and the frequency of each move was calculated.

### **3.7.3. Analysis of Interview and Reflections**

Thematic analysis that identifies common themes in the data was used to examine the learners' perceptions illustrated in the instruments, interview, and reflection. This type of analysis was chosen as it provides a detailed description of the qualitative data (Braun & Clarke, 2006).

The thematic analysis was carried out by following the steps suggested by Braun and Clarke (2006) for a better and clear interpretation. Firstly, oral interview data were

transcribed verbatim by the researcher. In order to familiarize with the data, the researcher read all the interview transcriptions and reflections. Then, they were uploaded to NVivo 11, and the preliminary codes were generated in the data set. The next step was interpretive analysis of the created codes. The potential themes were identified, and the codes were collected into themes. After that, these initial themes were reviewed to ensure that they represented the data accurately. Some of them were discarded, and some were combined with others. Next, each theme was named with a succinct name that indicated what the theme is about. Lastly, a table including the themes and some vivid extract examples was formed.



## CHAPTER 4

### 4. RESULTS

#### 4.1. INTRODUCTION

In this chapter, the findings of the study are provided. It presents the results of analyses for each participant individually. Firstly, it gives the frequency of interactive metadiscourse markers, namely, transition markers, frame markers and code glosses, comparing the data between assessment tasks and their drafts in a bar chart. Then, it provides the identified metadiscourse marker errors in opinion paragraphs, and comparison of their frequencies. It continues with presentation of the frequency of mediational steps in each paragraph of the learners in line charts. Later, it presents the reciprocity acts taken by the learner in response to mediations. Lastly, the perspectives of the learners about the process are expressed with the data obtained through interview and reflection.

#### 4.2. ANALYSIS OF DISAGGREGATED DATA

This part presents the analysis of each student' frequency of the target metadiscourse marker categories, errors types, mediation moves and reciprocity acts, respectively. However, before the presentation of the results individually, it is necessary to indicate identified metadiscourse errors that were found in the participants' paragraphs. When the paragraphs were analyzed regarding errors students made, seven types emerged. The names of them were missing metadiscourse marker, overuse, punctuation, spelling, structure, unnecessary use and wrong metadiscourse marker. In the following table, examples of those errors obtained from the data were listed together with an explanation.

Table 8  
*Types of Errors Found in the Students' Paragraphs*

<b>Error type</b>	<b>Example</b>	<b>Explanation</b>
Missing Metadiscourse marker	1) Finally, they don't teach life values. Life values are important. Bad parents don't teach life values. Bad parents don't take care of children. (Umut, 3 <sup>rd</sup> paragraph)	1) Last three sentences that are written separately should be rewritten with a transition marker.

Table 8 (continued)

Error type	Example	Explanation
Missing metadiscourse marker	2) Today many people trying to be famous or popular. They share everything on social media. They trying to be a youtuber. (Ada, 2 <sup>nd</sup> paragraph)	2) These three sentences that are written separately should be connected with a transition marker
Overuse	1) For example, if you are interested in music, you can follow the pages about it, <u>and</u> you can find people like you <u>and</u> you can meet, <u>and</u> you can be friends. (Bahar, 3 <sup>rd</sup> paragraph)  2) That companies sponsor to you <u>and</u> the companies are products free for you <u>and</u> earning money while having fun (Mine, 1 <sup>st</sup> paragraph)	1) <i>And</i> is used three times without any stop in successive sentences.  2) <i>And</i> is used twice in to connect three ideas without any stop.
Punctuation	1) Also, using too much result in eye disorders. <u>Such as</u> myopic and astigmatism. (Elif, 3 <sup>rd</sup> paragraph)  2) <u>Firstly</u> young people want to be popular. (Seda, 1 <sup>st</sup> paragraph)	1) Dot should not be used before <i>such as</i>  2) After <i>firstly</i> , coma should be used
Spelling	1) Feeling younger mean better looking for people, <u>expicialy</u> women. (Seda, 2 <sup>nd</sup> paragraph)  2) <u>In other words</u> , men don't think they are better than women, and they can make them do whatever they want. (Nil, 1 <sup>st</sup> paragraph)	1) <i>Especially</i> is spelled incorrectly  2) <i>In other words</i> is spelled incorrectly.
Structure	1) There are lots of disadvantages of using too much technology. <u>Firstly</u> , becoming lazy. (Umut, 1 <sup>st</sup> paragraph)  2) Secondly using too much technological things are harmful for human psychology <u>for instance</u> being unsociable. (Ada, 1 <sup>st</sup> paragraph)	1) A sentence should be used after <i>firstly</i> , but the student used just a gerund.  2) A sentence should be used after <i>for instance</i> , but the student used just a gerund.
Unnecessary use	1) The second reason for using Instagram is advertising. <u>Moreover</u> , using Instagram helps them to advertize. (Nil, 2 <sup>nd</sup> paragraph)  2) There are <u>three reasons why</u> disadvantages of using too much technology. (Bahar, 2 <sup>nd</sup> paragraph)	1) <i>Moreover</i> is not necessary as it is just the beginning of supporting idea.  2) <i>Three reasons why</i> is unnecessary since the goal is already announced with <i>disadvantages of</i>
Wrong metadiscourse marker	1) When they using technological products too much they don't want to be communicate for face to face and this makes people unsociable. <u>also</u> actually communicate for face to face is better for human psychology. (Ada, 1 <sup>st</sup> paragraph)	1) The use of <i>also</i> is incorrect. As the student compare the ideas here, a transition maker of comparison should be used.



#### 4.2.1. Elif

##### 4.2.1.1. Frequency of Metadiscourse Markers and Errors

In relation to the first research question, it was intended to find out the change in the frequency of metadiscourse markers in students' paragraphs before and after implementation of interactionist dynamic assessment as treatment. Therefore, the frequency in each paragraph's first and second draft used as assessment tasks were analyzed, and Figure 1 depicts the distribution of transition markers, frame markers and code glosses in Elif's opinion paragraphs.

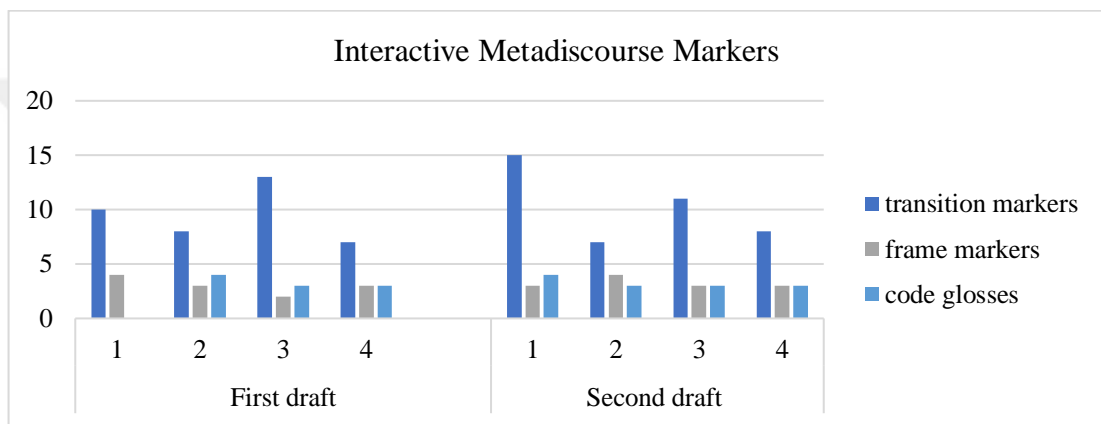


Figure 1. Frequency of transition markers, frame markers and code glosses in Elif's paragraphs

As can be seen from Figure 3, the most common category was transition markers, and it was followed by frame markers and code glosses, respectively, in all paragraphs. Regarding first drafts, the number of transition markers decreased gradually throughout the procedure, and the lowest frequency was observed in fourth paragraph, which was a surprising result. There was not much variation in frame markers, and their frequency retained between two and four as students wrote a few supporting ideas in Level 3. In terms of code glosses, Elif did not employ any in the first paragraph, but after the first DA session, she started to use them whose function was giving examples. In the second drafts, there were fluctuations in the number of transition markers while the frequency of the other categories stayed almost the same in the first and last opinion paragraphs.

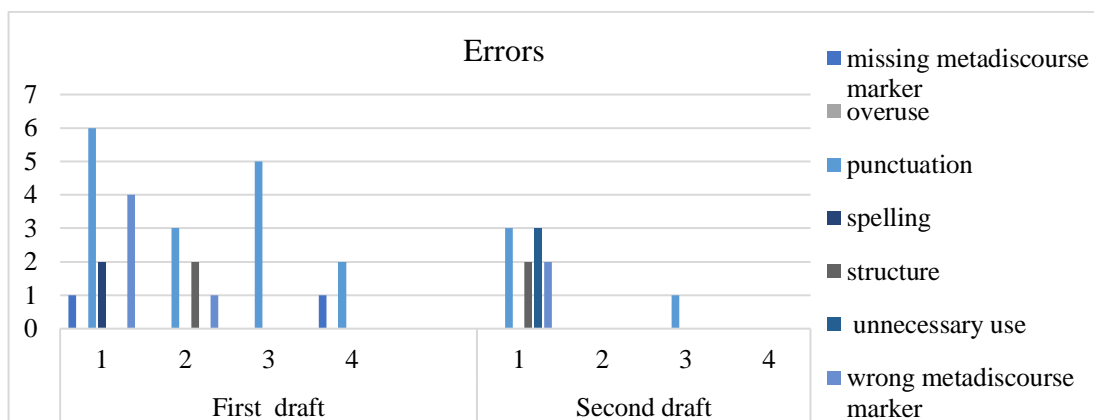


Figure 2. Frequency of metadiscourse marker error types in Elif's paragraphs

Figure 2 presents the types and frequency of metadiscourse marker errors found in Elif's opinion paragraphs. It is apparent that the most frequent error was in punctuation, and it was observed in almost all paragraphs. The second common one was wrong metadiscourse marker error, and structure error followed it. A spelling error was only observed in the first draft of first paragraph, and its frequency was only two while the unnecessary use was observed only in the second draft of first paragraph. However, Elif did not make any error related to overuse of metadiscourse resources. The highest number of errors was observed in the first draft of the first paragraph, but the number of errors showed a sharp decrease in later ones. Also, in that task, four error types were found, namely, missing metadiscourse marker, punctuation, spelling and wrong metadiscourse marker. Nevertheless, the number of error types decreased in the fourth paragraph, and Elif had problems in only two categories. As can be seen from Figure 2, there were not any errors in the second drafts of two paragraphs except the first and the third. Almost all errors in the second drafts were made in the first paragraph. Hence, it can be said that Elif managed to decrease her errors to a great extent during DA sessions, and she was able to use metadiscourse markers appropriately. These findings signal Elif's development in using them.

Example 2. Spelling, punctuation and missing metadiscourse marker errors (1<sup>st</sup> draft of 1<sup>st</sup> paragraph)

Young people try to be a youtuber. There are money reasons for this. First of all YouTube is very popular these days. YouTube become a job. Many people watch YouTube video.

In Example 1, Elif spelled many as *money*, and it was an example of a spelling mistake. Also, she forgot to put a comma after *first of all*. After the first supporting idea, there

are two sentences that are not connected. As they add ideas, they should be connected with a metadiscourse marker.

Example 3. Structure error (1<sup>st</sup> draft of 2<sup>nd</sup> paragraph)

For example, Duygu Ekim and Bilge Su Işık. They are famous on Instagram.

After *for example*, Elif wrote just names even though a sentence should come. Even though she was taught it in previous and current level, she was not able to use it appropriately.

#### 4.2.1.2. Mediation Moves

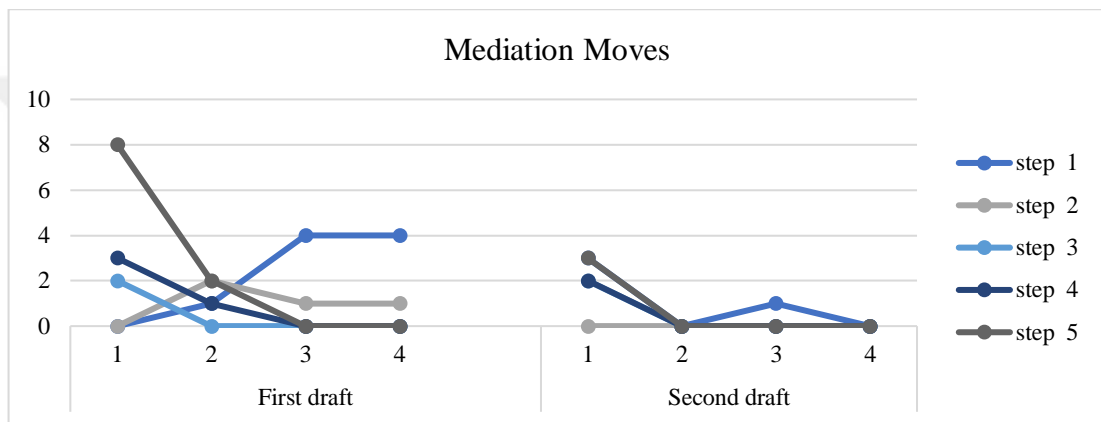


Figure 3. Mediation moves of Elif

Figure 3 illustrates mediation moves in Elif's paragraphs. In the first paragraph, Elif was not able to realize and correct eight errors, and she completed three steps to reach the answer of 3 errors. She did not respond to any mediation in step 2. She was not able to correct the errors with less mediation. Along with reduction in the errors, the number of explicit mediational moves decreased in the second paragraph. There was one response in steps 1 and 4 while step 2 and 5 took place twice. Regarding the third one, there was no occurrence of explicit moves, namely, step 3,4 and 5. She was able to notice and correct two of the mistakes individually and one of them after the mediator raised her awareness about the error. Compared to the third one, there were more errors in the fourth paragraph, but they were corrected by the learner herself without a lot of assistance coming from the mediator. Based on these results, it can be concluded that Elif moved toward a more self-regulated performance during the DA sessions.

When Elif's performance in the second drafts was analyzed, the development of her ZPD can clearly be seen. Moreover, the number of explicit mediation instances decreased. Ten errors were found in the first paragraph, and Elif corrected three of the errors by herself. She needed explicit mediation for four of them, and the mediator explained three. However, there were no errors in the second and fourth paragraphs, which resulted in no mediation. The only error found in the third task was corrected by Elif independently, too. In the following excerpts, the dialogues between mediator and Elif were given in order to illustrate her responsiveness in step 1 and 5.

Excerpt 1: Elif's responsiveness in step 1 (1<sup>st</sup> draft of 4<sup>th</sup> paragraph)

*Elif: In addition, bad parents generally use bad things. Such as cigarette, drug.*

*Elif: No dot.*

*M: Good.*

*Elif: Also, "and".*

*M: Yes.*

After reading the sentence, Elif realized that she should not have used dot and, she added *and* between examples without any assistance from the mediator.

Excerpt 2: Elif's responsiveness in step 5 (1<sup>st</sup> draft of 1<sup>st</sup> paragraph)

*M: Next one.*

*Elif: So they satisfy one's need.*

*M: Any problem here?*

*Elif: (silence)*

*M: Look at "so".*

*Elif: I mean "böylece". We can use "so".*

*M: It gives the meaning, but do we use "so" at the beginning of a sentence?*

*Elif: Can't we?*

*M: No, in writing it is not suitable. What can we use here instead of "so"?*

*Elif: I do not know.*

*M: Instead of "so", you can use "therefore", "as a result" or "consequently".*

As seen in Excerpt 3, Elif the function of *so*, but she did not know where to use it in a sentence. Even though the mediator pointed that it cannot be used at the beginning of the sentence, she questioned it. Also, she had used the markers that had same function with *so* in the writing, she was not able to utter them. It can be because of the fact that those markers were presented to her in isolation.

### 4.2.1.3. Reciprocity Acts

Table 9

*Frequency of Reciprocity Acts in the First and Second Drafts of Elif's Paragraphs*

	First draft				Second draft			
	1	2	3	4	1	2	3	4
<u>Reciprocity moves</u>								
Taking no action after receiving the first mediations	6	1	-	-	-	-	-	-
Giving incorrect response	1	-	-	-	-	-	-	-
Asking for more hints	4	2	-	-	1	-	-	-
Using mediator as evaluator	4	2	1	1	2	-	-	-
Providing the correct response alone after the mediation	5	3	1	1	4	-	-	-
Providing the correct response independently	-	2	4	2	3	-	1	-
Offering explanation	-	1	-	-	-	-	1	-

Table 9 shows how Elif responded to mediations during DA sessions. As can be seen from the table, all of the reciprocity moves existed in Elif's moves in varied frequencies. In DA session of the first writing task, Elif mostly did not *take any action after the first mediations*. Also, asking for more hints and *using mediator as evaluator*, which are dependent moves on mediator, were frequent. Even though Elif provided a correct response after five instances of mediation, she was not able to do it independently. However, the table above reveals that the number of independent moves increased in the later DA sessions while the dependent ones decreased to a great extent. Even the first three acts were not observed in sessions for the first drafts of the third and the fourth paragraph.

In addition, the frequency acts in the second drafts decreased as the errors were scarce in number. When mediation was provided for the existent errors, Elif made use of fewer dependent acts. The other regulated acts, *asking more hints* were employed only one while using mediator as evaluator occurred twice. There were not any instances of *no responsiveness* and *incorrect response*. One example of *offering explanation*, the most independent act, was seen in the second draft of the third paragraph. These observations in the second and first drafts provides evidence for Elif's development showing that she was able to take more responsibility and regulated herself independently during DA sessions. Excerpt 6 and 7 display some examples from Elif's reciprocity moves.

Excerpt 3: The act of taking no action after receiving the first mediations (1<sup>st</sup> draft of 1<sup>st</sup> paragraph)

*M: Next sentence.*

*Elif: First of all YouTube is very popular these days.*

*M: Is there any problem here?*

*Elif: (silence)*

*M: Actually, there is, and the problem is with “first of all.”*

*Elif: (silence)*

*M: It is a punctuation problem.*

*Elif: I don't know. Is it important?*

*M: Yeah, it is. If you don't learn with punctuation, this problem will continue, so while writing pay attention to punctuation.*

*Elif: Okay.*

*M: Then, what should we do it?*

*Elif: I said I don't know. I always write like this.*

*M: I see. We have to use comma after “first of all”. From now on, please be careful about it.*

*Elif: Okay.*

In the episode given in Excerpt 6, the mediator gradually moved from implicit to explicit mediation, but Elif remained *unresponsive* to mediations. She did not attempt to think about the mistake and provide the correct answer. Instead, she just gave a short answer “*I don't know*” and questioned the importance of punctuation in writing.

Excerpt 4: The act of offering explanation (1<sup>st</sup> draft of 2<sup>nd</sup> paragraph)

*M: Lets read this sentence.*

*Elif: For example, Duygu Ekim and Bilge Su Işık. They are famous on Instagram.*

*M: Is there a mistake?*

*Elif: Yes, because after “for example” we use a sentence.*

*M: Good.*

*Elif: I can say “such as”, but I have to give a few examples after “such as”.*

*M: Yess, right. Then, what can we do?*

*Elif: I delete they here and write “Duygu Ekim and Bilge su Işık are famous people on Instagram”. More logical.*

*M: Well done.*

This episode exemplifies the reciprocity act of *offering explanation*. After reading the sentence, Elif realized that a sentence was necessary after *for example*, a code gloss, and she corrected it by providing an explanation for the correction.

## 4.2.2. Ada

### 4.2.2.1. Frequency of Metadiscourse Markers and Error Types

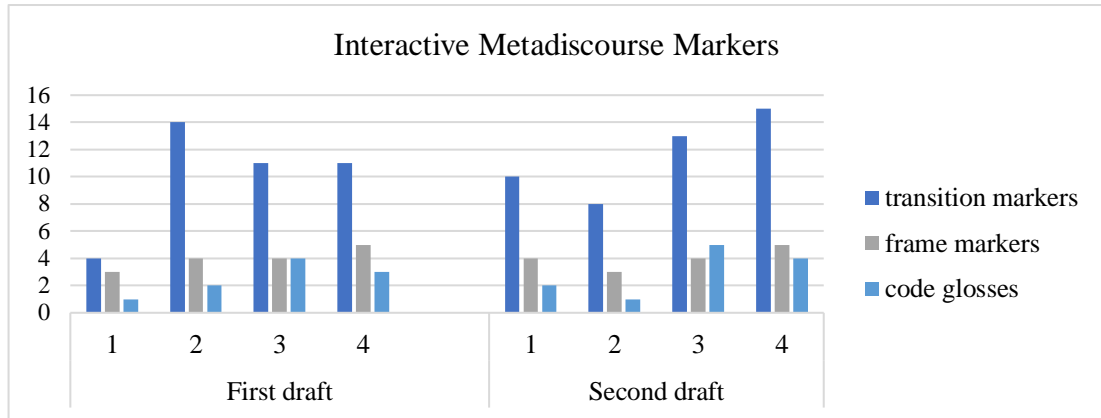


Figure 4. Frequency of transition markers, frame markers and code glosses in Ada's paragraphs

Figure 4 indicates the number of transition markers, frame markers and code glosses in Ada's paragraphs. Similarly, the most frequent one was transition markers while the least frequent one was code glosses. As shown in Figure 4, Ada employed very small number of metadiscourse markers in her very first paragraph. In that task, there were only eight of them, and so her text included ideas that were just presented in sentences without coherence. Even though she knew some metadiscourse markers, she could not attempt to use them. However, after the mediation in the first DA session, the number of transition markers increased dramatically. Frame markers retained the same frequency in most of the paragraphs as Ada mostly wrote two supporting ideas.

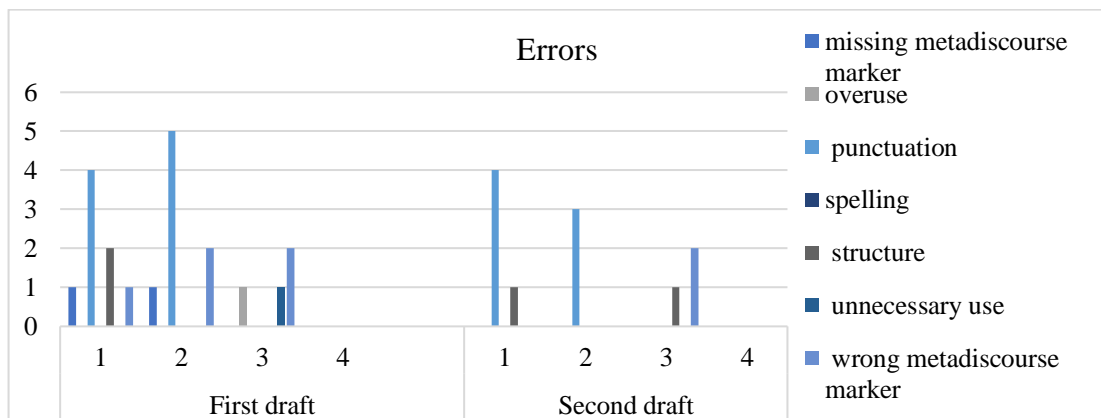


Figure 5. Frequency of metadiscourse marker error types in Ada's paragraphs

The findings related to types of errors in Ada's drafts are presented in Figure 5. The most frequent type was punctuation, and structure errors followed it as Ada had difficulty in using metadiscursive markers with appropriate structures. Compared to

these two errors, the number of other error types prevailing in Ada's paragraphs was only one. In addition, spelling was the only type that did not exist. In the first draft of the first paragraph, there were problems with almost all the markers that were employed, and errors were observed related to four categories. The frequency of errors was the same in the second writing, but there were three error types. In the third paragraph, overuse and unnecessary use were seen for the first time with the frequency of one. However, Ada was able to use all markers without any mistake in the last task. Compared to the first drafts, only punctuation and structure errors occurred with a lower frequency in the second drafts. Figure 5 also shows that there was a slight decrease in the number of errors. Based on the data in Figure 5, it can be suggested that Ada benefited from mediation in that she made few errors.

Example 4. Missing metadiscourse marker, punctuation, and structure errors (1<sup>st</sup> draft of 1<sup>st</sup> paragraph)

First of all using too much technological devices such as telephone, television or computer becoming people lazy. Because people only focus on these kinds of products. They don't reading books or they don't doing sports. They only want to looking at their technological products, they don't want to getting tired. They get used to comfort. They can't see the other opportunities.

This part of her writing was chosen as it included three of metadiscourse marker errors sequentially. Since Ada had problems with accuracy, not only the use of metadiscourse marker but also accuracy was problematic in this part. As seen in the example, punctuation and structure errors were made in relation to *firstly*. The student did not put comma after the marker, and she was not able to write a sentence after *firstly*. The use of *because* was also erroneous since punctuation was wrong, and it was not clear which sentences it connected. In addition, there were four sentences presented consecutively without any metadiscourse markers. As the ideas expressed in the sentences were related to each other, they should have been rewritten with markers.

Example 5. Wrong metadiscourse marker error (2<sup>nd</sup> draft of 3<sup>rd</sup> paragraph)

Some people don't share their seat with pregnant women and old people, and it doesn't obey the rules of respect on society. In addition, wanting to sit causes arguments about the seat. Moreover, these effects have a peaceful effect on people's life.

This example illustrates Ada's use of wrong metadiscourse resource. In the last sentence, she employed *moreover* which adds more information. However, the idea in this sentence expresses the result of the previously presented ideas instead of giving



additional information. Rather than *moreover*, a consequential metadiscourse marker such as *therefore* and *consequently* should be used in that sentence.

#### 4.2.2.2. Mediation Moves

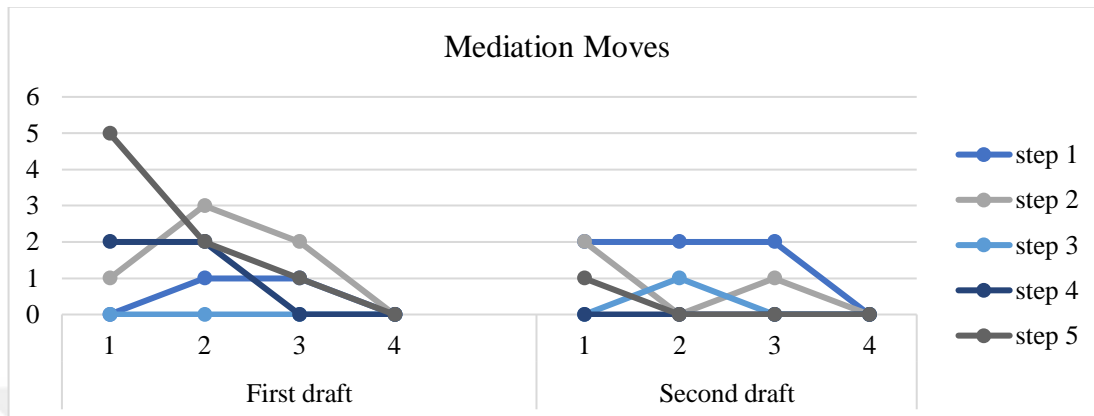


Figure 6. Mediation moves of Ada

As can be seen in Figure 6, Ada required explicit mediation for five errors in the first paragraph, and she was not able to notice any errors herself. In the second paragraph, the frequency of responses in step 4 and 5 was only two. Also, the number of errors remained same, but her responsiveness to implicit mediation increased. She corrected one error herself and completed step 1 for three errors. DA session for third paragraph included implicit moves for three errors, and only one explicit move took place. No mediation was given to fourth paragraph of this learner due to lack of errors.

The right side of the figure depicts mediational moves in DA sessions of Ada's second drafts. When compared to first drafts, the number of explicit moves was quite low, and the only instance of them occurred in the second draft of the first paragraph. Even though the number of errors was high in the first one, she was able to correct the errors with no or minimal mediation. In addition, the errors were made in the second and the third paragraphs, but Ada was able to correct them without mediation.

Considering the results displayed in Figure 6, it can be said that Ada went through a developmental process in DA sessions. The decrease in the number of both errors and explicit mediational moves in Ada's paragraphs signals to the increasing independence in terms of using metadiscourse markers in writing. The following excerpts illustrate Ada's responsiveness in mediation steps.

Excerpt 5: Ada's responsiveness in step 1 (1<sup>st</sup> draft of 3rd paragraph)

*M: This one.*

*Ada: So, you should wait your turn.*

*Ada: I don't start sentence with "so"*

*M: Yes, what can you use?*

*Ada: "As a result" and "therefore".*

*M: Yes, replace it with any of these.*

*Ada: Okay.*

As given in the Excerpt 8, Ada used *so* at the beginning of the sentence. However, she was able to notice and correct the errors without the mediator's assistance.

Excerpt 6: Ada's responsiveness in step 5 (1<sup>st</sup> draft of 2<sup>nd</sup> paragraph)

*M: This one.*

*Ada: And he is famous today.*

*Ada: Comma.*

*M: No, it is not the error, but you are right that there is a problem with "and", but not comma. Do we use and at the beginning of sentence?*

*Ada: No.*

*M: So? What can we write?*

*Ada: What?*

*M: Here you wanted to say the result of something. For this function, what is used?*

*Ada: I don't know.*

*M: Do you know "as a result", "therefore"?*

*Ada: Yes.*

*M: Here, we have to use one of them.*

*Ada: Okay. Yes.*

In this excerpt, Ada used *and* at the beginning of a sentence to express the result, but it was not used for this function. She was aware that there could be a problem with the marker even though she gave an incorrect response. The mediator followed all mediation steps, but the learner could not provide the answer. It was apparent that she had seen the metadiscourse markers showing consequence, but she lacked the awareness of their function. Therefore, she required explicit mediation from the mediator.

#### **4.2.2.3. Reciprocity acts**

Table 10

*Frequency of Reciprocity Acts in the First and Second Drafts of Ada's Paragraphs*

	First draft				Second draft			
	1	2	3	4	1	2	3	4
<u>Reciprocity moves</u>								
Taking no action after receiving the first mediations	5	1	-	-	-	-	-	-
Giving incorrect response	1	-	-	-	-	-	-	-
Asking for more hints	4	-	1	-	-	-	-	-
Using mediator as evaluator	2	2	1	-	2	-	-	-
Providing the correct response alone after the mediation	3	5	2	-	2	1	1	-
Providing the correct response independently	-	1	1	-	2	2	2	-
Offering explanation	-	-	2	-	2	-	-	-

The number of reciprocity moves adopted by Ada illustrated in Table 10. As depicted in the table, the highest number of moves was found in the session for the first draft of the first paragraph. For that task, the most frequent move was lack of response, the lowest reciprocity act, and Ada asked for hints for a few times. However, no instances of *independent response* and *offering explanation* were observed. In DA session for the second paragraph, a notable decrease in the frequency of *no response* act was found, and there was only one occurrence of it while the number of independent moves increased. Ada was able to provide a correct response five times, and the first instance of an *independent response* was seen in this task, too. Even in the third paragraph, by taking the most independent move, Ada offered explanations for two responses. Evidently, this table reveals Ada's development towards a self-regulated use of target structures in her writing.

Regarding the moves for the second drafts, it is clearly seen that the number of reciprocity acts decreased throughout the process as less assistance was required by the learner, which points to the progress in Ada's ZPD. Compared to the first drafts, there were no instances of moves that were identified as more dependent ones among moves appearing in the second drafts. By taking the control over her responses, Ada mostly provided responses with no help from the mediator. Some of the reciprocity acts taken by Ada are presented in the excerpts below.

Excerpt 7: The act of *asking for more hints* (1<sup>st</sup> draft of 3<sup>rd</sup> paragraph)

*M: Let's read this one.*

*Ada: Due to the fact that technology makes people lazy. I saw this (due to) in the book and I write it here. Is it correct?*

*M: Actually, no. "due to the fact that" is very good, but there is a problem.*

*Ada: What does it mean?*

*Ada: "Also"?*

*M: No no. It is similar to because of. Actually, they almost have same meaning.*

*Ada: Then how can I write it in this sentence?*

*M: After "due to", we use a noun and a gerund. If you want to add sentence you can use "the fact that". However, after that you have to write another sentence. Here, sentence is not complete. "Due to the fact that technology makes people lazy" and so what happens?*

*Ada: Okay.*

In the excerpt above, an example of *asking for more hints* was illustrated. The mediator and Ada were talking about the use of *due to*. Ada took risk by using it in her paragraph even though she did not understand it. Evidently, she accepted that it was not used appropriately, and so she asked for more hints from the mediator. She wanted to learn its meaning and usage with the assistance from the mediator.

Excerpt 8: The acts of *using mediator as evaluator* and *providing the correct response independently* (1<sup>st</sup> draft of 2<sup>nd</sup> paragraph)

*Ada: Comma? (For example Duyu Özaslan shared a lot of makeup videos, and today she have a job about makeup.*

*M: Yeah, you are right. After for example, comma should be used.*

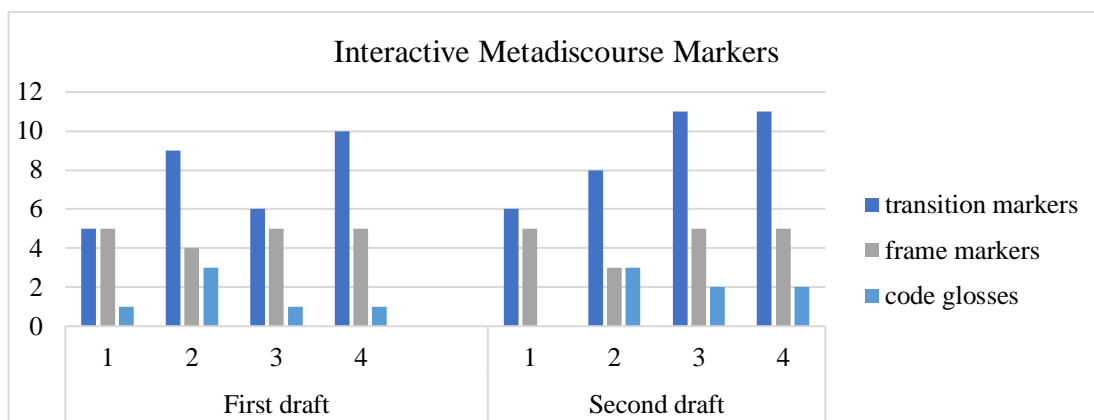
*Ada: And capital F.*

*M: Hhm.*

Excerpt 8 shows the reciprocity act of *using mediator as evaluator* and *providing correct response independently*. Apparently, Ada was able to correct what was wrong without any mediation, but she was not sure about it. In order to ensure her response, she sought approval of the mediator. As a result, the mediator accepted her response by offering an explanation.

### **4.2.3. Bahar**

#### **4.2.3.1. Frequency of Metadiscourse Markers and Error Types**



*Figure 7.* Frequency of transition markers, frame markers and code glosses in Bahar's paragraphs

Figure 7 summarizes interactive metadiscourse markers that Bahar employed. In all paragraphs except the first one, transition markers outnumbered the other two categories. In the first paragraph, the least number of markers was used, and it was the shortest paragraph of her. Also, in that one, she made use of the same markers a few times rather than using alternatives. In the first draft of the second paragraph, the number of transition markers increased to a great extent, and Bahar used more code glosses. However, there was a surprising decrease in the third one in both of them while frame markers increased. In the same task, the total number of markers declined, which led to a regressive move. In contrast, the progressive development was observed in the last one. Bahar also employed the highest number of markers in it. As seen in the figure, Bahar's progression was not linear, which is asserted to be common in development by Vygotsky.

When examined carefully, it is evident that more metadiscursive resources were observed in the second drafts. Even though the number of markers remained same in the third and fourth paragraphs, the frequency of markers found in them was notably different from the first one, especially in terms of transition markers and code glosses. These results were in line with the increasing use of markers in the first drafts.

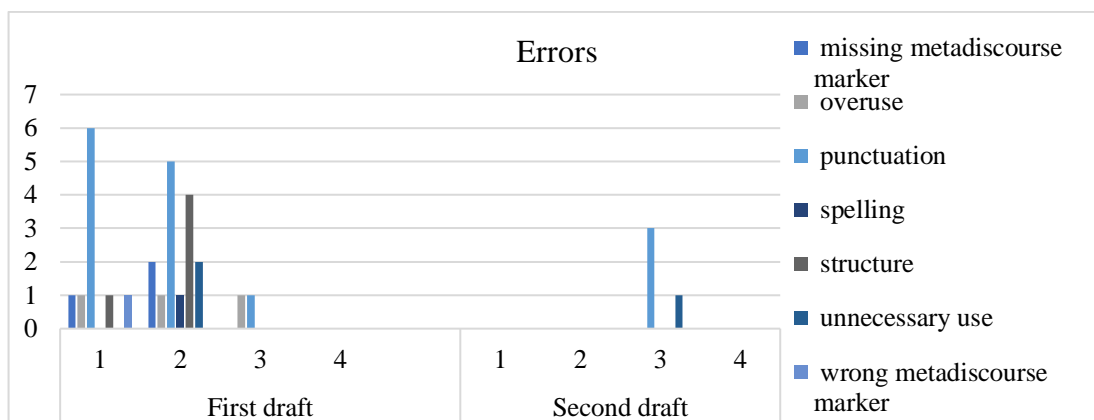


Figure 8. Frequency of metadiscourse marker error types in Bahar's paragraphs

Figure 8 indicates the types of errors in Bahar's paragraphs. In the first draft of the first paragraph, almost all error types were found except spelling and unnecessary use, and the most common one was punctuation with a striking difference in number. As can be seen, the second paragraph had the highest number of errors, and it was because Bahar used more markers that were taught by the mediator in very first DA session. As it was the first time that she used them, there were a lot of problems related to them. As well as the quantity, there were more error categories in the second paragraph, and wrong metadiscourse marker error was the only category that was not observed on it. Yet, with a sharp decrease, only two errors were found including one overuse and one punctuation in the third paragraph. Even, she made no error in the last paragraph. In comparison to the first drafts, a notable decline can be seen in the second drafts of the paragraphs except paragraph three. A regression was observed in that paragraph, which was described as normal in such studies, but Bahar was able to overcome it in the last task by making no mistake. Taking these results into consideration, it is apparent that Bahar was able to reduce the amount of errors after DA sessions, and this can be the evidence for her development of the use of metadiscourse markers.

Example 6. Punctuation and structure errors (1<sup>st</sup> draft of 1<sup>st</sup> paragraph)

Three reasons why flexible working hours are beneficial. Firstly people with flexible working hours are healthier than other employees

In this example, punctuation and structure error were illustrated. After the frame marker, *three reasons why*, Bahar did not write the reasons that she would talk about. Also, a comma should be used with *firstly*.

Example 7. Spelling, punctuation, and unnecessary use errors  
(1<sup>st</sup> draft of 2<sup>nd</sup> paragraph)

In short the reasons why the disadvantages of using too much technology are being lazy, being unsociable and having serious health problems.

As seen in example 7, Bahar spelled *in short*, frame marker, incorrectly, and she did not use comma after it. The other error was with *the reasons why* since it was unnecessary in that sentence.

#### 4.2.3.2. Mediation Moves

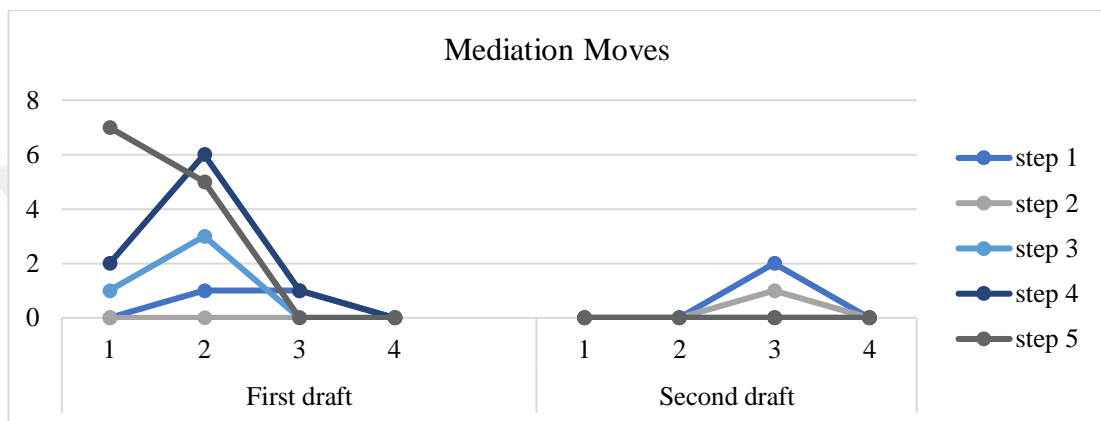


Figure 9. Mediation moves of Bahar

Figure 9 gives the frequencies of mediation steps of Bahar. As can be seen from the table, she needed explicit mediation for most of her errors, and the mediator provided the answer for seven errors in the first task. There was an increase in the errors and explicit mediation in the second paragraph. It was due to the fact that Bahar had limited metadiscourse markers in the first paragraph, and she did not know many metadiscourse markers. After she learned the alternative ones in the very first DA session, she tried to use more, and this led to more errors in the second paragraph. She corrected six errors in step 4 while she needed answer from the mediator for five wrong usages. First response in step 1 without any assistance was observed in that one too. Also, after the mediation given for the errors in the second paragraph, she was able to make few errors and correct one error without any mediation.

As the frequencies in the figure above reveal, no mediation steps were found in the second drafts of the first, a second and fourth paragraph. Two of three errors were made in the third paragraph, but the learner did not need any help to notice them. For the other one, she was able to find it just after the mediator raised her awareness. In fact when learners develop their ZPDs, the errors decline, and they need fewer

mediation. Hence, Bahar was able to improve her ZPD thanks to mediations in the first drafts of the paragraphs, and she required slightest assistance from the mediator.

Excerpt 9: Bahar's responsiveness in step 1 (1<sup>st</sup> draft of 3<sup>rd</sup> paragraph)

*M: Let's read these sentences together.*

*Bahar: Socialize on Instagram today is easier. Because you can easily find people who have the same hobbies as you.*

*Bahar: I found.*

*M: What is it?*

*Bahar: No comma no dot (showing because).*

Excerpt 9 exemplifies Bahar's self-regulation. As seen, she made an error about punctuation of *because*. When she read the sentence, she realized it, and correct it herself.

Excerpt 10: Bahar's responsiveness in step 5 (1<sup>st</sup> draft of 1<sup>st</sup> paragraph)

*M: Next sentence. Any problem here?*

*Bahar: .Because they love their job because they don't have to go to work at a certain time.*

*M: Is there any problem in this sentence?*

*Bahar: No.*

*M: The problem is with the use of two "because".*

*Bahar: (silence)*

*M: How many "because" you do see in that sentence?*

*Bahar: Two.*

*M: Is that possible?*

*Bahar: I don't know.*

*M: Okay then, do you know how to use "because"?*

*Bahar: It is "çünkü".*

*M: Yes, but how do we use it?*

*Bahar: Teacher, that is why I am here. I took notes in the class, but I don't know how to use it. Can you tell me?*

*M: Okay. As you said "because" means "çünkü. After "because", we use sentence. For example, "I left the school because I was sick". The part after "because" explained the reason. Also, do you know other ones that means because?*

*Bahar: No.*

*M: We can use "as" and "since" instead of "because". They are same.*

*Bahar: I should write them.*

*M: Okay. In this sentence, you used two of them, and it is not possible how can we correct it?*

*Bahar: How? Can you write?*



*M: We have to say “” they love their job because they don’t have to go to work at a certain time”.*

In this excerpt, Bahar’s responsiveness in step 5 was illustrated. She used *because* twice, but she did not think it was an inappropriate use. When the mediator started to give mediation, she only responded with *I don’t know*. When mediator further asked about *because*, it was revealed that she did not know how to use it despite the occurrence of it in her paragraph. Therefore, the mediator explained how to use it and presented the alternatives to her. After explanation, she could not even write the correct sentence independently, so the mediator provided the answer.

#### 4.2.3.3. Reciprocity Acts

Table 11  
*Frequency of Reciprocity Acts in the First and Second Drafts of Bahar’s Paragraphs*

	First draft				Second draft			
	1	2	3	4	1	2	3	4
<u>Reciprocity moves</u>								
Taking no action after receiving the first mediations	7	1	-	-	-	-	-	-
Giving incorrect response	1	2	-	-	-	-	-	-
Asking for more hints	4	4	-	-	-	-	-	-
Using mediator as evaluator	1	2	1	-	-	-	1	-
Providing the correct response alone after the mediation	3	9	1	-	-	-	1	-
Providing the correct response independently	-	1	2	-	-	-	2	-
Offering explanation	-	-	-	-	-	-	-	-

It is illustrated in Table 11 that the total number of reciprocating moves decreased both in the first drafts of the first drafts and the second drafts, which shows development in terms of self-regulation since the less mediation they require, the less reciprocity moves they employ. The first draft of the first paragraph included many reciprocity moves most of which were low reciprocity acts. Bahar remained *unresponsive* seven times, and she took the act of *asking for more hints* four times. Whereas she was able to correct three errors after the mediation was given, there were no *independent response* and *explanation*. Nevertheless, the number of high reciprocity moves increased in the second paragraph while low reciprocity acts decreased remarkably. *Providing the correct response alone after the mediations* increased to nine, and there was one response given without any mediation. In the third one, there were only five moves all of which required minimal or no dependence on

mediator. As Bahar moved toward self-regulation in her ZPD during the sessions, there was no mediation and so no reciprocity acts in the last task.

In the second drafts, the acts were observed only in the third paragraph since Bahar did not require any mediation for the other second drafts. There was not any *unresponsive, incorrect response* and *request for more hints*. Supporting Bahar's progress observed in the first drafts, the reciprocity moves found in that paragraph mostly consisted of independent acts.

Excerpt 11: The acts of taking no actions after the first mediations and asking for more hints (1<sup>st</sup> draft of 1<sup>st</sup> paragraph)

*Bahar: We don't do research anymore lead to we becoming lazy.*

*M: Is there any problem here?*

*Bahar: (silence)*

*M: There is an error here.*

*Bahar: (silence)*

*M: The problem is with "lead to".*

*Bahar: I see it in the booklet and tried to use it.*

*M: Do you know how to use it?*

*Bahar: I don't know exactly. How can I use it?*

*M: Okay, no problem. It means "cause" and it is a verb. For example, "stress leads to depression" "After "lead to" we use a noun or Ving". But here what did you use?*

*Bahar: (silence)*

*M: You wrote sentence. We have to rewrite it. We have to write "not doing research leads to laziness" or you can say "lead to being lazy".*

*M: Laziness is noun form of lazy.*

*Bahar: It is better now. I will work on this.*

Excerpt 11 shows how Bahar remained unresponsive to the mediation. The structure of *lead to*, a transition marker, was incorrect as she used sentences before and after it. The mediator followed the mediation steps, but the learner did not take any action by keeping her silence. Later, she asked how to use the marker, and wanted an explanation from the mediator. As Bahar lacked the knowledge of *lead to*, the mediator explained it.

Excerpt 12: The acts of providing the correct response alone after the mediations and independently (1<sup>st</sup> draft of 2<sup>nd</sup> paragraph)

*M: Last sentence.*

Bahar: *In short reasons why* the disadvantages of using too much technology are being lazy, being unsociable and having serious health problems.

Bahar: Comma and -I.

M: Great. any other?

Bahar: What?

M: Also, look at “the reasons why”?

Bahar: It is unnecessary, I guess.

M: Why?

Bahar: There is “disadvantages”.

M: Yeah, you don’t need “reasons why”.

In Excerpt 12, the examples of *providing the correct response alone after the mediation and independently* are indicated. Regarding the spelling and punctuation error with *in short*, Bahar managed to correct them without any help from the mediator. Also, she was able to notice the other mistake immediately after the mediator pointed to the location of it. She stated that *the reasons why* was unnecessary in that sentence.

#### 4.2.4. Mine

##### 4.2.4.1. Frequency of Metadiscourse Markers and Error Types

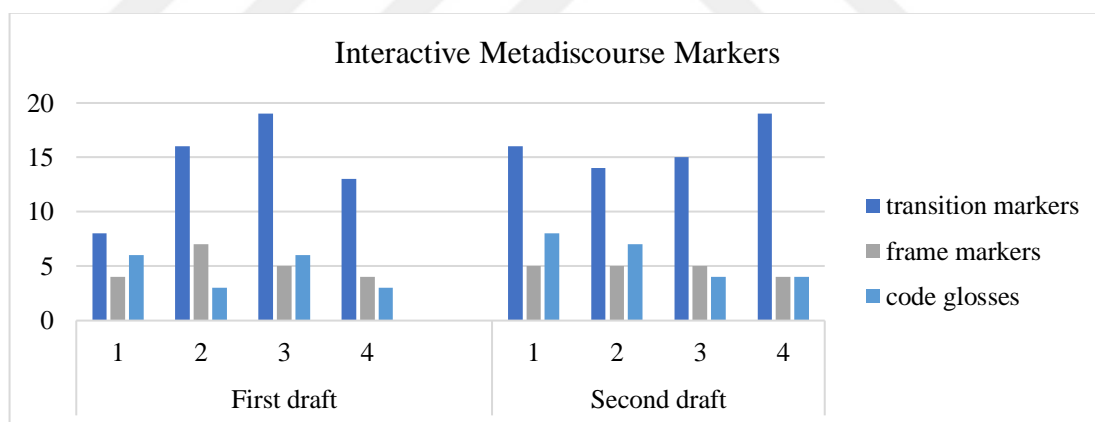


Figure 10. Frequency of transition markers, frame markers and code glosses in Mine’s paragraphs

In Figure 10, distribution of interactive metadiscourse markers Mine employed was displayed. As shown, the most frequent type was transition markers in all paragraphs. In contrast to the other learners in the study, code glosses were the second common category in some of her first and second drafts. One possible reason for that can be that Mine wrote longer paragraphs, and she needed more markers to elaborate on the ideas, which led her to use more code glosses. Comparison of the markers in the first drafts indicated that the frequency of markers increased gradually until the

third paragraph. However, there was a marked decrease in their number in the last paragraph. In the second drafts, the most markers were observed in the first paragraph, and interestingly the number of them declined slightly in the second and third paragraphs. Yet, a minor increase took place in the second draft of the last task.

Figure 10 demonstrates that there was some regression in terms of using markers in both first and second drafts, but it does not mean lack of development. Instead, based on the data given in Figure 10, it can be said that learner experienced development to some extent. Due to problems such as choice of topic, their motivation, and the length of the paragraph, she might have regressed and used fewer metadiscursive resources in certain paragraphs.

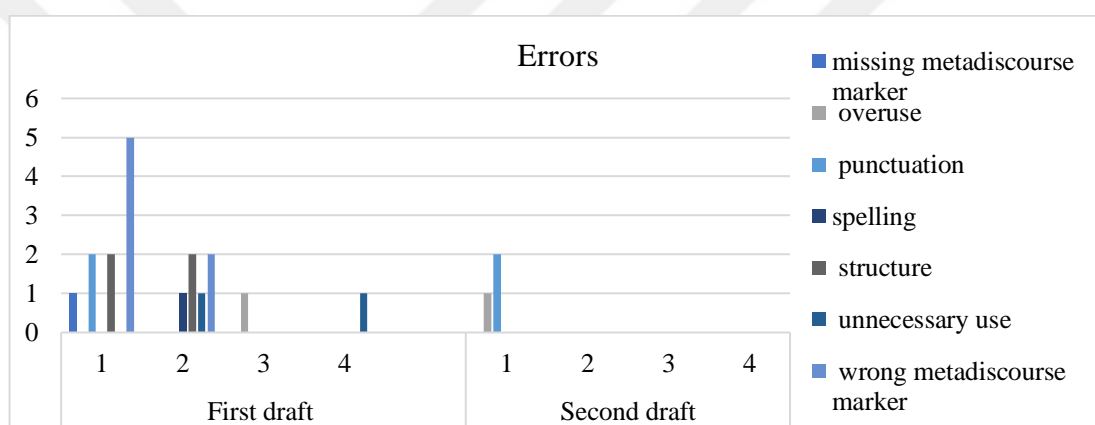


Figure 11. Frequency of metadiscourse marker error types in Mine's paragraphs

Figure 11 details the errors in Mine's paragraphs. It shows that Mine made errors in all categories, and the most prevailing one was wrong metadiscourse marker, which was followed by structure error and punctuation. Regarding the first drafts, more errors were observed in the first paragraph that included four different error types. In the following task, there was a small decrease although the number of error categories stayed the same. However, it is apparent that Mine was able to use markers more correctly in the third and fourth paragraph making only one error in both of them. When the second drafts were analyzed, it is clearly seen that Mine reduced her errors with the help of mediation given for the first drafts. No error was found in her second, third and fourth writing tasks. Errors were only detected in the first one, but their number declined considerably when compared to the first draft of the same paragraph. In line with the development highlighted in the use of markers, data in Figure 11

pinpoints Mine’s progress in her ZPD with the decreased number of errors types and their frequencies.

Example 8. Structure, wrong metadiscourse marker, spelling, and punctuation errors (1<sup>st</sup> draft of 2<sup>nd</sup> paragraph)

It result in you cant be social freely. But when you meet different people from different countries or different cities you can get their culture and experiences if you travel alone. Moreover you can empathize with them more easily.

In this example, four error types are shown. There was a structure error with *result in* as the learned wrote a sentence after it. Also, the usage of *but* was incorrect since it cannot be used at the beginning of a sentence. Instead, other markers showing comparison such as *however* and *nevertheless* might be employed. Regarding *moreover*, spelling and punctuation errors were made. Mine did not spell it correctly and did not put comma after it.

Example 9. Overuse error (1<sup>st</sup> draft of 3<sup>rd</sup> paragraph)

you can’t be able to express yourself well enough because of less self-confidence. Finally, you can have some serious health problems because of using too much technology such as deafness, seeing less and intense backache.

As Example 9 presents, Mine used *because of* in successive sentences. Instead of overusing that transition marker, its alternatives such as *due to* and *thanks* could be written.

#### 2.4.4.2. Mediation Moves

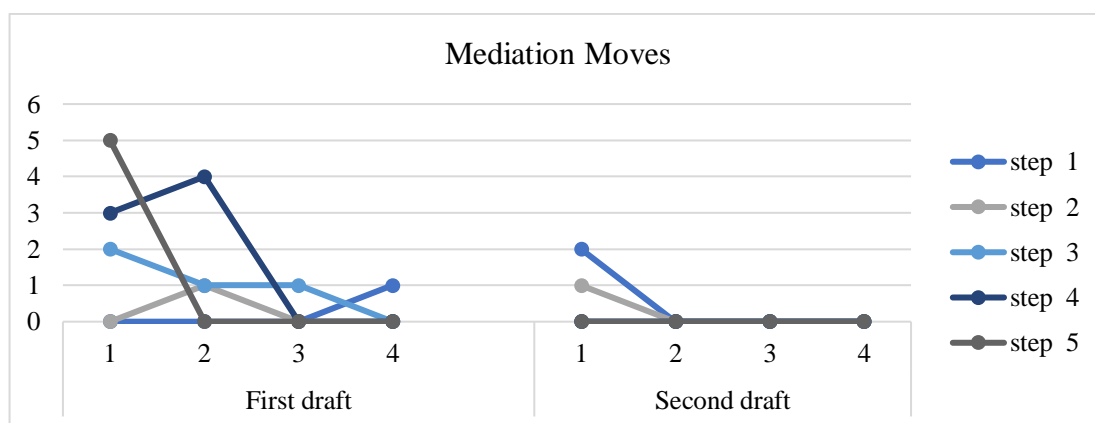


Figure 12. Mediation moves of Mine

The results related to Mine’s mediational moves are indicated in Figure 12. In the first paragraph, there was not any response in implicit steps, namely step 1 and 2. For the eight errors she made, explicit mediation was needed, and the mediator provided the answer for half of them. In the second one, there was one occurrence of step 2, but she completed three steps to realize her mistakes. The only mistake in third

task was corrected by the learner in step 3. With increased self-regulation, Mine was able to provide an answer independently to the error in the fourth paragraph.

In the second drafts, Mine made three errors spotted in the first paragraph. As Mine already had taken mediation for the first draft of that paragraph, she was successful at noticing them without no or a little assistance. These results reveal that Mine increased her responsiveness to implicit mediation while the frequency of explicit ones decreased. As a result, it can be suggested that the learner was able to increase her awareness of the errors and correct them independently.

Excerpt 13: Mine's responsiveness in step 1 (1<sup>st</sup> draft of 4<sup>th</sup> paragraph)

*M: Okay let's look at this sentence.*

*Mine: The second advantage of having plastic surgery leads to recovery from an injury and illness.*

*Mine: Is it "lead to"?*

*M: Yeah, what is the problem with it?*

*Mine: I think I should not use it.*

*M: Why?*

*Mine: It is incorrect like this if I font use it, it is better.*

*M: Good. It is unnecessary here.*

This excerpt illustrated Mine's response in step 1. After reading the sentence, she noticed that *lead to* should not have been used there. Even though she was not sure about it, she was able to realize it independently.

Excerpt 14: Mine's responsiveness in step 4 and 5 (1<sup>st</sup> draft of 1<sup>st</sup> paragraph)

*M: Let's look at this sentence*

*Mine: Moreover, YouTube provides most people get to know you better.*

*M: Any mistake here?*

*Mine: I don't know.*

*M: Lok at "moreover".*

*Mine: (silence)*

*M: Is spelling correct?*

*Mine: I think yes.*

*M: No, a letter is missing. Can you find which one?*

*Mine: What? I can't really see it.*

*M: Okay, it is "moreover". Any other?*

*Mine: Still I have errors?*

*M: Yes, a small one.*

*Mine: I don't know.*

M: *There is punctuation mistake.*

Mine: *Comma?*

M: *Right. Good.*

As seen in Excerpt 14, there were *spelling* and *punctuation* error with *moreover*. In order to make the learner detect the spelling error, the mediator followed all steps, but it was not a successful attempt. Mine could not find the correct spelling of *moreover*, and therefore the mediator gave the answer in step 5. Also, Mine did not use comma after the marker, but this error was easy for her to detect. When the type of error was told, she was able to notice and put comma.

#### 4.2.4.3. Reciprocity Acts

Table 12

*Frequency of Reciprocity Acts in the First and Second Drafts of Mine's Paragraphs*

	First draft				Second draft			
	1	2	3	4	1	2	3	4
Reciprocity moves								
Taking no action after receiving the first mediations	-	-	-	-	-	-	-	-
Giving incorrect response	2	1	-	-	-	-	-	-
Asking for more hints	3	4	1	-	-	-	-	-
Using mediator as evaluator	2	2	1	-	-	-	-	-
Providing the correct response alone after the mediation	5	6	1	-	1	-	1	-
Providing the correct response independently	-	-	-	1	2	-	-	-
Offering explanation	-	2	-	-	-	-	-	-

In the table above, frequencies of Mine's reciprocity acts were listed. As illustrated, Mine differed from other participants in that she was never *unresponsive* to the mediation. The most frequent act was *providing correct response alone after the mediations*, and it was followed by *asking more hints* and *using mediator as evaluator*, respectively. In the session for the first draft of the first paragraph, Mine gave two incorrect answers and asked for help three times. Yet, she did not take the most independent acts, *providing independent response* and *offering explanation*. In the second writing task, *offering explanation* was detected twice. In the second drafts of the paragraphs, fewer acts were spotted as the learned needed less mediation. Highlighting Mine's development, identified moves included only independent moves.

Excerpt 15: The acts of giving incorrect response and asking for more hints (1<sup>st</sup> draft of 1<sup>st</sup> paragraph)

Mine: Thirdly, nowadays being a youtuber is real job. As a result, you can earn money easily.

M: Is something wrong here?

Mine: I don't think there is problem.

M: The problem is with "as a result".

Mine: Is that incorrect?

M: Yes. why do we use "as a result"?

Mine: In fact, it is something like "in addition", like "in fact".

M: Actually no. it is similar to "therefore". Then, what is its function?

Mine: What is it?

M: It shows consequence.

Mine: Yes, yes. "you can earn money easily on YouTube".

M: But we cannot use "as a result" here.

Mine: Why?

M: You said "youtuber is a real job" and without explaining you said that "as a result earning money is easy". However, how they earn money from YouTube and why it is easy to earn money? You don't have the reason part. You have to explain more and then write this sentence.

Mine: Okay, I will do it. I understood.

In Excerpt 15, the mediator provided assistance for the error with *as a result*. Despite the mediation, the student was unable to notice the error. When the function of that marker was asked, she answered incorrectly mentioning its function as addition. However, Mine wanted to solve the problem in the sentence, and so she asked for more information *asking for more hints* from the mediator.

Excerpt 16: The act of offering an explanation (1<sup>st</sup> draft of 2<sup>nd</sup> paragraph)

M: Let's look at this sentence.

Mine: I have learned this (result in) recently. It is used after a noun or gerund. (It results in you can't be social freely)

M: That is good. You have learned and used it. Then what did you use after it?

Mine: (reads the sentence again) A sentence.

M: Then?

Mine: It must be noun or gerund.

M: How can you write?

Mine: It results in being unsocial.

M: Well done.

Excerpt 16 shows an example of *offering explanation* act. There was a structure error with *result in*. As indicated, Mine knew how to use this marker, and aware of its



structure. After reading the sentence, she explained the usage of *result in*. With a few encouraging questions, Mine could write the appropriate sentence.

#### 4.2.5. Nil

##### 4.2.5.1. Frequency of Metadiscourse Markers and Error Types

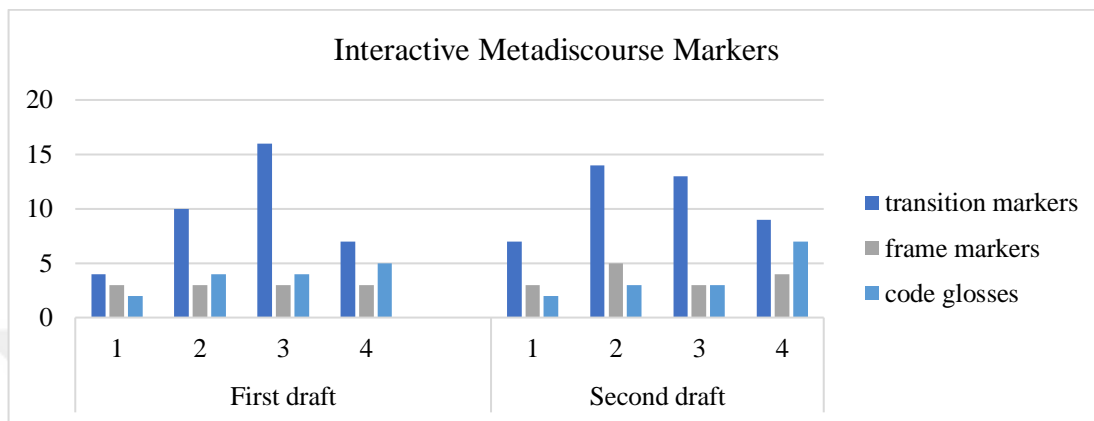


Figure 13. Frequency of transition markers, frame markers and code glosses in Nil's paragraphs

Figure 13 reveals that Nil had a similar performance to Mine in terms of interactive metadiscourse markers. In the first drafts, the most common one was transition markers which was followed by code glosses and frame markers except the first paragraph. In the first and second draft of the first paragraph, frame markers surpassed code glosses, and probably it was because of the fact that that task was shorter than others requiring less elaboration on ideas. Nil had a steady increase in the number of metadiscourse markers throughout three writing tasks, but the number lowered in the last task.

Considering second drafts, the frequencies of markers was on increase compared to first drafts supporting Nil's improvement after the mediation given for the first drafts. However, a different rate of development was seen when second drafts were examined. The progression was observed in the second paragraph, but backsliding started earlier, in third task, which continued until last one. As previously stated, those findings do not show lack of development as it is not continual. Instead, it demonstrates that the mediation provided to paragraphs, brought about some progress toward Nil's self-regulation in terms use of markers despite a small regression.

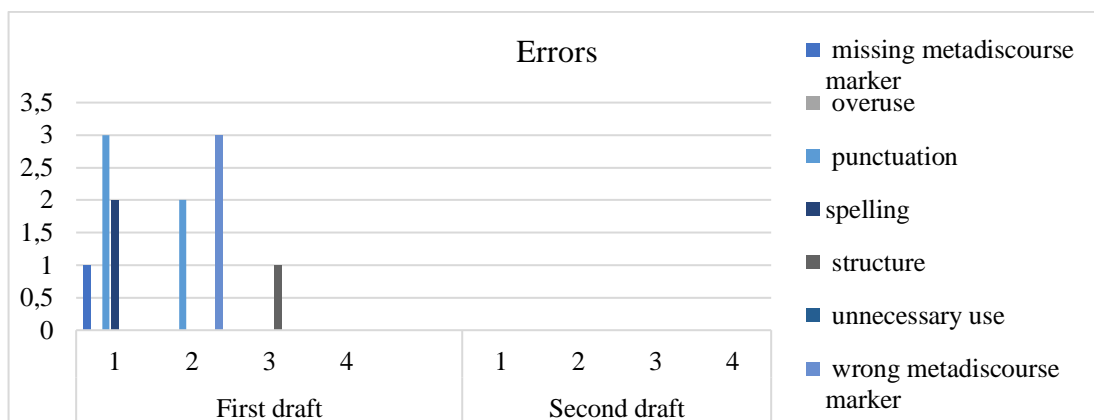


Figure 14. Frequency of metadiscourse marker error types in Nil's paragraphs

Figure 14 demonstrates types and quantity of errors Nil made. As shown, the only types that were not observed in her tasks were overuse and unnecessary use. The first common error category was punctuation while the second ones were wrong metadiscourse marker and structure, both of which had three instances. In comparison to other six participants in the study, Nil had the lowest number of errors in total showing that she was more successful at using metadiscourse markers. When examined carefully, it can be seen that the highest number of errors was detected in first draft of the first paragraph including the most error types. In the second one, both the number of them and categories had a small decrease. It decreased to one structure error in in the third task, and even none was found in the fourth one. Regarding second drafts, there were not any markers that were used incorrectly thanks to mediation provided in the sessions for the first drafts. This gradual decline of errors frequencies in the first drafts and their absence in the second drafts provide a strong evidence of Nil's development during DA implementation.

Example 10. Spelling, missing metadiscourse marker and punctuation errors (1<sup>st</sup> draft of 1<sup>st</sup> paragraph)

In other words, they are patient everywhere, (+) don't get nervous. Therefore; they are at peace with the people, and they always respect.

In Example 10, examples of three error categories were given. Nil did not spell *in other words* correctly since she did not know capital *I* is not used in English. In the same part, there were sentences, which were connected, but she neither started a new sentence nor connected them. Using *and* just before *don't get nervous* could solve the problem. Also, the learner put a semicolon after the transition marker, *therefore*, instead of a comma.

Example 11. Wrong metadiscourse marker error (1<sup>st</sup> draft of 2<sup>nd</sup> paragraph)

When many people meet new people, they use Instagram to recognize them. They follow their accounts and start to talk. However, they can communicate with other people easily with Instagram.

Example 11 indicates an instance of wrong metadiscourse marker error in the part where Nil wrote about how Instagram help people communicate with each other. In her last sentence, she talked about the result, but she used *however*, which highlights comparison.

#### 4.2.5.2. Mediation Moves

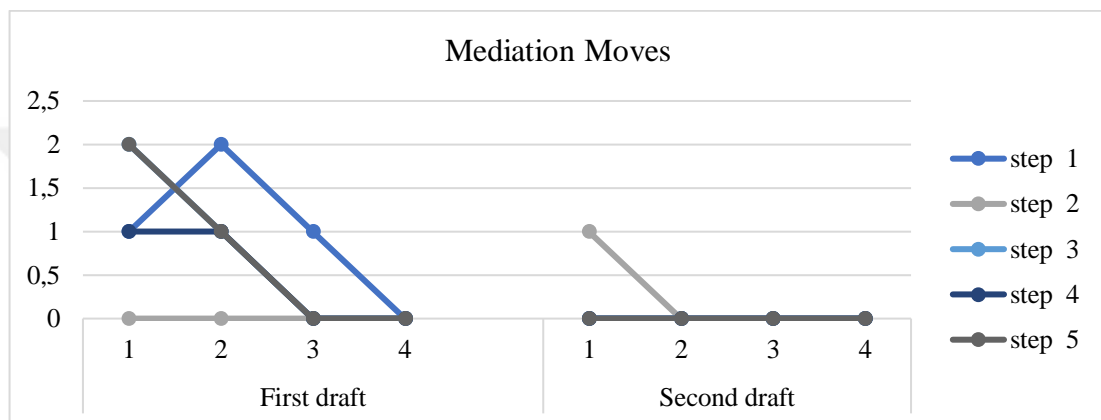


Figure 15. Mediation moves of Nil

As Figure 15 reveals, there were not many mediation moves due to small number of errors. Interestingly, Nil did not provide any response in step 2 in all paragraphs. When looked at the first draft of the first paragraph, the mediator corrected two errors, and one was corrected by the learner on her own. In the second paragraph, step 3, 4 and 5 had one instance while Nil realized two mistakes without any mediation. In the third one, one error was observed which she found the answer herself. There was not any occurrence of step 2, 3, 4 and 5. Also, the usage of all metadiscourse markers in the last paragraph was correct, which yielded no assistance. In terms of the second drafts of the writing tasks, Nil did not have any erroneous uses of metadiscourse markers, and so no mediation was given. The results presented in Figure 15 can be interpreted as Nil's microgenetic development in using metadiscourse markers and noticing incorrect structures.

Excerpt 17: Nil's responsiveness in step 1 (1<sup>st</sup> draft of 2<sup>nd</sup> paragraph)

*M: This sentence?*

*Nil: Consequently those people attract a lot of people's attention.*

*Nil: Punctuation problem with "consequently" (adding comma after it).*

*M: Good.*

Excerpt 17 presents Nil's responsiveness in step 1. While reading the sentence, she noticed the punctuation error with *consequently* and put comma without any help.

Excerpt 18: Nil's responsiveness in step 4 and 5 (1<sup>st</sup> draft of 1<sup>st</sup> paragraph)

*Nil: In other words, they are patient everywhere, (+) don't get nervous.*

*M: Any problems here?*

*Nil: I don't know.*

*M: There are two errors.*

*Nil: (silence)*

*M: Look at "in other words".*

*Nil: (silence)*

*M: Do we use capital "-I" in English?*

*Nil: I think we do. We use in Turkish.*

*M: Actually, we don't use in English. Then, what do we do here?*

*Nil: We don't use capital "I" in English, so it must be written with "-I".*

*M: What is the other one?*

*Nil: What is it?*

*M: The problem is here (pointing to "don't get nervous")*

*Nil: (silence)*

*M: Something is missing here?*

*Nil: (silence)*

*M: Are these sentences connected?*

*Nil: Yes.*

*M: Then, you have to add a marker here?*

*Nil: What is it? I don't know.*

*M: Before don't we have to put "and".*

*Nil: Thanks.*

As shown in Excerpt 18, Nil had a spelling and missing metadiscourse marker error. The mediator gave mediation, but she could not correct it until step 4 when a very explicit clue that capital *-I* is not used in English was given. However, she was not able to realize the problem that a marker was necessary in any steps. The mediator had to explain the problem and provide the answer.

#### **4.2.5.3. Reciprocity Acts**

Table 13

Frequency of Reciprocity Moves in the First and Second Drafts of Nil's Paragraphs

	First draft				Second draft			
	1	2	3	4	1	2	3	4
<u>Reciprocity moves</u>								
Taking no action after receiving the first mediations	3	-	-	-	-	-	-	-
Giving incorrect response	-	-	-	-	-	-	-	-
Asking for more hints	1	2	1	-	-	-	-	-
Using mediator as evaluator	1	1	-	-	-	-	-	-
Providing the correct response alone after the mediation	3	2	-	-	-	-	-	-
Providing the correct response independently	-	-	-	1	2	-	-	-
Offering explanation	-	2	-	-	-	-	-	-

Table 13 provides the reciprocity acts taken by Nil. Other than *giving incorrect response* move, all acts were seen, especially in the first drafts. In line with the assistance she required, the highest number of moves were found in the first paragraph. Differing from other participants, Nil made use of high reciprocity acts even in the first task. Along with three *unresponsive acts*, she was able to take independent moves. She gave the correct response three times after mediation, and one instance of *independent response* and *explanation* was noted. Also, the acts found in the second paragraph mostly included higher reciprocity, and lowest ones did not occur. In the third writing task, only *asking for more hints* was observed as there was only one error. Since the mediation was not needed in the last task and the second drafts, there were not any acts. Based on the data in Table 13, it can be said that the reciprocity acts declined because of the fact that Nil required no or minimal assistance, and identified ones mostly included less dependents ones. This finding points out that Nil's moved from other regulated performance to self-regulated one.

Excerpt 19: The act of *taking no action after the first mediations* (1<sup>st</sup> draft of 1<sup>st</sup> paragraph)

*Nil: Therefore; they are at peace with the people, and they always respect them.*

*M: Any problems here?*

*Nil: I don't know.*

*M: There is a mistake here.*

*Nil: (silence)*

*M: Look at "therefore"?*

*Nil: (silence)*

*M: Punctuation mistake.*

Nil: Is not it semicolon?  
M: No, we don't use semicolon.  
Nil: I understand. I always do like this.  
M: But it is wrong, you have to use comma.  
Nil: Okay.

Excerpt 19 demonstrates the act of *taking no action after the first mediations*. The punctuation of *therefore* was incorrect, and so mediation was given. However, Nil was mostly silent, and did not respond to the assistance. When the location of the error was shown, she realized that semicolon was wrong, but she could not give a response.

Excerpt 20: The acts of *providing the correct response independently* and *offering explanation* (1<sup>st</sup> draft of 3<sup>rd</sup> paragraph)

Nil: There are several reasons for many people try to be a Youtuber.  
M: Is there any problem here?  
Nil: Yes.  
M: What is it?  
Nil: I have to use "why" here. I don't know why I wrote it.  
M: So, how should it be?  
Nil: "Several reasons why many people try to be a Youtuber." After "reason why", sentence is used. After "reason for" noun is used.  
M: That is great.

In Excerpt 20, the highest reciprocity moves are illustrated. Nil made a mistake related to *reason for* and *reason why*. As she stated, her aim was to use *reason why*, but she wrote *for* due to lack of attention. When she went over the sentence, she could detect it herself. Along with the correction, the learner explained how the markers were used.

#### 4.2.6. Seda

##### 4.2.6.1. Frequency of Metadiscourse Markers and Error Types

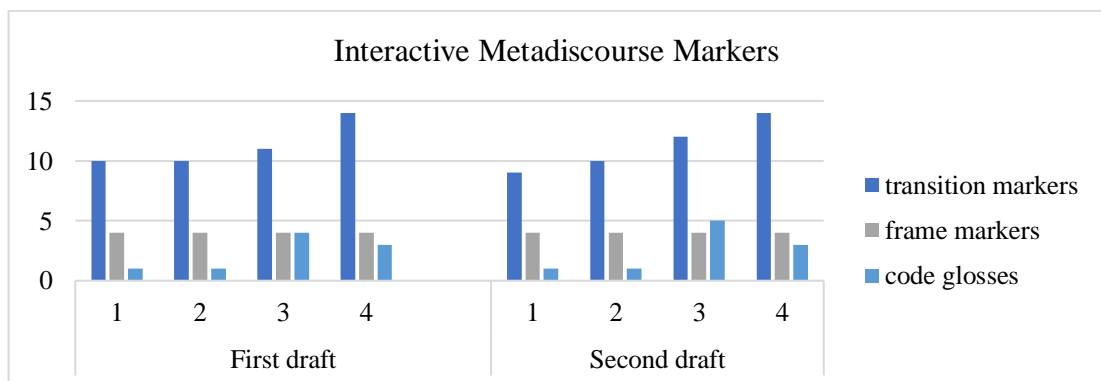


Figure 16. Frequency of transition markers, frame markers and code glosses in Seda's paragraphs

Figure 16 indicates the quantity of metadiscursive resources in Seda's paragraphs. As expected, transition markers had the highest frequency, and framer markers were the second highest in all paragraphs except the second draft of the third paragraph. In the first draft of first and second paragraph, the number of all markers remained same. However, there was an increase both in third and fourth writing task, especially in transition markers. Regarding second drafts, overall frequency increased gradually from the first to last task. While frame markers maintained the similar frequency, transition markers had a moderate increase. This was due to the fact that the number of supporting ideas was the same while Seda's writings included more words resulting in more transition markers. In Figure 16, there is a trend of increasing interactive metadiscourse markers, and this observation supports the growth.

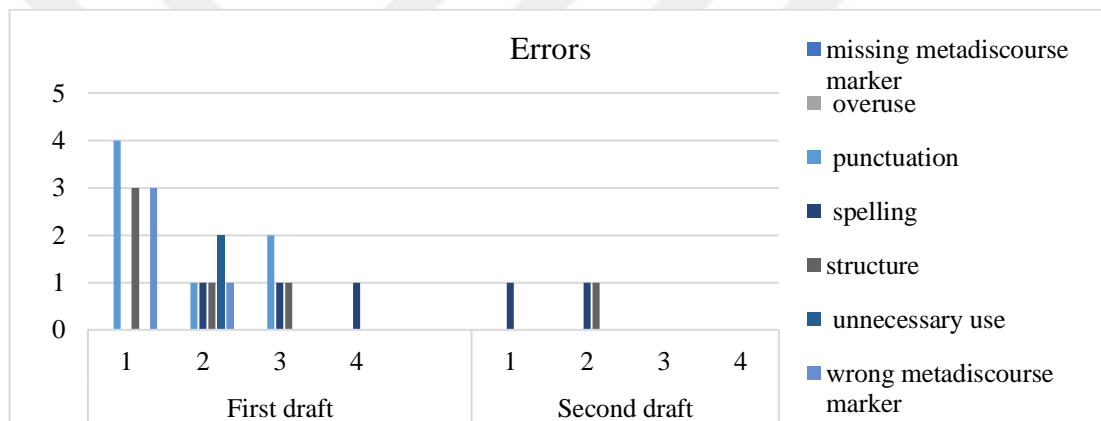


Figure 17. Frequency of metadiscourse marker error types in Seda's paragraphs

As shown in Figure 17, the most common error type was punctuation. The second common error category was structure since she did not know how to use metadiscourse devices. However, the nonexistent category was overuse. Figure 17 reveals that the first draft of the first paragraph had the highest number of errors including three types. Though there were four error types in the second paragraph, there was a slight decrease in frequency of errors. In the third task, three errors were found in the categories of spelling, structure, and unnecessary use. The frequency of both the error types and their frequencies reduced to one in the last task. When it comes to the second drafts, there were only two structure and one unnecessary use mistake, which demonstrated a decrease in comparison to the first drafts. The reduction in the amount of errors in both first and second drafts signals to the Seda's improvement in terms of using interactive metadiscourse markers.

Example 12. Unnecessary use error (1<sup>st</sup> draft of 2<sup>nd</sup> paragraph)

There are two advantages of because of having plastic surgery.

This example shows the unnecessary use of *because of*. As Seda already used *two advantages* in order to announce the goal, *because of* was not necessary.

Example 13. Structure error (1<sup>st</sup> draft of 1st paragraph)

Because of people use more social media, advertising industry works in YouTube.

In Example 13, structure error was illustrated. The student wrote a sentence after *because of* even though a gerund or noun had to be used.

#### 4.2.6.2. Mediation Moves

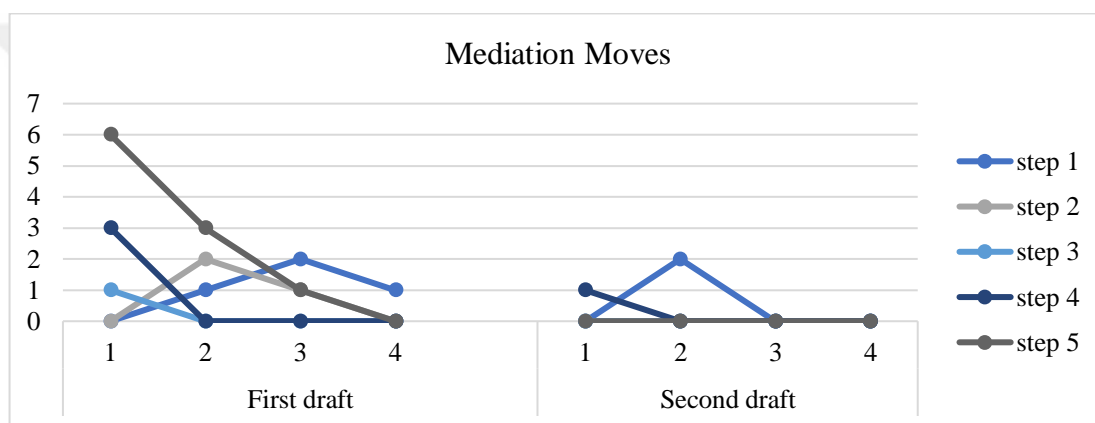


Figure 18. Mediation moves of Seda

As can be seen from the figure, Seda did not respond to implicit mediation in step 1 and 2 in DA session of the first paragraph. Among the moves, fifth one accounted for six errors while the fourth one had three instances. The frequency of mediation in step 5 decreased to three in the second paragraph, and there was no correction in the step 4. The responsivity in the first two steps also had an increase. In the third paragraph, the learner corrected most of her errors with a little or no help, and only one occurrence of step 5 was observed. Seda had one error in the fourth paragraph which was corrected by her in step 1. The data in Figure 18 shows increased autonomy and self-regulated performance of the learner.

In her second drafts, Seda had 3 errors in total, one in the first paragraph and two in the second paragraph. The one in the first task was changed in step 4 with explicit mediation. However, the correction of the ones in the second one, took place in step 1 without any mediation. The decreased assistance from the mediator and scarce instance



of mediational moves in the second drafts confirm the shift to agentive control over her own performance.

Excerpt 21: Seda's responsiveness in step 1 (1<sup>st</sup> draft of 3<sup>rd</sup> paragraph)

*M: This sentence.*

*Seda: Moreover when they share a photo on Instagram, their followers see this photo and like this immediately.*

*Seda: Comma here (showing "moreover").*

*M: Good.*

As given in Excerpt 21, Seda forgot to put comma after *moreover*, a transition marker. However, she managed to find and write it before the mediator gave any mediation.

Excerpt 22: Seda's responsiveness in step 5 (1<sup>st</sup> draft of 1<sup>st</sup> paragraph)

*M: Let's read first sentence.*

*Seda: Three reasons why do many people try to be a Youtuber are becoming popular, sharing their skills, and earning money.*

*M: Any problem here?*

*Seda: Normally we use "one reason why", I used "three reasons why". Maybe it is wrong.*

*M: No no, it is okay. You can write "three reasons why", it can be used with any number. Look at the expression "three reasons why do many people."*

*Seda: I generally have problems with this. I cannot see.*

*M: Is this sentence a question?*

*Seda: No.*

*M: Then, can we use "do" here?*

*Seda: No.*

*M: What do we need to do here?*

*Seda: (silence)*

*M: We need to omit do.*

*Seda: Okay, I get it.*

Excerpt 22 indicates moves until step 5. While using *reason why*, Seda added the auxiliary *do* as she thought the marker was used like a question. The mediator gave assistance and clues about the error, but it was evident that she could not use that marker. Also, she stated that she always had problems with it. As no correction was provided by the learner in any steps although her answer to mediation was correct, the mediator gave the answer in step 5.

#### **4.2.6.3. Reciprocity Acts**

Table 14

Frequency of Reciprocity Moves in the First and Second Drafts of Seda's Paragraphs

	First draft				Second draft			
	1	2	3	4	1	2	3	4
<u>Reciprocity moves</u>								
Taking no action after receiving the first mediations	4	-	-	-	-	-	-	-
Giving incorrect response	2	1	-	-	-	-	-	-
Asking for more hints	-	-	1	-	-	-	-	-
Using mediator as evaluator	2	1	2	-	-	-	-	-
Providing the correct response alone after the mediations	4	2	1	-	1	-	-	-
Providing the correct response independently	-	1	2	-	-	2	-	-
Offering explanation	-	1	1	-	-	-	-	-

Table 14 gives the frequencies of reciprocity acts across Seda's writing tasks. As presented in the table, *unresponsive move* and *providing the correct response after first mediations* prevailed in the first draft of the first paragraph. Yet, high reciprocity moves acts were not detected. With a considerable decline in the number of dependent reciprocity acts, the higher-level ones maintained their increase in the second and third paragraph. Moreover, in the second drafts, there were only three moves in which Seda took more responsibility. These results also point to the microgenetic development and autonomous functioning of the learner.

Excerpt 23: The acts of taking no action after receiving the first mediations and giving incorrect response (1<sup>st</sup> draft of 1<sup>st</sup> paragraph)

M: Next one

Seda: .So they prefer YouTube for earning money.

M: Any problematic part?

Seda: (silence)

M: There is one, can you see it?

Seda: (silence)

M: Pay attention to "so"

Seda: Comma before "so"

M: Yeah, normally you put comma before "so". But here you wanted to say the result of all ideas in the body part one, but you started sentence with "so". Is this possible?

Seda: Can't we? I always use like that.

M: In academic writing is it not appropriate. Instead of "so", what can you use?

Seda: I don't know.

M: We can use "therefore", "as a result" and "consequently". Let's use write one of them here.

In this excerpt, lowest reciprocity acts are exemplified. Seda wanted to conclude the supporting idea showing the result with *so*. As it was not appropriate to employ *so* for that function, the mediator took it as a mistake. When the mediator started giving the mediation, Seda was unresponsive. Also, when the location of error was highlighted, she thought comma was missing. However, her answer was incorrect as the mistake was using the wrong metadiscourse marker, not punctuation.

Excerpt 24: The acts of *providing the correct response independently* and *offering explanation* (1<sup>st</sup> draft of 3<sup>rd</sup> paragraph)

Seda: They stay in hostel or someone's house lead to meeting new people.

M: Is there any problem?

Seda: There is, I guess. I used "lead to" incorrectly.

M: How?

Seda: We use "lead to" with the meaning of cause.

M: Yes, you are right. What is the problem here?

Seda: I don't write sentence. I can write "Staying at a hotel leads to meeting new people."

M: Yes, great.

*Providing the correct response independently* and *offering explanation* acts are illustrated in Excerpt 24. *Lead to* was used incorrectly as sentence was written before it. The student was able to detect the error herself. As well as the correction, she explained the function and the structure of *lead to*.

#### 4.2.7. Umut

##### 4.2.7.1. Frequency of Metadiscourse Markers and Error Types

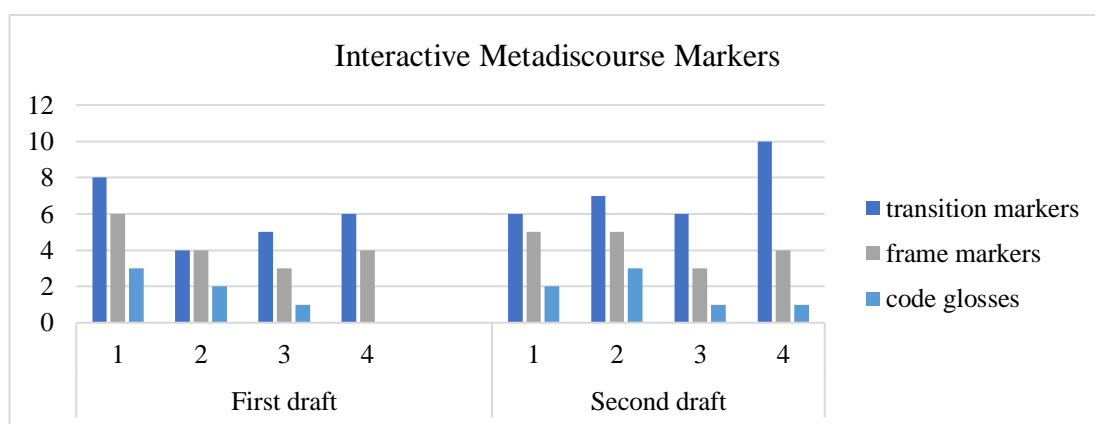


Figure 19. Frequency of transition markers, frame markers and code glosses in Umut's paragraphs

Figure 19 presents the results related to interactive metadiscourse markers Umut used. Similar to other participants, he employed more transition markers, and frame markers came after it. As seen in the figure, the number of frame markers was higher than other learners since Umut included three and more supporting ideas in his tasks. One surprising finding was that the use of code glosses in the first drafts reduced steadily, and none was found in the last task. However, with the mediation in the first drafts, Umut was encouraged to use them, and they were written in the second drafts. Regarding overall number of markers in the first drafts, there was a slight increase in the tasks despite the relative decrease in the second paragraph. In addition, a regression was also observed in the third paragraph, but a small increase occurred in the second drafts of other tasks. Considering the data provided in Figure 19, it can be pointed that Umut developed moderately in using interactive metadiscourse markers, which can be interpreted as a progress in his ZPD. As a part of this development, regression took place in some tasks, too.

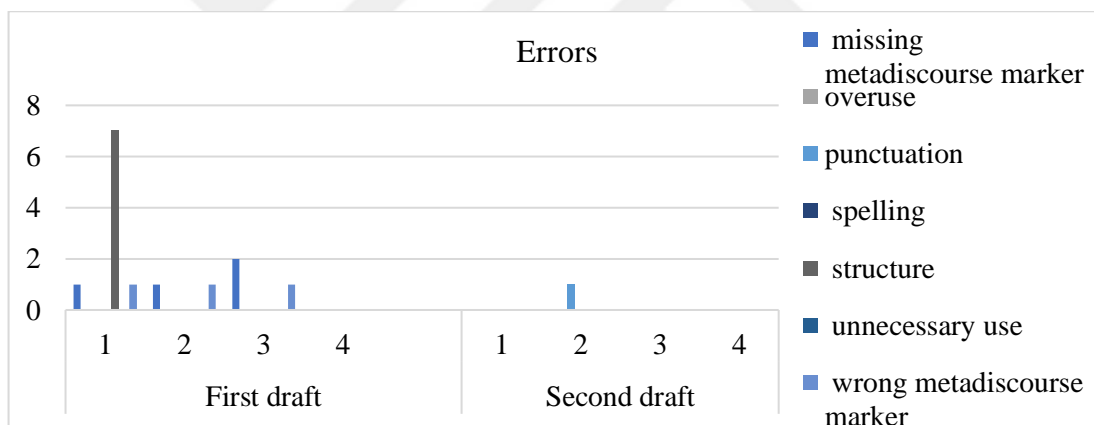


Figure 20. Frequency of metadiscourse marker error types in Umut's paragraphs

When compared to other participants, Umut had the second lowest number of errors after Nil. As illustrated in the figure, one different finding was that Umut had more problems about the structure of metadiscourse markers. Second common error type was punctuation with four instances. Umut did not make any errors in categories of overuse, spelling and unnecessary use. Also, most of the errors were observed in the first draft of the first paragraph. Compared to that task, the errors in subsequent ones were quite low. There were two of them in the second task while the third one had three, and any was found in the last one. In terms of the second drafts, the only error was observed in the second paragraph, which was punctuation. From the data in

Figure 20, we can see that Umut improved a lot, and mediation helped him reduce the errors.

Example 14. Structure error (1<sup>st</sup> draft of 1<sup>st</sup> paragraph)

Finally, having serious health problems.

In Example 14, one structure error is given. After *finally*, a frame marker, Umut should have written a sentence, but he used a gerund.

Example 15. Missing metadiscourse marker error (1<sup>st</sup> draft of 2<sup>nd</sup> paragraph)

Many people try to be a Youtuber. (+) First of all, young people want to be famous person, so they try to make a video.

Example 15 presents missing metadiscourse marker error. If written like this, it was not clear what he would talk about in the paragraph. Hence, a frame marker that announced the aim of the writing was necessary.

#### 4.2.7.2. Mediation moves

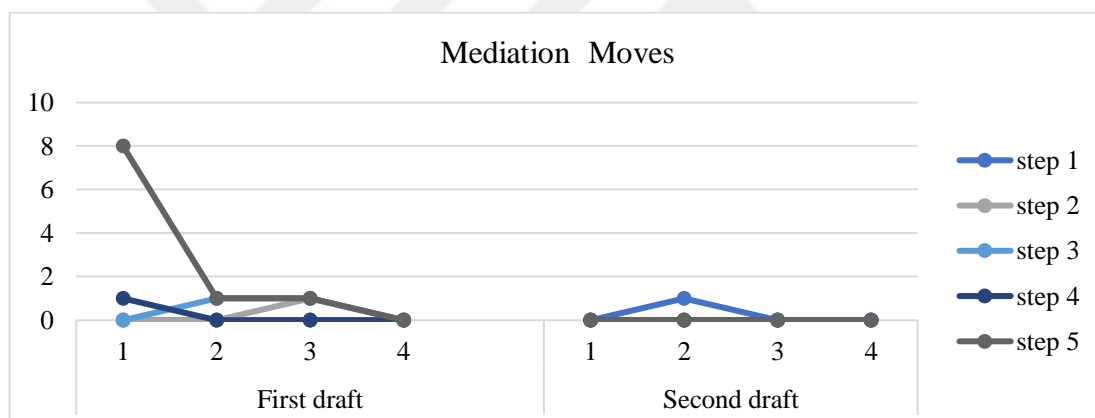


Figure 21. Mediation moves of Umut

It was shown in Figure 21 that Umut did not realize and correct his mistake in steps that implicit mediation was given. 10 out of 14 errors in total were corrected in step 5 in which the mediator provided the answer. In all sessions, Umut could not provide a response without the mediator's assistance. Even though he was mostly dependent on the mediator, especially in the first paragraph, the sharp decline in the explicit mediations was observed. These results demonstrate a slight progression from other regulation to self-regulation, and therefore it can be said that DA helped him decrease metadiscourse marker errors he used to make.

There was only one error in the second drafts, which was found in the second paragraph. However, Umut correct it independently. Other than that, Umut did not

need any explicit or implicit assistance in DA sessions for the second drafts. The lack of mediation in the second drafts can also be understood as the learner's progressive development since second drafts were written after DA implementation for the first drafts.

Excerpt 25: Umut's responsiveness in step 1 (2<sup>nd</sup> draft of 2<sup>nd</sup> paragraph)

*M: This sentence.*

*Umut: If they are good at football they can share videos about football also knowledgeable people can share their ideas with other people on YouTube*

*Umut: Something is wrong.*

*M: What is it?*

*Umut: About punctuation?*

*M: Hhm. How do you correct it?*

*Umut: Comma after "also" and dot before it.*

*M: Great.*

Excerpt 25 shows the only correct answer that was given by Umut independently. As given, the punctuation of *also* was incorrect. After reading the sentence, he realized there was a problem. Without any help, he managed to utter the answer.

Excerpt 26: Umut's responsiveness in step 5 (1<sup>st</sup> draft of 1<sup>st</sup> paragraph)

*M: Let's look at second sentence.*

*Umut: Firstly, becoming lazy.*

*M: Is there a problem here?*

*Umut: (silence)*

*M: There is an error here.*

*Umut: Is it about topic?*

*M: No, no. Look at the part after "firstly".*

*Umut: (silence)*

*M: Do we use sentence or noun after "firstly"?*

*Umut: Does it matter?*

*M: Yes. Do you know what we use after it?*

*Umut: No, I just saw this and wrote it.*

*M: Okay, we have to use a sentence after "firstly".*

*Umut. I see.*

*M: What did you use here?*

*Umut: Then, it is not a sentence.*

*M: Yes, then, what can we write here?*

*Umut: Can you say?*

*M: Okay. We can say "technology makes people lazier". This is a sentence.*

*Umut: Thank you, will write like that from now on.*

This except illustrates Umut’s responsiveness in step 5. By using a gerund after *firstly*, he made a structure error. The mediator gave mediation to make Umut notice and correct the error. However, the attempts were unsuccessful. Umut stated that he saw it, probably in examples of the writing booklet, but he did not pay attention to how it was used. He knew the function of it as he used it to explain first supporting idea. Despite the mediations, he was unable to provide an answer, so the mediator explained the correct form of the sentence.

#### 4.2.7.3. Reciprocity acts

Table 15  
*Frequency of Reciprocity Moves in the First and Second Drafts of Umut’s Paragraphs*

	First draft				Second draft			
	1	2	3	4	1	2	3	4
Reciprocity moves								
Taking no action after receiving the first mediations	6	2	1	-	-	-	-	-
Giving incorrect response	3	-	1	-	-	-	-	-
Asking for more hints	1	3	3	-	-	-	-	-
Using mediator as evaluator	2	-	2	-	-	-	-	-
Providing the correct response alone after the mediation	3	2	-	-	-	-	-	-
Providing the correct response independently	1	1	2	-	-	-	-	-
Offering explanation	-	-	-	-	-	-	-	-

This table shows the number of reciprocity acts Umut took during the process. As provided in Table 15, *offering explanation* act was not seen in any of DA sessions since Umut could not reach such a self-regulated functioning. In the very first DA session of the first paragraph, the unresponsiveness and other lower reciprocity acts were frequent. In the second task, the frequency of dependent moves declined despite the fact that there was no *independent response*. The same results were observed in the third paragraph with more decrease in lower acts. The only act in the second drafts was the one in which the learner took all responsibility of his response. In line with the findings of mediation required by Umut, the reciprocity act presented in the table, can be thought as the sign of self-regulated and independent performance throughout the DA process.

Excerpt 27: The act of taking no action after receiving the first mediations (1<sup>st</sup> draft of 1<sup>st</sup> paragraph)

*M: Let's look at the next sentence.*

*Umut: They don't go outside, and they don't meet their friends so being a unsociable.*

*M: Is there any problem here?*

*Umut: (silence)*

*M: There is a problem with "so".*

*Umut: It means "bu yüzden".*

*M: Yes. The meaning is correct, but there is a problem with punctuation.*

*Umut: (silence)*

*M: We need comma before "so".*

*Umut: Okay.*

*M: Any other problem?*

*Umut: I don't think there is one.*

*M: Look at the part after "so".*

*Umut: (silence)*

*M: Do we use sentence or noun after so?*

*Umut: Sentence.*

*M: What about your sentence?*

*Umut: I tried to form a sentence.*

*M: I see, but this is not a sentence. You just used the prompt as it is given. We can use the verb "socialize here" and write, "so people socialize."*

In Excerpt 27, the mediator and the learner were talking about the transition marker, *so*, which also exemplifies the act of *taking no action after the first mediations*. He made punctuation and structure error as there was no comma before it, and a gerund was written after it. The mediator started providing mediation for the punctuation error, but Umut remained silent for a few times. Even after the error type was told, he was unable to give the answer. Furthermore, he did not attempt to repair the sentence when mediation was presented for it.

Excerpt 28: The act of providing the correct response alone after the first mediations (1<sup>st</sup> draft of 3<sup>rd</sup> paragraph)

*M: Read the first two sentences together.*

*Umut: Bad parents affect negatively children. The first reason is that they don't take care of their kids and leave alone their kids.*

*M: Is there any mistake here?*

*Umut: There must be.*

*M: Yes, there is. Look at "the first reason".*

*Umut: I think it is "effect". I used wrong one.*



*M: Good.*

Excerpt 28 demonstrates that Umut wrote *first reason* to introduce first supporting idea, but it was described as wrong since the topic was *effects of bad parents*. When he read the sentence, he noticed that there was something incorrect. As he could not find where it was, the mediator showed the erroneous part. After going over it again, he was able to tell the correct form.

#### **4.2.8. A Review of Participants' Development**

In the previous part, the findings related to learners' development in the use of metadiscourse markers were presented. The frequency of interactive metadiscourse devices, errors, mediation moves and reciprocity acts were provided, respectively.

When disaggregated data of each participant were scrutinized carefully, it is evident that there were individual differences in their development. Regarding categorical distribution of the markers, Mine employed the highest number of markers while Umut had the lowest number of metadiscourse markers in total. The frequencies observed in other five learners' paragraphs were similar to each other. Throughout DA sessions, the number of markers increased thanks to DA implementation despite some fluctuations. Those fluctuations were seen in all learners' paragraphs except the ones of Seda. Even though some decrease was observed in certain paragraphs of the other learners, Seda had a steady increase in the number of metadiscourse devices. Taken together, it can be said that students were able to increase the number of interactive metadiscourse marker thanks to DA mediations.

In terms of the errors, Nil made the least number of errors whereas Bahar made errors more than others. Hence, it is apparent that Nil was able to use metadiscourse markers much more effectively than others, but Bahar had less competence over them. Even though the types of errors were different for each learner, the most common error was punctuation in the paragraphs of the learners except Mine and Umut. Mine had more trouble with wrong metadiscourse markers, and Umut' problems were mostly related to structure. When the effect of DA on correct use and errors were examined, it is obvious that there was a reduction in the number of errors. After DA sessions with the mediator, students were able to use metadiscourse marker more appropriately. In the paragraphs of most students, there was a gradual decrease in errors both in the first

and second drafts throughout the study. However, some students experienced regression at certain paragraphs with an increase in the errors.

Furthermore, the analyses of mediation moves displayed a microgenetic development in the use of metadiscourse marker. The findings indicated that learners mostly required explicit mediation in the first DA sessions, but thanks to DA implementation, the occurrences of explicit prompts declined, and implicit ones increased in the subsequent sessions. That result points to the development of learners towards a more self-regulated performance and to increasing awareness of the errors. Also, the analysis showed how learners' ZPD differed from each other. The amount of explicit and implicit mediation provided to each learner varied. Therefore, the mediator gave mediation that was modified and adjusted to the students' needs. The examples of tailored mediation were presented in the excerpts written in the previous part.

The other indication of learners' microgenetic development was the reciprocity acts that learners had taken to respond to the mediation. Considering the findings, it can be seen that the number of low reciprocity moves (*taking no action after the first mediations, giving incorrect response, asking for more help*) declined remarkably, and the number of high acts (*using mediator as evaluator, providing the correct answer alone after the mediation, providing the correct independently, offering explanation*) increased. Even no reciprocity moves were observed in the DA session of the final task as no mediation was needed. This change in the amount of reciprocity acts indicated that learners were able to take more responsibility and control over their responses. In accordance with the mediation moves, these acts showed differences of learners. To illustrate, the highest reciprocity acts, *providing the correct independently* and *offering explanation* were not observed in Umut's responses, but they had several occurrences in Ada's responsiveness. Hence, it is possible to say that responsivity of the students showed variations among students depending on their different ZPDs.

#### **4.3. LEARNERS' PERCEPTIONS**

The other aim of the study was to find out what learners thought about DA implementation. For this purpose, interviews and reflections were analyzed thematically, and some themes were identified regarding learners' attitudes and

perceptions towards the effectiveness of the study. The findings are presented in Table 16.

Table 16

*Categories of the Learners' Attitudes towards DA Implementation*

<b>Category</b>	<b>Theme</b>	<b>Example</b>
Development in their writing	Overall development in writing	Umut: <i>"It was a useful process which contributed to my writing skill, and now I could write better paragraphs in contrast to previous ones."</i>
	Structure of the writing	Mine: <i>"I understood how to organize a writing and produce a text coherently. My writing was mostly off topic before this study, but now I can write paragraphs about a given topic without being off topic."</i>
Emotional development	Decrease in their anxiety	Bahar: <i>"It was very useful for me. The guidance of my teacher, her mediation about my errors and her explanation of the answers reduced my stress and anxiety about writing."</i>
	Increase in their confidence	Elif: <i>"Before the interview, I was talking to my friend. I said to my friend that I will get a good score in AT."</i>
Effectiveness of mediations	Awareness of metadiscourse markers importance	Seda: <i>"It raised my awareness about importance of metadiscourse markers, and I have realized they are vital for a writing task. Currently, while reading and writing, I pay attention to them."</i>
	Awareness of errors	Elif: <i>"I remember what you had told in the sessions while they were writing, and I refrain from making mistakes. I can notice my mistakes without any help thanks to this training. I even started to find erroneous uses of metadiscourse markers in my friends' essays and correct them."</i>
Their learning regarding metadiscourse markers	Function	Bahar: <i>"I learned all metadiscoursal resources taught in Level 3. After the training, I can integrate them into my writing. For instance, I learned how to use therefore and because of."</i>
	Variation	Umut: <i>"Another thing is that I am careful about using a variety of markers instead of the same marker over again and again. To illustrate, if I use for example in one sentence, I prefer for instance for the other example."</i>
	Structure and punctuation of metadiscourse markers	Ada: <i>"I had problems with punctuation and structure of some markers, but this training helped me solve these problems. Before this training, I thought punctuation such as comma after firstly was not important in a writing, but my ideas changed, and I started to pay more attention to them."</i>
Positive aspects of the study	Constant mediation	Ada: <i>"One of the things I liked was the continuation of the mediation. Büşra teacher followed my development throughout the process. That was an advantage for me."</i>
	Individual assessment	Mine: <i>"This study was different as it was one to-one study."</i>
	Relationship with the mediator	Bahar: <i>"What I liked was the relationship with the mediator and her efforts to help me. The instructor cared about me and she supported me as much as possible."</i>

As shown in Table 16, overall results indicated that learners had positive attitudes towards effectiveness of DA intervention. The participants thought that DA helped them develop their paragraphs. Especially, they reported that they understood how to organize their ideas in a writing, and how to explain them coherently. Students also explained that the opinions paragraphs written in the DA process were better, and notable changes occurred in them when compared to the writings before the study.

As well as the improvement in the writing, affective factors were influenced positively by DA process. At the onset of the procedure, the students had had higher level of anxiety and held negative feelings towards writing because of the fact that their writing scores in the exams were low. However, as they reported, they were able to reduce the stress and anxiety they felt while writing an opinion paragraph throughout the DA process. The other finding was related to their self-esteem. The learners were not confident about their writing skill, and this low self-esteem negatively affected both their motivation and performance. With the help of training with DA, they were able to increase their confident in their capabilities during the study. They confidently told that they could produce better paragraphs, and their writing scores would increase.

Regarding the mediation given by the mediator on metadiscourse marker errors, students also had favorable attitudes, and they talked about the effectiveness of mediations. They mentioned that mediations helped them gain awareness about the significance of metadiscourse markers. As expected, learners did not think they were vital for the writing probably because of the fact that metadiscourse is a neglected aspect in writing classes. However, the guidance of the mediator showed them their significance, and so the learners started to pay more attention to them while both writing and reading a text. In addition to that, mediations raised their awareness about errors related to metadiscourse markers. They stated that they were able to notice the errors without mediator's assistance, and it became easier for them to realize the errors. With the mediations, they abstained from making the same mistakes. An interesting finding was that the learners were able to find the errors not only in their own writing but also their friends'. Hence, it can be said that they could transfer their knowledge attained in the DA sessions with the mediations into new contexts.

Another common theme in the interview and reflections was contribution of the study to their knowledge and the use of metadiscourse markers. They indicated that the study taught them a lot of things related to markers. As presented in the table, they learned how certain markers function in a text. They also understood that diversity is important in the writing, and it is better to use alternatives. Instead of overusing a specific marker, they were able to employ a variety of them. Moreover, they became proficient in using metadiscourse markers with an appropriate structure and punctuation. At the beginning of the study, learners experienced problems with how to use a marker in the sentence and punctuation. Thanks to the guidance of the mediator, they learned structure and punctuation rules of metadiscourse resources.

Lastly, learners considered dynamic assessment as advantageous over traditional one. The thematic analysis revealed that there were a few advantages prevailing in the data. The most important advantage was the continuation of the mediations. They told that they benefited a lot from the continuous mediation given to their writing. With the sustained assistance, the mediator was able to track their development throughout the process and provide more practical suggestions. Students were satisfied with this continuous assessment of their writing as assistance that was provided once could not help them as much as this study did. The other positive feature of the study was one to one assessment. Students explained that the mediator was able to pay more attention to them as they were assessed individually. As the analysis shows, the students favored that individual assessment. This one to one DA assessment also helped mediator and learners to develop a good rapport with each other, which students regarded as another positive aspect of the study. They indicated that they were able to build a good relationship with the mediator during the study. As the mediator focused on participants separately and duration of the study lasted for four weeks, they developed an emotional attachment to each other, and the learners found this favorable.

## **CHAPTER 5**

### **5. DISCUSSION AND CONCLUSION**

#### **5.1. INTRODUCTION**

In this chapter, it is intended to discuss the findings of the study with a reference to the relevant literature on DA and metadiscourse. It first gives an overview of the current study. Then, the discussion of findings, implications of the study and suggestion for further research are presented.

#### **5.2. GENERAL OVERVIEW OF THE RESEARCH**

Metadiscourse is an important term that signals to the interactive aspect of writing. Using metadiscursive markers promotes communication between reader and the writer. However, Hyland (2005) argues that many language learners experience problems with employing them properly, and they use them unlike to the native writers. Hence, several researchers have contended that instruction of metadiscourse markers is necessary to enable students to increase their metadiscourse awareness and practice using them in a writing (Crismore et al., 1993; Hyland, 2005; Olshtain, 2001; Steffethensen & Cheng, 1996).

The other focus of the study, dynamic assessment, is a type of interactive assessment drawing on Vygotsky's notion of Zone of Proximal Development (ZPD) described as the difference between assisted and unassisted performance of a learner. Vygotsky (1978) argues that learning is twofold, first occurring on social level and then on individual level. The cognitive development from other regulated learning to self-regulated one takes place within ZPD through the interaction with others. Building on ZPD and Vygotskian understanding of development, DA focuses on the processes of learning and, and aims at diagnosing their ZPD and developing it by integrating assessment and instruction. The researchers examining the effect of DA on different language skills show that DA has a positive impact on both students' learning and performance (Ableeva, 2010; Ebadi, 2016; Guterman, 2010; Hidri, 2014; Ho & Li, 2018; Lantolf & Poehner, 2010; Lu & Hu, 2019; Malmeer & Zogh, 2014; Poehner, 2005; Shabani, 2018).

As previously stated, this study examined EFL learners' development in the use of interactive metadiscourse markers through interactionist dynamic assessment by analyzing the change in the frequency of markers, correct use of them, mediation moves and reciprocity acts recorded in DA sessions. Additionally, it attempted to uncover the perceptions of students about DA intervention. The data was collected from seven participants studying at preparatory school through opinion paragraphs used as assessment tasks, interview, and reflection. For four weeks, the learners wrote four opinion paragraphs along with their second drafts. Microgenesis analysis framework was used in order to analyze the students' progress from other regulation to self-regulated functioning. Thematic analysis was also adopted to examine attitudes of the learners. The next section discusses the findings which emerged from analysis presented in the previous chapter.

### **5.3. DISCUSSION OF THE FINDINGS**

The first research question was about examination of the change in the number of interactive metadiscourse markers; namely, transition markers, frame markers and code glosses throughout DA process. The analysis demonstrated that there was a notable increase in the overall number of markers despite some fluctuations across the writing tasks. In the first paragraphs, students employed a small number of markers, but they were able to integrate more into their writing thanks to the DA mediations. Moreover, when the overall distribution of those devices was compared, it was found that there were differences between them. The categorical distribution observed in this study accords with the ones that were reported in earlier studies (Hyland & Tse, 2004; Ho & Li, 2018; Kaya, 2019; Kobayashi, 2017; Qin & Ucelli, 2018; Sancak, 2019; Yüksel & Kavanoz, 2018). In agreement with findings of those studies, the most common category in the opinion paragraphs of the learners was transition markers, and their number was notably higher when compared to the other categories. Also, transition markers had the most substantial increase. Hyland and Tse (2004) state that writers employ them to link the arguments in the text ensuring the transition between them, and therefore they are frequently used in the texts. Frame markers were the second most frequently employed type in almost all opinion paragraphs, and the least used one was code glosses. These results contradict with the studies of Mohamed and Rashid (2017) and Rustipa (2014) which revealed that code glosses were employed

more than frame markers in their participants' essays. As Yüksel and (Kavanoz (2018) asserted in their study, limited number of code glosses can be explained by the fact that the novice nonnative writers have difficulty in expanding on propositions in the text with examples and explanations. Regarding the change in the frequency of the code glosses, there was a slight rise after mediations. However, the least rise was seen in frame markers from the first to the last assessment task. One possible reason for this can be the length of the paragraphs. Based on these findings, it can be suggested that learners were able to use more metadiscourse markers in their writing when dynamic assessment was implemented.

As well as their frequency, it was intended to find out how the correct use of metadiscourse devices was enhanced by DA. For this purpose, identifying errors was necessary in order to see to what extent students could improve correct usages of markers. As each marker had a different function and characteristics, the errors varied. In the analysis of the collected opinions paragraphs, seven error types emerged, and they were missing metadiscourse marker, punctuation, spelling, structure, overuse, unnecessary use and wrong metadiscourse marker. On the whole, the most common error type was punctuation while the least prevailing one was overuse. This finding differs from Gholami et al.'s (2014) study which found that misuses of interactive metadiscourse marker are mostly related to overuse. Furthermore, when frequencies of errors were scrutinized for each learner separately, the individual differences in the correct use of metadiscursive devices can clearly be seen. While five participants had more errors about punctuation, one student had more problems in using appropriate metadiscourse marker, and the other one experienced difficulty with structure of the markers. The number of other error types also changed from student to student depending on difficulties they experienced. These findings signal to the differences in their individual needs and to the necessity of mediation addressing to their problems. Accordingly, differences were also observed in the development of correct usages. Some students improved the correct use of metadiscourse markers by gradually decreasing the number of errors throughout the writing tasks. However, a few of them demonstrated regression at certain paragraphs with making errors more than the previous tasks. Vygotsky regarded development as forward and backward movement that is innately progressive. Even though backward change appears to be regressive, actually "it often foreshadows the reorganization and restructuring of experience and



prepare for the developmental leap that follows” (Zebroski, 1994, p. 162). In line with Zebroski’s (1994) argument that regression prepares the learner for the next developmental step, it was found that learners managed to decline the errors and promote the correct use with the mediations after the regression. Hence, it can be concluded that regression occurred in some students’ performances, but it contributed to their progress. In general, therefore, it seems that DA enhanced the correct use of markers and helped learner reduce the number of errors related to metadiscourse. Nevertheless, the level of development was different for each participant because of their individual differences.

The primary aim of the study was to find out the microgenetic development learners’ ZPD regarding the use of metadiscourse markers in writing. This progress was displayed by the amount of explicit and implicit mediation moves, and the reciprocity acts. The analysis of mediation moves revealed that the learners required more assistance from the mediator, and therefore explicit mediations were more frequent in DA sessions of the first paragraphs. Throughout the other DA sessions, there was a remarkable change both in the quantity and quality of mediation moves. The explicit prompts decreased, the implicit ones increased, and almost no mediation was required by the learners in the last session. These findings show that learners became more aware of the metadiscourse markers and were able to correct the errors with less or no assistance from the mediator. Lantolf and Poehner (2010) states that the more a learner responds to implicit mediation, the more he or she gains control over the certain language structures, and the closer he or she becomes to self-regulation. Hence, changes in relation to mediation moves can be understood as learners’ progress form other regulation to self-regulation, and their growth in their ZPD. Accordingly, the findings of the reduction in explicit mediation and increase in self-regulated performance through DA intervention are consistent with the results of the earlier studies (Besharati, 2018; Birjandi & Ebadi,2012; Ebadi & Rahimi,2019; Kushi,2012; Saadi & Razmjoo, 2017;Shabani 2018; Shrestha & Coffin, 2012; Rahimi et al., 2015). Even though these studies focused on the impact of DA on writing skill of learners, all confirmed the effectiveness of DA on microgenetic development in EFL learners’ ZPD. Besides, analysis of mediation moves pinpointed the variations in the amount of mediation learners required and their level of self-regulation across DA sessions due to their distinct ZPDs. While some learners required more explicit

assistance to correct the errors, some were able to respond correctly with only implicit mediations. Also, the self-regulated functioning started earlier for some students, and they were able to produce self-corrected errors more. Nonetheless, all learners displayed a gradual and progressive developmental trend in terms of independent performance from first sessions to the final one. These results agree with the observations of the several studies which also reported individual differences related to mediation and progress of learners (Ableeva, 2010; Ebadi & Rahimi, 2019; Saadi & Razmjoo, 2017, Summer, 2008; Vakili & Ebadi, 2019).

Not only the mediation moves but also reciprocity acts indicate the emergent and potential capabilities of the learners. Reciprocity is essential in dynamic assessment as “it represents learners’ agency in learning” (Ebadi, 2016, p.37). Therefore, it was also attempted to demonstrate reciprocity of learners in DA sessions as an indication of their autonomy and self-functioning (Poehner, 2005). The reciprocity moves emerged from the data, and they were based on the responsibility that the learner takes to respond to the mediations. The low reciprocity acts signaled to control of the mediator while high reciprocity ones showed greater responsibility of the learner. The low reciprocity acts included being unresponsive to mediation, giving incorrect response and seeking more help whereas using mediator as evaluator, giving the correct response alone after the mediations, providing the answer independently and offering explanation acts were high reciprocity ones. The analysis of the reciprocity acts showed that the number of low reciprocity acts decreased substantially throughout the DA sessions, and there was a marked increase in the number of high ones after DA session of the first writing task. Additionally, a reduction in the total number of reciprocity acts was observed in the final writing tasks. These findings support the argument of Poehner (2008) that reciprocity of learners tends to change as they develop into self-sufficient learners. These findings also provided evidence for learners’ development from other regulation to self-regulation, and for their autonomous performance as a result of the DA intervention. They are also in agreement with the findings of the studies which revealed progression in learners’ ZPD in writing through reciprocity acts thanks to DA implementation (Ebadi, 2016; Ebadi & Rahimi, 2019; Shabani, 2018; Shrestha & Coffin, 2012). Similar to the mediation moves, reciprocity acts varied for each student, and this demonstrated that each learner had different level of proficiency in using metadiscourse markers and distinct

potentials for development. This result related to individual differences in responsiveness corroborates the findings of Ableeva (2010); Izadi, Khoshsima, Nourmohammadi and Yarahmadzehi (2017); Ebadi (2016) and Poehner (2009). Despite the differences, performance of the all learners revealed a progress towards the independent regulation, and this highlights the positive impact of DA on learners' ZPD.

In order to explore perceptions of learners toward their DA experience, themes were identified in their interviews and reflections. The students hold positive attitudes toward both DA intervention and the mediator. This finding is line with other studies which demonstrate the favorable attitudes of the learners towards DA (Ableeva, 2010; Çalış, 2018; Çetin-Köroğlu, 2019; Davoudi& Ataie-Tabar, 2015; Shrestha & Coffin, 2012; Şentürk, 2019, Yılmaz-Yakışık, 2012; Xiaoxiao & Yan, 2010). The responses of the students indicated that DA implementation helped them improve their writing skill by writing with a clear organization and coherence. This result matches the one that was observed in the study of Rashidi and Bahadori-Nejad (2018). Their findings revealed that the development of the participants in writing was mostly related to organization rather than content. As well as the development in writing, students reported undergoing an emotional development. They expressed that DA mediation helped them reduce the anxiety during the process of writing. This finding is in line with results of Siwathaworn and Wudthayagorn (2018) who found a decrease in anxiety level of students after DA mediations. The other affective factor that DA influenced positively was students' self-esteem. They indicated that they increased their confidence in their writing abilities. This finding is consistent with the results of earlier studies that also found an increase in students' confidence with DA (Xiaoxiao & Yan, 2010; Shrestha & Coffin, 2012). Moreover, students mentioned the efficacy of DA implementation in terms of raising their awareness about the importance of metadiscourse markers and errors. They expressed that they understood that they were significant for a writing. Also, they stated that they were able to notice the metadiscourse marker errors on their own. Even some could find errors in their friends' paragraphs. Another theme that emerged from the analysis was their learning related to metadiscourse resources. They stated that they learned the function, structure, and punctuation rules of them. In addition, they understood that variation in those markers was important, and using different markers contributed to the quality of a writing.

Therefore, they would pay more attention to employ a variety of these devices. The last category identified was about the advantages of DA over traditional assessment. As they stated, continuous assistance and one to one assessment were positive aspects of the study. They were important for students in that both the mediator and the learners themselves were able to keep track of their development, and the mediator managed to focus more on each learner. In turn, these advantages led to the other one, establishing a rapport with the mediator. Learners indicated that they built a good relationship with the mediator, and they appreciated the support of her. Taken together, it can be interpreted that the learners had favorable attitudes towards DA.

#### **5.4. IMPLICATIONS OF THE STUDY**

When students' opinion paragraphs were analyzed, it was observed that students experience several difficulties with using metadiscourse markers in writing. With the help of the instruction embedded within assessment in the present study, students were able to improve the usage of those devices, and they understood the significance of them as Hyland (2005) suggests. Hence, this research demonstrates that instruction of metadiscourse markers is necessary, especially for EFL learners. If instructed, they can use metadiscourse resources appropriately, and in turn improve the quality of their writing.

In this study, DA was implemented in order to both teach and assess the metadiscourse markers in learners' writing. As a result of the cooperative dialogues in DA sessions, development from other regulation to self-regulation was observed in learners' ZPD. Also, students reflected that they had favorable attitude towards their experience with DA, and they told that it was advantageous for them in several aspects. Therefore, teachers can adopt such a dynamic way to assess learners' language skills. It can be assumed that learners would both benefit from and enjoy integration of DA into their classes.

Also, it was found that the DA implementation helped learners with some affective factors in language learning. As they stated, the anxiety related to writing was reduced, and students fostered their confidence in writing skill. Then, it can be suggested that teachers can make use of DA to encourage and motivate students to

improve their writing and produce better texts. This influence might be also observed in other language skills such as speaking.

Finally, the findings of the study has important implications for developing both the syllabus of writing classes and individualized plans for the learners who are in need of special assistance. The present study indicated that metadiscourse markers require more focus in writing classes, and so they can be included in the syllabus. In addition, DA allows the mediators to diagnose individual needs of the students, and thereby DA research can be used to prepare specialized plans.

### **5.5. SUGGESTIONS FOR FURTHER RESEARCH**

Considering the findings and limitations of the current study, a few suggestions can be made for the following studies. Firstly, there have been a limited number of studies investigating metadiscourse markers and DA in Turkish EFL context. In order to understand how Turkish learners use such markers and how DA influences their usage, more studies are needed in this area.

This study examined only the usage of three types of interactive metadiscourse markers in writing due to lack of others in the paragraphs. However, studies investigating both interactive and interactional metadiscourse markers in students' essays would enlighten researchers and expand our knowledge on the issue. Also, this study included the metadiscourse markers in writing, but further studies can extend the scope by exploring those markers in speaking.

In addition, this study used interactionist DA to provide mediation to learners, and it was found to be influential for the development of metadiscourse markers. Similar studies investigating the same issue can be conducted by using interventionist, G-DA, and computerized DA with both synchronous and asynchronous formats.

Another aspect to be considered in other studies is participants. This study was conducted with pre-intermediate learners in a preparatory school. Similar studies can be conducted with different groups of learners and with other proficiency levels in other contexts.

Lastly, further studies can investigate the learners' microgenetic development in novel and increasingly more challenging situations called transcendence which

demonstrates whether learners can display similar performances in transfer assessments including different paragraph types.



## CONCLUSION

The current qualitative study set out to examine the development of learners in the use of metadiscourse markers with implementation of dynamic assessment (DA). For this purpose, the frequency of metadiscourse markers, the errors related to those devices, mediation moves and reciprocity acts recorded in DA sessions were analyzed. Also, the data in the interviews and reflections were evaluated in order to gain insight into the experiences of learners during the study.

The findings of this investigation reveal that DA had a positive impact on the both the use and knowledge of metadiscourse markers. It was observed that students employed more markers in their writings after DA sessions. It was also demonstrated that DA enhanced the correct use of the markers. With the help of mediation in DA sessions, students were able to use metadiscourse resources more properly. Regarding the microgenetic development of learners in the use of such resources, the results indicated that DA was effective in improving learners' abilities to use them. It helped them increase their awareness of metadiscourse and its significance in writing. Furthermore, students had positive opinions about DA, and believed that it was advantageous in many aspects. They also reflected that DA positively influenced not only their academic writing but also the affective factors that might intervene with their learning.

To conclude, it has been demonstrated that EFL learners experience trouble with appropriate use of metadiscourse markers in writing. The findings indicate that integration of assessment and instruction of those markers brought about progress and growth in their capabilities to use them properly, and students favored it.

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## APPENDICES

### APPENDIX I: Background Questionnaire

1. Name and Surname: \_\_\_\_\_
2. Gender: \_\_\_\_\_
3. Age: \_\_\_\_\_
4. Mother tongue (s): \_\_\_\_\_
5. Is there any other language you can speak? If so, which language is it?  
\_\_\_\_\_
6. How many years have you learning English?  
\_\_\_\_\_
7. Where did you graduate from?  
 private high school                       public high school
8. Have you ever been you stayed in a country where English is mother tongue?  
If so, where and how long did you stay?  
\_\_\_\_\_
9. Have you taken any private classes for writing since you started university? If  
so, how long?  
\_\_\_\_\_

Thank you for taking the time to complete this questionnaire.

## **APPENDIX II: Writing Topics and Their Prompts**

### **1. Why do many people use Instagram?**

- Socializing
- Advertising
- Becoming famous

### **2. What are the benefits of travelling?**

- Freedom of choice
- Opportunity to meet different people
- Building self-confidence
- Controlling your budget easily

### **3. Discuss the reasons why some people are addicted to computer games?**

- Competition
- Socialization
- Interesting storyline

### **4. Why do many people try to be a Youtuber?**

- Becoming popular
- Sharing skills and knowledge
- Earning money

### **5. How do bad parents affect their children?**

- Negative role models
- Not teaching life values

### **5. What are the benefits of having flexible working hours?**

- Health
- Motivation
- Effectiveness

### **6. What are the positive effects of volunteering?**

- Helping people who are in need
- Learning not to be selfish
- Gaining work /life experience
- Socializing

### **7. What are the advantages of having plastic surgery?**

- Looking younger/better looking
- Recovery from injury/illness
- Looking like celebrities

### **8. What are the disadvantages of using too much technology?**

- Becoming lazy
- Being unsociable
- Having serious health problems

### **9. What are the benefits of respect on society?**

- More peaceful world
- Equal rights
- Happy people

### **APPENDIX III: Reflection Paper**

Write about your reflections upon your learning experience in this study. It will inform the researcher about your ideas and insights into 4-weeks writing training. You may consider following prompts.

- Have you ever taken any training like this before? How was it different?
- How was your experience this training?
- What were the things you liked and did not like in this training?



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### **EDUCATION**

Master's Degree Kocaeli University (2018-2020)  
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### **WORK EXPERIENCE**

2018- present English Instructor  
Bilgi University  
2017- 2018 TEFL Teacher Trainee  
ENKA Schools, İstanbul  
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### **PROJECTS**

2017-2018 Volunteer Teacher in “Ders Arası Dil Molası” Project  
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Aykut, C., İnan Karagül, B., & Ulu, B. (2020). Analysis of articles and theses on discourse of English as a foreign language classroom published between the years of 2010 and 2019 in Turkey. *Turkish Studies - Education*, 15(1), 1-13. doi:10.29228/TurkishStudies.39599