MAKING THE IMPLICIT EXPLICIT: UNPACKING THE REVISION PROCESS

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THE PROGRAM OF
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TO MY PRECIOUS PARENTS

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The Graduate School of Education of İhsan Doğramacı Bilkent University

by

Duygu Aktuğ

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ABSTRACT

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M.A., Program of Teaching English as a Foreign Language

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June, 2015

Providing feedback is an intrinsic component of writing instruction, and arguably one of the most important components when teaching a second language. Learners of English generally receive feedback on their written texts through teachers' written comments or correction code symbols. Among these two ways of feedback provision, writing instructors often prefer giving feedback through correction symbols as it enables the students to process acquired knowledge and correct their own errors accordingly. Yet, the writing instructors have little or no idea about cognitive processes the learners experience while utilizing the correction code symbols. Therefore, this study was designed to investigate how students having different proficiency levels interpret and respond to the correction code symbols on their written output while revising their work. The study also sought to identify how useful the students find the use of correction code symbols while revising their texts.

The research was conducted at a public university in Turkey with thirty two participants, who were chosen among intermediate and elementary level students on a voluntary basis. The data for this research were collected via the think-aloud protocols (TAPs) of the students while they were re-drafting their output according to the correction symbols, and retrospective interviews conducted following the TAPs. Qualitative data analysis from the TAPs and interviews indicated that the students employed certain strategies while interpreting the symbols for different error categories. The study also showed that, with the exception of syntactic errors, the intermediate level participants were able to correct their errors slightly more frequently than the elementary level students. Finally, despite some surface-level difficulties, the data retrieved from the interviews indicated that all the students regardless of their levels of proficiency found using correction code symbols helpful.

Key words: Second-language writing, feedback in teaching writing, indirect corrective feedback, error correction code, error correction symbols, think-aloud protocol (TAP) procedure.

ÖZET

GİZLİ ALANI AÇIĞA ÇIKARMA: ÖĞRENCİLERİN METİNLERİNİ DÜZELTME ESNASINDAKİ BİLİŞSEL SÜREÇLERİ

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Öğrencilerin yazılarına dönüt verilmesi, yazma becerisi öğretiminin ayrılmaz ve en önemli parçasıdır. İngilizce öğrenenler yazılarına dönütü genellikle yazma becerisi öğretmenlerinin yazılı açıklamaları veya hata düzeltme kodu yoluyla alırlar. Yazma becerisi öğretmenleri, bu iki dönüt verme çeşidinden hata düzeltme kodunun sembolleri yoluyla dönüt vermeyi tercih ederler, böylece öğrenciler edindikleri bilgileri kullanır ve buna uygun olarak hatalarını düzeltirler. Ancak, yazma becerisi öğretmenleri, öğrencilerin hata düzeltme kodunun sembollerini kullanırken hangi bilişsel süreçlerden geçtikleri hakkında hiç denecek kadar az fikirleri vardır çünkü öğrencilerin yazıları hakkında her bir öğrenciyle konuşmak oldukça fazla zaman alır. Bu sebeple bu çalışma iki farklı yeterlik seviyesine sahip olan öğrencilerin yazdıkları metinleri düzeltme esnasında hata düzeltme kodu sembollerini nasıl yorumladıklarını, bu sembollere nasıl karşılık verdiklerini ve metinlerini gözden geçirirken hata düzeltme kodu kullanımını ne kadar yararlı bulduklarını araştırmayı amaclamaktadır.

Bu araştırma Türkiye'de bir devlet üniversitesinde on altı başlangıç seviyesi ve on altı üst seviye olmak üzere toplam otuz iki gönüllü katılımcıyla yürütülmüştür. Bu çalışmanın verileri, öğrencilerin yazdıkları ilk ve düzeltilmiş metinleri, öğrencilerin ilk metinlerini hata düzeltme kodu sembolleri vasıtasıyla düzeltmeleri esnasında yürütülen sesli düşünme protokolleri ve öğrencilerle yapılan görüşmeler yoluyla toplanmıştır.

Sonuç olarak, katılımcılarla yapılan sesli düşünme protokolleri ve görüşmeleri sonrası elde edilen nitel analiz, öğrencilerin farklı hata kategorileri için belirli stratejiler kullandıklarını göstermektedir. Ayrıca, bu çalışma, üst seviyedeki öğrencilerin sözdizimsel hatalar dışındaki tüm hatalarını başlangıç seviyesindeki öğrencilere göre nispeten daha sık düzelttiklerini de göstermektedir. Son olarak, görüşmelerden elde edilen veri, bazı yüzeysel zorluklar yaşamalarına rağmen yeterlik seviyesi gözetilmeksizin tüm öğrencilerin hata düzeltme kodunu faydalı bulduklarını göstermektedir.

Anahtar kelimeler: İkinci dilde yazma, yazma becerisi eğitiminde dönüt, dolaylı hata düzeltme, hata düzeltme kodu, hata düzeltme sembolleri, sesli düşünme protokolü yöntemi.

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CHAPTER 1: INTRODUCTION

Introduction

"I'm not a very good writer, but I'm an excellent rewriter." James Michener

From this quotation one can probably say that after having written a short story, novel or fiction documentaries, the prominent U.S. writer James Michener constantly assessed and revised his plans and outlines, adjusting and changing them afterwards, returning again and again to the manuscript to reread it and change it anew. It seems clear that Michener's approach to writing illustrates many of the procedures skilled writers use when composing their works.

While preparing and producing a written output, a variety of strategies are used for planning and revising it. In order to orchestrate the writing process accomplishedly, the procedures such as goal-setting or self-evaluation should be applied by both novice and experienced writers (Harris & Graham, 1999). It is the same for writing in a second language as well as in the mother tongue. However, students always find writing in a foreign language challenging since it necessities many procedures that L2 learners generally disregard in the writing process.

Thanks to researchers, for over forty years, the writing process has changed into the "process writing". The process approach to writing changed the focus from finished products to the producing process itself, putting emphasis on the relationship between audience, writer, and the text itself. This approach includes generating ideas, writing, revising, getting feedback, and writing again (Keh, 1990a).

Researchers in the field of L2 writing have heavily investigated the efficacy of each step for the sake of both writing instructors and learners. Among these steps,

error correction in the writing process has been both one of the most widely researched and debated areas for more than three decades. Some studies support corrective feedback, arguing that it offers learners opportunities for noticing and comprehending forms. However, research findings have been inconclusive about the effectiveness of implicit error correction on L2 writing through coding and little is known about how students interpret the provided feedback on their work when redrafting.

This study aims at shedding light on the cognitive process the students go through while using the correction code symbols on their draft while revising their essay and their perceptions about it. It may also provide some insights into the difficulties students experience and the steps they take to handle them. The variety of perspectives will aid to reveal more detailed findings.

Background of the Study

Writing is considered to be a complex cognitive process whether it is in the mother tongue or in the target language. Foreign language learners find writing in L2 challenging on the grounds that their cognitive immaturity and lack of training (Bradford, 1983). According to research into second language writing, the complexity of writing is due to implementing cognitive processes and mental representations in order to generate, express and refine ideas while producing a text (Bereiter & Scardamalia, 1987; Flower & Hayes, 1981). White (2006) defines writing as a problem solving process in which writers engage a variety of cognitive and linguistic skills to identify a purpose and to produce and shape ideas. The main purpose of writing in a second language is to develop the ability to communicate in writing through the instruments of conventions of writing in a particular culture,

grammatical structures, target vocabulary, and punctuation (Hedgcock & Lefkowitz, 1994; Paulus, 1999).

In the 1970s, the concept of writing as a process was first introduced, and the process approach to writing has become increasingly popular for ESL/EFL instruction since then (e.g.: Zamel, 1976). In this approach, writing is considered to involve several steps: generating ideas, writing, revising, getting feedback, and writing again (Keh, 1990a). According to Leki (1991), process writing stands out as the emphasis is on the process the students go through during the composing process rather than the product. Lannon (1995) suggests a three-cycle writing process model including rehearsing, drafting, and revising which aid the students to make revisions and correct their errors, therefore they can improve their writing by these stages.

describes an error as a deviation from the norms of the target language. Student texts have many components and characteristics that determine their overall quality, experienced L2 writing instructors would agree that the number of linguistic errors made by students represents neither a text's worthiness nor a student's ability (Ferris & Roberts, 2001). Error correction is defined by Truscott (1996) as "correction of grammatical errors for the purpose of improving a student's ability to write accurately" (p. 329). Error correction for written texts of students is provided by writing instructors through direct and indirect ways. Support for corrective feedback can also be found in Vygotsky's (1978) sociocultural model of learning, and specifically his notion of the zone of proximal development. Error identification and guided provision towards the idealized form demonstrate the learner "the distance between the actual development level as determined by independent problem solving" constituting "the difference between what a person can achieve when acting alone and what the same person can accomplish when acting with support from

someone else" (Lantolf, 2000a, b, p. 17, as cited in Sampson, 2012), in other words the learner's zone of proximal development. According to Sampson (2012), the correction code is a form of scaffolded help, provided by a knowing other (in this case the teacher) and which marks "critical features and discrepancies between what has been produced and the ideal solution" (Wood, Bruner, & Ross, 1976; in Mitchell & Myles, 1998, p. 147). With practice, learners move from other-regulation provided by the teacher (through feedback) to self-regulation and greater independent control over target language forms. As learners experience "micro genetic growth" (Ellis & Barkhuizen, 2005, p. 240, as cited in Sampson, 2012), the "reorganization and development of mediation over a relatively short span of time" (Lantolf, 2000a, p. 17, in Sampson, 2012), they become more fully integrated, so we can expect increased frequencies of correct forms to be produced independently.

According to Komura (1999), students preferred indirect correction as it was more comprehensive and that they felt they learned more from indirect correction using error codes. In order to give indirect feedback on drafts, a special coding system called "correction code" (or error/marking code) including a symbol for each error is used by writing instructors. Namely, students write their first drafts on the issue given without any help during the class-hour, and then they are given the correction codes and required to produce the final drafts after a short while which will be graded by the teacher. In Turkey, both state and private universities have schools of foreign languages where students are taught English for one year and whose curriculums include writing skill as part of their education programs. In addition to writing paragraphs or essays during the exams conducted, students are required to write drafts that teachers give feedbacks on and students subsequently revise their work. In this writing process, teacher-written feedback is an important

part not only for the teacher, but also for the students (Cohen & Cavalcanti, 1990; Fatham & Whalley, 1990; Ferris, 1995; Ferris, 2002).

Many researchers have carried out studies about feedback preferences by students and teachers. While several scholars argue that feedback is not educatory for students (i.e., Radecki & Swales, 1988), some studies refute that feedback is effective to correct lexical, syntactic and stylistic errors (Ferris, 1995; Hyland, 1998). Moreover, studies investigating students' perceptions of and preferences for feedback types have illustrated that students have strong opinions on both the amount and type of feedback given by their teachers. For example, Cohen (1987) examined 217 students' perceptions on the amount and the effectiveness of teacher-written feedback. The results of this study indicated that students felt that teachers do and should focus their feedback on local issues (such as grammar and mechanics) more than on global writing issues (such as ideas, content, and organization). Ferris (1995) replicated Cohen's study and found similar results to Cohen. Such findings demonstrate how and how much students use this feedback to improve their writing in L2. These studies are quite valuable in giving insight into feedback issues both from teacher and student perspective. However, none of the above mentioned studies have explicitly examined the cognitive processes that learners go through during writing in L2, thus little is known about how the students interpret the symbols and how the symbols assist them to make changes in their written outputs.

Statement of the Problem

For more than three decades, error correction has been both "among the most widely researched and debated areas" (Flahive, 2010, p. 148) in the field of L2 writing research (Bruton, 2009, 2010; Chandler, 2004; Ferris, 2004a, 2004b; Truscott, 1996, 1999, 2004). Some of the literature on corrective feedback (CF) on

writing suggests that it is ineffective, and potentially harmful (Truscott, 1996). However, studies supporting CF argue that it offers learners opportunities for discovering and consciously interpreting the linguistic forms (Schmidt, 1990), and for increasing declarative knowledge (DeKeyser, 2007a). Not only have research findings been inconclusive regarding the effectiveness of error correction on L2 writing, but little is known about how students actually interpret feedback on their work when re-drafting. Regarding these, there is a need to acknowledge how the learners of L2 interpret the provided corrective feedback in their writings and how effective these symbols are in terms of developing their writing abilities.

In Turkey, many universities have preparatory programs and almost all of these programs have writing classes. In their curricula, writing is tested through different kinds of writing tests in which students are tested on their ability to produce a single text. In addition, students are assessed through the process writing, during which they have to revise their drafts with the help of error codes provided by their instructor. Revisions are produced in class within a specified time; students are thus under pressure to interpret the correction codes and produce an improved draft which will be graded.

Research Questions

This study addressed the following research questions:

- 1. How do students from different proficiency levels interpret and respond to the correction code symbols on their draft while revising their essay?
- 2. How useful do students find the use of correction code symbols?

Significance of the Study

This study, intending to examine a broad array of tertiary level Turkish EFL students' perceptions of correction codes and experiences about the writing revision process, may contribute to the existent literature by providing further insight into redrafting issue from learner perspective. Hence, the findings of this study might contribute to the existing literature by providing data about the mental processes of the learners during writing, revising and interpreting their teachers' feedback. This research will also shed light on students' perceptions of the usefulness of feedback codes during the revision process.

At the local level, by evidencing how EFL writers undergo the process of interpreting the symbols of the codes, it is expected that the results of this study may help foreshadow the potential problems experienced by the learners. Along with providing insight for writing instructors to comprehend the logic behind the error codes, the study may also provide guidance to high-stakes tests takers and examiners about the writing revision process. Through the results of this study, the current feedback procedures may be revised and altered to provide students with better guidance in revising their works, enabling the students and test-takers to communicate through writing more effectively.

Conclusion

This chapter introduced the study with the statement of the problem, research questions, and the significance of the study. The next chapter will review the relevant literature in a detailed way. The methodology of the study will be explained including the sample, the setting of the study, and the data collection procedures in the third chapter. The data will be analyzed in the fourth chapter. Finally, the last

chapter will discuss the findings. Pedagogical implications, limitations of the study, and suggestions for further research will also be considered in the last chapter.

CHAPTER 2: LITERATURE REVIEW

Introduction

This study explores the cognitive processes of EFL learners while revising their written outputs using coded feedback. In the literature, the feedback issue has been widely investigated from different perspectives. This chapter reviews the literature on writing in a second language with regards to coded error feedback. In the first section, a brief explanation of writing in a second language is provided. Then, the underlying reasons why error feedback on writing has gained importance are examined. An overview of studies on the impact of coded feedback will be presented along with the perspectives of the students. The last section examines the methods used to identify learners' cognitive processes while interpreting the symbols to revise and redraft in their written output.

Writing in L2

In the history of applied linguistics, the writing skill plays an important role in the maintenance of learning a language. The key aspect of producing a successful written output was defined by White and Arndt (1995) as having various steps including:

- producing relevant ideas,
- evaluating these ideas in relation to purpose, topic and audience,
- considering the knowledge, attitudes and tastes of the intended reader,
- making decisions about the amount of information shared with the reader, the kind of information that has to be explicit and the need for indirectness,

- taking the separation in time and place between writer and reader into consideration,
- conforming to conventions of style and format in the social group concerned.
- conforming to grammatical and other language conventions,
- organizing and structuring ideas, content and purposes into a coherent whole,
- writing a draft,
- revising and improving the draft,
- producing a final revision to be published in some way (p. v).

One of the most significant discussions in the writing issue among researchers has been the similarity between L1 and L2 writing processes. The similarity of the processes between L1 and L2 writing has been advocated by some researchers. They claim that some common fundamental processes are shared by L1 and L2 writing while others support the idea that writing in a foreign language is more challenging for the learners when it is done in L1 (Matsuda, 1998; Silva, 1993). The researchers supporting the idea of the difference between L1 and L2 writing argue that writing in a second language is different because it involves critical factors such as epistemological issues, functions of writing, knowledge storage, and textual issues.

A fair amount of literature has been published on the relationship between the processes of the first and second language writing. Among these studies, the study of Akyel and Kamisli (1997) examined the student-writers' works to investigate the shared aspects on the linguistic preferences to regulate data in and across sentences. The finding demonstrated that in terms of the writing processes, the similarities were more frequent than differences between the learners' writing in L1 and L2. Another

study attempting to draw fine distinctions between the possible connection of L2 writing instruction on L1 and L2 writing strategies and attitudes in the academic context found that in the written works of the students, the transfer between L1 and L2 is two-sided (Kenkel & Yates, 2009). Uysal (2008) conducted research on the relevant issue to investigate both the impact of the writers' cultural backgrounds on their writing practices in their essays and the variations of these practices according to the language style they use. This study produced results which corroborate the findings of a great deal of the previous work in this field. According to the findings, similarities exist on the basis of not only the frequency, but also the structures of the L1 and L2 writers due to the fact that the same information management requirements restrain the writers of L1 and L2.

In short, it can be suggested that writing in the second language has been one of the most significant issues in writing. It has been long discussed among the researchers whether the processes in L1 and L2 writing are similar. The presented literature mostly agrees that writing in the second language has been found to be affected by the writer's first language.

Product and Process Approaches to Writing in L2

About thirty years ago, the literature on writing concentrated upon only the product writing. This model was at the heart of both researchers' and writing instructors' understanding of how writing needs to be conducted. According to the product approach, the main focus was the finished products of the learners (Williams, 1989). On this ground, it was argued that the product approach was a teacher-centered instruction ignoring all the steps learners experience in a writing activity. In this model where the only feedback learners get is the teacher's comments along with the error corrections on the papers, the teacher instructs the

learners about how to write about a genre and students write about a topic accordingly.

Over the past thirty years, the process approach to both first and second language writing instruction has been introduced by researchers. The first serious discussions and analyses of this new approach to writing emerged during the 1970s on the grounds that writing was a highly complex process, made up of various subprocesses that occurred not one after another in a strict linear sequence, but cyclically and in varying patterns (Caudery, 1995). This approach places the learner and the learners' needs at the center of authentic instruction by seeing learning as a socially situated activity that is enhanced in functional and meaningful contexts (Harris & Graham, 1996). According to Harris and Graham (1996), the aim of the teachers using process approach is to develop learners who:

- share and help each other,
- make personal choices about what they read and write,
- take ownership and responsibility for their learning,
- take risks in their writing, and
- collaborate in evaluating their efforts and progress (Harris & Graham, p. viii).

Moreover, in classes where writing instruction is provided via process approach, students are provided with essential components of the approach: "writing conferences, peer collaboration, modeling, sharing, and classroom dialogue" (Harris and Graham, 1996, p. ix).

Research on process writing supports the view that students should be aided in the actual writing process by finding the source of their problems in creating good written texts and enabling them to overcome challenges (Caudery, 1995). Having investigated his own writing process to emphasize the significance of producing a

number of drafts, Murray (1980) mentions that writers gradually uncover what they actually want to say through writing.

The processes involved in this approach are indicated by Keh (1990a) as generating ideas, writing, revising, getting feedback, and writing again. Similarly, Lannon (1995) offered a three-cycle writing process model including rehearsing, drafting, and revising, proposing that these cycles are recursive and students can go back for revision in order to develop their texts. This feature in writing is advocated and appraised by Perl (1983, p. 44) as "Writing is a recursive process, that throughout the process of writing, writers return to sub-strands of the overall process, or sub-routines (short sections of steps); writers use these to keep the process moving forward". In other words, recursiveness in writing implies that there is a forward-moving action that exists by virtue of a backward-moving action. Dyer (1996) also argues that these steps aid the learners in understanding writing and being proficient writers in the end.

In contrast to the dominance of the teacher in the product approach, the writing instructor's aim is to provide opportunities for extended writing and emphasize student ownership of writing in the process approach. Furthermore, they are required to engage the students as critical collaborators in their own learning and development by being active, facilitative, and supportive (Harris & Graham, 1996). Similarly, Gumus (2002) mentioned that the writing process starts with the teacher's instruction. However, writing instructors seem to be undervalued by Zamel (1976), who identifies a process approach teacher as disregardful of observing grammar exercises, assigning topics, providing criteria for writing and showing writing models.

Students have many roles including the ones provided by the teacher and the processes by the nature of process writing. These roles include implementing writing

stages as well as taking responsibility for their learning and collaborating in the evaluation of their progress (Harris & Graham, 1996). The responsibilities of the learners are highlighted by other researchers such as Raimes (1991) and Myers (1997). According to them, students should be provided with the opportunity of selecting topics to write, more time to brainstorm, write, make necessary revisions, and give feedback to each other.

Feedback on Writing

As the process approach to writing superseded the product approach emphasizing accuracy, writing instruction techniques has also altered. As Horowitz (1986) discusses, in its early form, process approach led some learners to produce richer text reflecting the writer's opinions, but hindered them from producing errorfree, formal and academic texts. Subsequent to this, the effect of written corrective feedback on writing was at the center of discussions among researchers in the late 1990s. The first serious discussions and analyses of error correction in writing emerged during the 1990s with Truscott (1996). He alleged that error correction should be abandoned because of its ineffectiveness and harmfulness by presenting the reasons as there was no research evidence to support the view that it ever helps student writers, it overlooks second language acquisition insights about how different aspects of language are acquired, and there were practical problems related to how teachers provide written corrective feedback (WCF) and how students receive it to make a futile endeavor.

In 1999, Truscott added that error correction is harmful because it averts time and energy away from more productive aspects of writing instruction. In response to Truscott (1996), Ferris (1999) highlighted the need for more research and claimed

that written corrective feedback improves accuracy and it is believed to help students improve their writing.

A number of studies investigated the issue of improving accuracy via WCF and made comparisons about students who received feedback and who did not (Kepner, 1991; Robb, Ross, & Shortreed, 1986; Semke, 1984; Sheppard, 1992). Interestingly, the results of each study agree that there is no significant difference in writing accuracy of the students (Bitchener, Young, & Cameron, 2005). Chandler (2003) also conducted two studies to examine the relationship between error correction and writing improvement, and the effects of various kinds of error correction. The results show that correction by the teacher significantly improved the accuracy and fluency in subsequent writing of the same type over the semester, and correction by the teacher is claimed to be the best method for increasing accuracy both for revisions and for subsequent writing.

To sum up, writing instructors help their writers to comprehend the aims of learning and provide opportunities for the writers to have feedback on their progress towards the targets (Parr & Timperley, 2010). The effect of instruction along with feedback was supported in the literature to have a direct relationship with the learners' comprehension of the performance, success, and targeted achievement through the writing task (Black & William, 1998). According to Zellermayer (1989), writers are in need of a response in the form of feedback, and therefore they will be able to monitor their progress, move forward and discover their readers' needs.

Previous research findings into feedback on writing have also revealed that as well as student writers, teachers are in favor of corrective feedback as they tend to feel that the coded errors can justify the grades given (Dohrer, 1991 as cited in Simpson, 2006). Moreover, as Keh (1990) indicated, error coding not only shows the

dominance of the teacher over the students, but it also provides evidence that the teacher is literally working.

On the basis of Ellis' (2009, p. 98) typology of written corrective feedback types, the feedback provided for the writers can be labeled as:

- Direct corrective feedback
- Indirect corrective feedback (by underlining the errors or using cursors to show omissions in the student's text or by placing a cross in the margin next to the line containing the error)
- Metalinguistic corrective feedback (by using error codes)
- Focused (selecting specific error types) versus unfocused (by correcting all of the students' errors) corrective feedback
- Electronic feedback (providing learners with the means where they can appropriate the usage of more experienced writers)
- Reformulation (providing learners with a resource that they can use to correct their errors but placing the responsibility for the final decision about whether and how to correct on the students themselves)

Alleged to have certain benefits for the writers, the corrective feedback types provided by the writing instructor have been generally labeled as direct and indirect feedback.

Direct Feedback

Direct (explicit) feedback given by teacher on the students' writings provides the correct form for the student writer, thus, on revising the text, they need only to transcribe the correction into the final version of their outputs (Ferris and Roberts, 2001). Chandler (2003) states that for students to produce accurate revisions, direct

correction is the best way, and they prefer it because it is the fastest and easiest way for them as well as the fastest way for teachers over several drafts.

Data from several studies have revealed that both students and teachers prefer direct, explicit feedback rather than indirect feedback (Ferris & Roberts, 2001; Ferris, Cheyney, Komura, Roberts, & McKee, 2000; Komura, 1999; Rennie, 2000; Roberts, 1999). Ferris et al. (2000) analyzed the effects of different treatments on revisions and new writings of the learners, and the results show that direct error correction provided by the teacher led more correct revisions than indirect error feedback. According to the findings of a relatively recent study conducted by Bitchener et al. (2005), direct oral feedback in combination with direct written feedback has a greater effect than direct written feedback alone on improved accuracy over time, and it is also found that the combined feedback option facilitated improvement in the more "treatable", rule-governed features (the past simple tense and the definite article) than in the less "treatable" feature (prepositions) (Bitchener, et al., 2005).

Even though direct feedback has been alleged to be beneficial for the students and time-saving for the teacher, many studies have shown its limitations (Ferris, 1995a, Ferris 1995b; Ferris & Hedgcock, 1998; Lalande, 1982; Robb et al., 1986). One criticism of much of the literature on direct feedback is that it does not lead to either greater or similar levels of accuracy over time when compared to indirect feedback (Ferris et al., 2000; Ferris & Helt, 2000; Frantzen, 1995; Lalande, 1982; Lee, 1997; Robb et al., 1986).

In short, direct feedback is thought to be helpful in the writing process when the focus of writing instruction is on the accuracy. It has been also suggested that providing direct feedback along with direct oral feedback on students' essays led improvement in rule-governed grammar items.

Indirect Feedback

Feedback can be defined as procedures teachers use to communicate with a learner on the effect of teaching, whether the aim has been achieved or not (Lalande, 1982). During the writing instruction, instructors provide indirect feedback by showing that an error exists, but the correction is not provided, thus the learner is informed about the problematic part and expected to overcome it (Ferris & Roberts, 2001). According to Bitchner and Knoch (2008), indirect feedback can be provided in one of four ways:

- underlining the error,
- circling the error;
- recording in the margin the number of errors in a given line;
- using a code to show where an error has occurred and what type of error it is (p. 414).

Many SLA theorists and writing specialists have argued that indirect feedback is preferable for most learners. Lalande (1982, p. 140) also supported this idea claiming it engages student writers in "guided learning and problem solving".

There is a large volume of published studies describing the role of implicit (indirect) feedback for writing instruction in the literature. One of the researchers, Ferris (2002) compared the effect of direct and indirect feedback on students' writing and found that learners receiving mainly indirect feedback made fewer errors than learners receiving direct feedback over time. Likewise, upon investigating the effect of written corrective feedback, Bitchener and Knoch (2009) states that in terms of accuracy, indirect feedback has a greater effect than direct feedback does. In another major study, Saiko (1994) examined the accordance of feedback between teachers'

practices and students' preferences, and reported that providing indirect feedback resulted in automatic correction by the students while revising their texts.

In short, a large and growing body of literature has investigated the effect of indirect feedback on student writers' texts. Compared to direct corrective feedback, indirect feedback has been suggested to have greater effects on the written product.

The Impact of Coded Feedback

Coded feedback is provided through error codes (correction codes) consisting of abbreviated labels (mostly letters) for various kinds of errors. For example, the symbol "T" stands for "verb tense" error, or "PR" stands for "preposition" error.

When the label is placed above the error, the hint is provided, while if the label is placed in the margin, it means that the error must be found and then corrected (Ellis, 2009). In the writing process, after the students write their first texts, they are provided feedback via error codes. They are expected to interpret the codes and rewrite their texts accordingly in the correct forms (Higgs, 1979, as cited in Lalande, 1982). Since feedback on language acquisition was started to be discussed, numerous studies have attempted to investigate the effect of coded feedback.

The impact of various types of feedback on writing has been examined by a number of studies including Ferris, Chaney, Komura, Roberts, and McKee (2000); Ferris and Roberts (2001); Frantzen (1995); Lalande (1982); Lee (1997); Robb, Ross, and Shortreed (1986). Lalande (1982) reported upon the experimental study he conducted that the experimental group receiving coded feedback made less grammatical errors than the control group receiving direct feedback from the instructor. Ferris (2006) also investigated the relationship between using error codes and improving accuracy. Similarly, Ferris found that error codes aid the learners to improve verb and total errors after examining four essays of the learners over time.

Support for coded feedback can be seen in Ferris and Roberts's (2001) study as well. They reported that a consistent marking and coding system during a writing class, along with mini-lessons to teach the error types being marked, might benefit long-term growth in student accuracy than underlining or highlighting errors. According to the findings of their research, coded feedback was preferred by the students.

However, some studies found that corrective feedback by using error codes did not help the writers improve their grammatical errors; instead, their non-grammatical errors were improved. For example, indirect feedback with codes was reported to assist long-term acquisition of linguistic features (Bitchener & Knoch, 2008; Ferris, 1995). Likewise, Beuningen, Long, and Kuiken (2012) compared the effects of both direct and indirect corrective feedback on the learners' accuracy. According to the results, different types of feedback are beneficial for the learners; while direct feedback helps the learners with grammatical errors, indirect feedback is better for non-grammatical errors.

The Categorization of the Errors

Biber, Johansson, Leech, Conrad, and Finegan (1999) presented a broad overview of the word classes and grammatical constructions in English. According to Biber et al. (1999), orthographic words are the word forms separated by spaces in written text, and the corresponding forms in speech; grammatical words primarily have a grammatical function; and lexeme correspond for a group of word forms that share the same basic meaning and belong to the same word class (p. 54). The three main word classes were defined as lexical words, function words, and inserts (Biber et al., 1999).

In light of their classification, the categorization of the errors situated in the error correction code used at the institution was identified as:

- Morphological errors: The errors of verb tense, verb form, singular /
 plural, countable / uncountable, subject-verb agreement, article, and active
 / passive.
- Errors in word choice: The errors of omission, word form, wrong word, preposition, not necessary, informal, and repetition.
- Syntactic errors: The errors of unclear sentences, word order, fragment, and run on sentences.
- Orthography and punctuation errors: The errors of capitalization,
 separating words, combining words, spelling, and punctuation.

Language Learning Strategies

Second language learners employ strategies while learning a new language. According to Oxford (1990), strategies are important for language learning as "they are tools for active, self-directed involvement, which is essential for developing communicative competence" (Oxford, 1990, p. 1). She also listed the features of language learning strategies:

- 1. They contribute to the main goal, communicative competence.
- 2. They allow learners become more self-directed.
- 3. They expand the role of teachers.
- 4. They are problem-oriented.
- 5. They are specific actions taken by the learner.
- 6. They involve many aspects of the learner, not just the cognitive.
- 7. They support learning both directly and indirectly.
- 8. They are not always observable.
- 9. They are often conscious.
- 10. They can be taught.

- 11. They are flexible.
- 12. They are influenced by a variety of factors (Oxford, 1990, p. 9).

Learning strategies were divided into two types: direct and indirect strategies (Oxford, 1990). Direct strategies comprise of memory, cognitive, and compensation strategies; and indirect strategies include metacognitive, affective and social strategies (Oxford, 1990, p. 16).

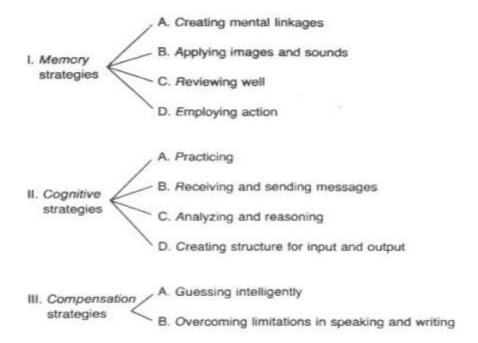


Figure 1. Oxford's (1990) diagram of direct learning strategies

The strategies in Figure 1 are the direct strategies students employ while learning. These strategies are used by the students to internalize the four skills. Writing skill also requires the direct and indirect learning strategies in Figur e 2 while producing an output.

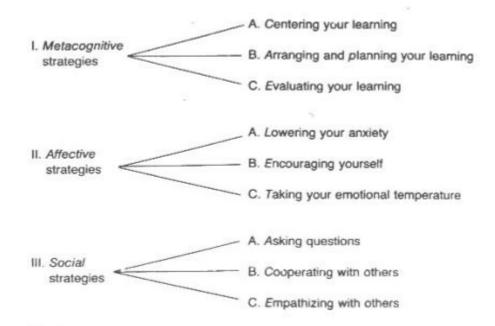


Figure 2. Oxford's (1990) diagram of indirect learning strategies

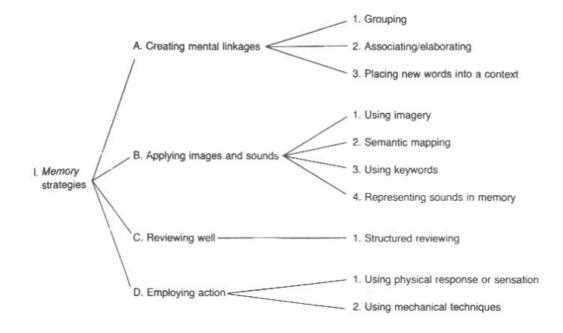


Figure 3. Oxford's (1990) diagram of memory strategies in direct learning strategies

The memory strategies presented in Figure 3 help the students to be proficient learners. When the writing instruction is considered, the students may be expected to use the first sub-strategy, "creating mental linkages", and the third sub-strategy, "reviewing well", while revising a piece of work.

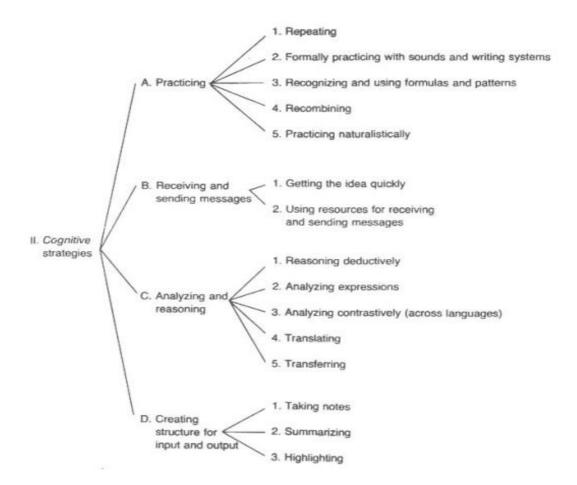


Figure 4. Oxford's (1990) diagram of cognitive strategies in direct learning strategies

The cognitive strategies demonstrated in Figure 4 and Figure 5 include strategies employed by second language writers because writing skill necessitates certain cognitive abilities such as analyzing and reasoning. Moreover, the second sub-strategy of the compensation strategies, "overcoming limitations in speaking and writing", compensate for what the student-writers do while producing written output.

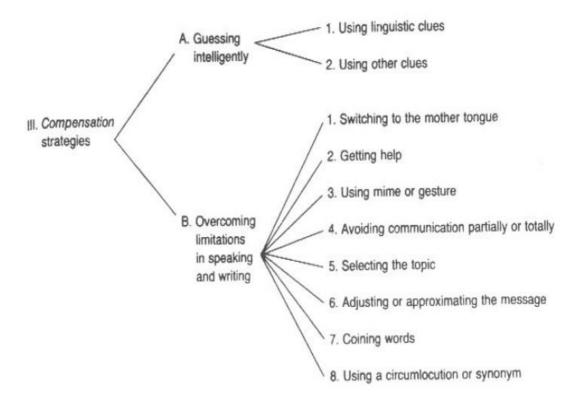


Figure 5. Oxford's (1990) diagram of compensation strategies in direct learning strategies

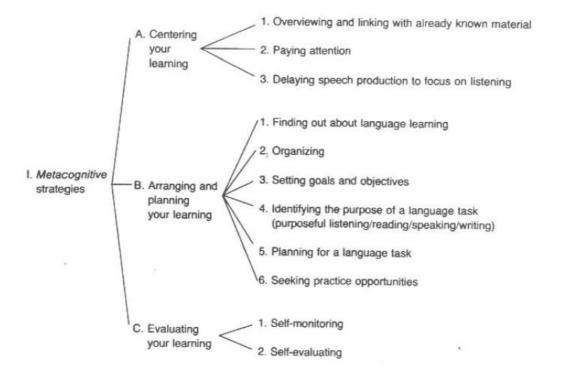


Figure 6. Oxford's (1990) diagram of metacognitive strategies in indirect learning strategies

The revising strategies for this study were adapted from Oxford's (1990) direct and indirect learning strategies, mainly from "memory", "cognitive", "metacognitive" and "compensation" strategies. The overview of the revising strategies employed by the students while re-drafting their work is presented below.

- 1) Reference to the correction code sheet when correcting an error with no discernable pause to reflect on the error
- 2) Immediate correction by using the correction code and pausing to reflect on the error
- 3) Correction without using the correction code sheet
- 4) Reformulation strategy without consulting the correction code sheet
- 5) Consulting the dictionary
- 6) Avoidance strategy

The first revising strategy, "reference to the correction code sheet when correcting an error with no discernable pause to reflect on the error", was adapted from the cognitive strategy: "using resources for receiving and sending messages" (See Figure 4). "Immediate correction by using the correction code and pausing to reflect on the error" strategy was adopted from the metacognitive strategies: "identifying the purpose of a language task", and "self-evaluating" (See Figure 6); and cognitive strategies: "recognizing and using formulas and patterns", "getting the idea quickly", and "reasoning deductively" (See Figure 4). The third revising strategy was adapted mainly from the cognitive strategy: "recognizing and using formulas and patterns" (See Figure 4), and the metacognitive strategy: "overviewing and linking with already known material" (See Figure 6). "Consulting the dictionary" strategy was adapted from both the memory strategy: "associating/elaborating" (See Figure 3), and the cognitive strategy: "using resources for receiving and sending

messages" (See Figure 4). The last strategy, "avoidance", was adapted from the compensation strategy: "avoiding communication partially or totally" (See Figure 5).

Methods Used to Identify Cognitive Processes in Revising

In language learning, all the learning processes are not observable as it is a cognitive and an individual process. This study aims at unpacking what the students think while and after decoding the correction code symbols on their revised draft. To this end, the data were collected through two verbalization methods: the think-aloud protocols (TAPs or concurrent verbalizations) and retrospective interviews (retrospective reports) (Ericsson & Simon, 1993).

Think-Aloud Protocol (TAP)

Being one of the introspective methods, think-aloud protocols (concurrent reports) have been a valuable data collection tool for SLA researchers in order to provide insight into many topics for which production data alone cannot address, for instance language learners' cognitive processing, thought processes, and strategies (Bowles, 2010).

There are a lot of advantages of using TAPs in SLA research. Recent evidence existing in SLA literature suggests that because the verbalizing is thought to change thinking processes, verbal reports can be a tool for learning (Bowles, 2010). In order to reveal the cognitive processes that the writers experience while producing their written texts, verbal reports have been used in L2 writing literature. A considerable amount of literature has been published on writing instruction by using TAPs (Cohen, 1989; Faerch & Kasper, 1987; Green, 1998). The main advantage of using TAPs for data collection is providing insight into learners' cognitive processes (Bowles, 2010). Therefore, many researchers used this method

as their research tool. For example, Faerch and Kasper (1987) discussed that TAPs are beneficial in understanding the way a participant sees the task, their decision-making strategies and concerns when deciding (p. 16). In recent years, there has been an increasing amount of literature on writing using think-alouds as a tool including the studies of Sachs and Polio (2007), to examine L2 writers' thought processes during interpreting feedback they received on their written texts, Alhaisoni (2012), to investigate the writing revision strategies used by EFL learners, Barkaoui (2011), to gain insight into rater performance while evaluating the essays, and Yanguas and Lado (2012), to find out whether thinking aloud while writing in the L1 benefits fluency and accuracy while writing.

According to Bowles (2010), in order to conduct an effective think-aloud protocol (TAP), a set of instructions should be given to the participants. These instructions are stated as "(1) a description of what is meant by "thinking aloud," (2) the language(s) participants are allowed to use to verbalize their thoughts, and (3) the level of detail and reflection required in the think-aloud" (Bowles, 2010, p. 115). In addition, before the think-aloud procedure, each participant of the research should be provided with consent forms informing the participant about the voice record and the anonymity. The instruction on the acceptable language is also essential because some participants cannot think aloud entirely in the second language, which causes them to convey their thoughts ineffectively and incompetently (Bowles, 2010). In addition, when compared to a silent group, participants verbalizing on an L2 work need more time to fulfill the task (Bowles, 2010).

The other important issue of the TAP procedure is providing participants with a warm-up task during which the participants think-aloud to familiarize themselves with the process and ensure understanding of the instructions (Bowles, 2010).

Retrospective Interviews

Retrospective interviews are conducted after the participants' performances to learn about their perceptions on their own performances (Gass & Mackey, 2000). The researcher asks questions a short time after the performance, which allows participants to remember their reasoning processes.

Conclusion

In this chapter, the existing literature on second language writing, approaches to writing in L2, corrective feedback on writing, the types of feedback including direct and indirect feedback, the impact of corrective feedback types of writing, and finally methods used to investigate the cognitive processes while revising have been reviewed. Even though some of the studies indicate conflicting findings, using error (correction) codes while providing feedback on students' written texts in writing instruction is generally favored. Having investigated the effects of implicit feedback and correction code use in writing instruction, many researchers did not investigate the actual processes learners experience while interpreting the codes and revising their texts. The current study aims at filling the literature gap in providing insightful data about the learners' cognitive processes while producing a written output.

The following chapter describes the components of the context, participants, instruments, and methodology of this study.

CHAPTER 3: METHODOLOGY

Introduction

The overall aim of this study is to shed light on the issue of which cognitive processes students go through when interpreting and responding to error code symbols during the revision of their essays. In order to determine the perceptions of the students about the error codes, this exploratory study investigates how effective these symbols are in terms of developing their writing abilities. The reasoning process that students went through when interpreting the correction codes, the revising processes of students during completing writing assignments, and the reflective opinions of students after completing the tasks were analyzed to investigate the real cognitive processes during written production. The research questions for this study were as follows:

- 1) How do students from different proficiency levels interpret and respond to the correction code symbols on their draft while revising their essay?
- 2) How useful do the students find the use of correction code symbols?

This chapter has four sections, which includes the participants and settings, the instruments, the research design and procedure, the researcher's role and finally, data analysis. In the first section, detailed information about the participants and the settings of the study is introduced. The second section presents a description of the research design and the data collection instruments used in this study. This section will also provide thorough information about the research procedure, which includes training of the participants and data collection. In the third section, the researchers

role will be discussed. The final section will summarize the overall procedure for the analysis of the data.

Setting and Participants

The study was conducted at Uludağ University School of Foreign Languages (SFL). Since thirty percent of the courses are taught in English in the department of Industrial Engineering in Faculty of Engineering, Faculty of Veterinary Science, Faculty of Education, and Chemistry in Faculty of Science and Letters, students who are accepted into these departments in Uludağ University are required to pass the English proficiency test which is held every September, before the classes start. The students who cannot pass this test at the beginning of each academic year are taken into an English language learning preparatory program at the School of Foreign Languages. When the students register for the preparatory school, their English proficiency level is determined through the test they have taken, and they are divided into three levels according to their proficiency levels in English: elementary, pre-intermediate and intermediate.

For the current study, 16 elementary level and 16 intermediate level students who volunteered to participate in this study were chosen. All the students of School of Foreign Languages are provided feedback on their writing through correction codes. Writing is tested via two quizzes and two midterms per semester, and for the quizzes students are expected to write about the given topic without consulting any resources. Then, the writing instructors collect the papers and provide feedback on students' performance using the coding system. Students write their second (final) draft, which are graded, the following week during the class hour with the help of an explanatory handout reminding students what each code refers to, and an English

dictionary. Therefore, the participants of the study were familiar with the coding system before the data collection.

The students' ages were between 18-22 years. Writing instruction for the two level students varies. The students from the elementary level take five hours of writing instruction a week while intermediate level students take four hours, since the overall class hours for intermediate students are less than pre-intermediate and elementary levels in the institution.

Instruments, Research Design and Procedure

The data were collected through the first and revised drafts of the students from different language proficiency levels. During their revision process, the researcher conducted think-aloud protocols (TAPs) and following the TAPs, retrospective interviews were made to collect the data the study required.

First and Revised Drafts of the Students

For this study, the researcher asked the students to write a paragraph about the given topic as the first draft according as the procedure followed during the writing evaluation exams in the institution (See Appendix D). At UUSFL, after the students write the first draft of their output for thirty minutes without consulting any sources, the writing teachers mark the errors using the correction code (See Appendix C) with which the test-takers are familiar. The following week, instructors give the marked papers back, and the students are required to write a final draft (See Appendix E) to be graded in another thirty minutes. While writing the final draft, the learners are allowed to consult the correction code and dictionary. Following the same procedure, during the data collection period, students wrote their first draft on their own under the researcher's supervision, and they wrote their final draft with the

help of correction code and a dictionary. The revisions by the students were made in individual sessions in the presence of the researcher. During the revision, the researcher sat in the room with each student who was correcting his/her work using the TAP in order to ensure students verbalized their thoughts throughout. Moreover, regarding the revisions made by students, the revised drafts were also examined and compared with the first drafts to see whether the correction symbols led to required revisions, in other words, whether the coded feedback attained its aim.

Training Using the TAP

Before conducting the individual TAPs, the researcher conducted a training session with the students individually to make the students familiar with the TAP process and feel comfortable during the procedure. The training session began with a piloting video (See Appendix H) which the researcher prepared and shot. In the video, the researcher's colleague was revising a coded paragraph and thinking-aloud in L1, verbalizing all the possible revision strategies such as hesitating and consulting the code and the dictionary. First, the researcher showed the video about TAP to each student as an example of the thinking-aloud procedure (See Appendix H). After that, the researcher handed out a paragraph (See Appendix I) to each student prepared by the researcher with errors and appropriate correction code symbols. While the students were revising the sample paragraph with the help of the correction code sheet and a dictionary, the researcher instructed them to think-aloud as in the video and kept prompting students to verbalize. All the training TAPs were recorded digitally, and the researcher reviewed them to assure that the procedure was understood by the participants. Moreover, the training sessions became an opportunity for the researcher to establish rapport with the participants as the researcher was not a familiar instructor for the participants.

Think-Aloud Protocols

Having the effect of making the implicit processes explicit, this research tool requires the participants to verbalize their thoughts and feelings while completing a task. While revising their own draft, the researcher asked the students to state everything that came to their mind (See Appendix F). The researcher was with each student to prompt them to keep verbalizing throughout the recording. The actual data collection was made two weeks after the training. During the collection of real data, the researcher conducted the TAPs, during some of which the researcher prompted the students to verbalize what they were thinking. Furthermore, both to eliminate the possible barriers of thinking and stating the ideas in a foreign language and to obtain richer data, all verbalizing was done in their first language. Table 1 presents an overview of the participants' TAP durations. Following the administration of each TAP, the recordings were transcribed and the relevant parts were translated into English by the researcher.

Table 1 shows the durations of the TAP sessions according to the proficiency levels. According to the table, the students numbered 1-16 were elementary level students, and 17-32 were intermediate level students.

Table 1

Durations of TAP Sessions According to the Proficiency Levels

Elementary Level		Intermediate Level		
Student Number	Minutes	Student Number	Minutes	
1	8.00	17	12.30	
2	18.01	18	12.51	
3	10.04	19	12.31	
4	13.18	20	23.07	
5	16.38	21	11.28	
6	19.05	22	12.11	
7	32.04	23	16.10	
8	16.17	24	11.03	
9	20.17	25	11.47	
10	4.10	26	9.50	
11	11.07	27	9.11	
12	12.59	28	9.05	
13	11.02	29	15.18	
14	12.44	30	16.30	
15	4.27	31	8.46	
16	29.55	32	12.27	
Total	238.08	Total	202.05	

Retrospective Interviews

Each student was interviewed right after the TAP in order to inquire into the TAP process and ask about specific instances when the student may have been quiet, that is, may not have verbalized his/her thoughts or when the verbalization was unclear. During the interviews, the students were provided with their first and revised drafts to make the recall process easier. The students also added some details that

were not mentioned during the think-aloud protocol. Thus, the existence of the interviews provided more information about the cognitive processes and perceptions of the learners during their re-drafting process.

Research Design and Procedure

The current research was carried out with the students from two different levels, elementary and intermediate level students from Uludağ University School of Foreign Languages after the permission of the institution was secured. The researcher picked the volunteer students and briefly informed them about the purpose and the procedures of the study, and they were assured about confidentiality by signing the consent forms (see Appendix A) that indicated their agreement to participate in the study.

The training on the TAP and interview processes were conducted in individual sessions with the participants in February, 2014. Before the training, the researcher adapted a paragraph from the students' writing course book and applied the correction code symbols to the paragraph. Therefore, the students did not need to produce anything during the training; rather, the idea was to make the students make necessary revisions on the provided text and, most importantly, become acquainted with the think-aloud procedure. For the training, the researcher shot an informative video to show an example think-aloud protocol. During the video, the participant made necessary revisions accordingly and verbalized her thoughts in Turkish. Following the informative session, each student scheduled an appointment for the individual trainings which took fifteen minutes per student including a TAP session.

The actual data were collected two weeks after the training. During the week in which the training was conducted, the researcher informed each student that they would write their own paragraphs as their first draft and revise it using TAP. During

actual data collection, all the students came to the conference hall at the institution at the same time. The researcher handed out the topic about which they would write. They had forty minutes, as in their writing evaluation exams. They wrote their first draft of the paragraphs, and the researcher collected the sheets to provide feedback. Each student was scheduled for an appointment again to revise their draft using TAP, and more time was provided for TAPs in this instance. Following the TAPs, an interview was conducted with each student and tape-recorded to clarify unclear sections of the student's verbalization process and to collect having their general perceptions on the use of correction code sheet.

The researcher was aware of the importance of reliability in applying the correction symbols to the students' work and interpreting the verbal data from TAP sessions. Inter-coder reliability of the coding the students' errors on their first draft was checked in the following manner. The researcher randomly selected four of the students (two drafts from the elementary level, and two drafts from the intermediate level) and invited another teacher, who was a writing instructor at the same institution and familiar with the coding system, to code the selected draft according to the error correction code. The researcher's colleague found similar results (97% consistency). Subsequently, the researcher consulted to the same colleague on the interpretation of the transcriptions from the TAP sessions. The inter-coder reliability of the coding of these transcriptions was checked, with the result that the colleague interpreted the TAP sessions in the same manner (100% consistency).

Data Analysis

The researcher investigated the revision strategies of the students. General perceptions towards the use of correction code in the revision process of the participants from two different proficiency levels were also examined.

The data analysis and the comparison of the students while re-drafting were done in a qualitative manner. In order to answer the first research question, the researcher analyzed the data obtained from the two drafts and think-aloud protocols of the students. First of all, the transcriptions of the TAP sessions in accordance with the two drafts of each student were completed. Then, the researcher counted each error type (e.g. morphological, word choice, syntactic errors) the students made on their first draft. After that, the content analysis by reading through each transcript and the two drafts concurrently was done. The researcher noted when interesting or relevant information on revising strategies were found, and then listed the different types of revising strategies found to categorize each strategy. After identifying the strategies, the researcher listed them as major themes and minor themes and added whether each error had been corrected by the students or not. To answer the second research question, the researcher did a content analysis again on the transcribed student interviews.

Conclusion

The main aim of this chapter was to describe the methodology of the study by presenting the basic components of the research study such as participants, instruments, data collection procedures, and the methods of data analysis. The following chapter will provide detailed information about the data analysis of the study.

CHAPTER 4: DATA ANALYSIS

Introduction

This qualitative study in which thirty two students participated aimed to discover the cognitive processes experienced by L2 student-writers from different levels while revising their written work through the correction code sheet. The study also sought to investigate how the students interpret and utilize the correction code symbols in the process of composing a revised draft. This study attempted to answer the following research questions:

1) How do students from different proficiency levels interpret and respond to the correction code symbols on their draft while revising their essay?

2) How useful do the students find the use of the correction code symbols?

Sixteen students with intermediate proficiency level and sixteen students with the elementary proficiency level at Uludağ University School of Foreign Languages (UUSFL) participated in the study. In the presence of the researcher, all the participants were assigned to write an opinion paragraph about the same given topic regardless of their proficiency levels in the way that they were taking an institutional test. After having gathered the first draft of the written output, the researcher coded the errors in accordance with the correction code that had been used in the institution with which the students were familiar. The data for the current study were collected through the think-aloud protocols that were digitally recorded for each participant individually while the students revised and composed their paragraphs. Following the TAPs, each student was interviewed in order to clarify issues from the TAPs regarding the individual student's use of the coding system and to elicit their

impressions and comments about using the correction code for revising their work.

Individual TAP sessions and interviews of the students were transcribed and translated into English. The data gathered through the transcriptions of TAPs, interviews, and the students' two drafts were analyzed in a qualitative manner.

This chapter comprises of three main sections:

- the analysis of the correction code symbols,
- the analysis of the students' TAPs,
- the analysis of the interviews with the students.

In the first section, the symbols on the correction code sheet used at the institution will be presented. The categorization of the errors is divided into four parts: morphological errors, word choice errors, syntactic errors, and orthography and punctuation errors.

The second section reports the analysis of the students' TAPs and drafts according to the predetermined error types, and is divided into four main parts. Each part includes both the level students' frequencies of the errors, and their strategies to decode and respond to the symbols. Thus, the strategies identified were in each instance those used with reference to the correction code sheet.

- The analysis of the morphological errors:
- Strategy 1: Reference to the correction code sheet when correcting an error with no discernable pause to reflect on the error.
- Strategy 2: Immediate correction by using the correction code and pausing to reflect on the error.
- Strategy 3: Correction without using the correction code sheet.
- The analysis of the errors in word choice:

Strategy 1: Reference to the correction code sheet when correcting an error.

Strategy 2: Consulting the dictionary, immediate correction without using the correction code.

Strategy 3: Avoidance strategy.

- The analysis of the syntactic errors:

Strategy 1: Reference to the correction code sheet when correcting an error.

Strategy 2: Consulting the dictionary.

Strategy 3: Reformulation strategy without consulting the correction code sheet.

Strategy 4: Correction without consulting the correction code sheet.

- The analysis of the orthography and punctuation errors:

Strategy 1: Reference to the correction code sheet when correcting an error,

Strategy 2: Correction without using the correction code sheet, and

Strategy 3: Consulting the dictionary.

In many instances, the students also used other strategies, such as translation from their L1 to the target language; however, this study only focuses on strategies employed in relation to the correction code sheet.

Finally, the responses of the students during the interviews will be analyzed in light of their think-aloud comments while composing the final drafts.

The Analysis of the Correction Code Symbols

As the first step of data analysis, the types of errors situated in the correction code that were employed by the writing teachers to mark the errors at the institution were categorized. The four fundamental categories consisting of errors of morphology, word choice, syntax, and orthography and punctuation are presented, and the students' errors for each symbol in the categories are analyzed.

The Four Main Sections of the Correction Code Symbols

As the main purpose of this study is to develop an understanding of the interpretation and responding to symbols of the correction code, which is the standard one used at the institution to evaluate the written output of the students, the categorization of the errors identified by the correction code was a key component of the analysis. The error code symbols were divided into four main categories:

- 1) Morphological errors
- 2) Errors in word choice
- 3) Syntactic errors
- 4) Orthography and punctuation errors.

Before analyzing the errors on the first drafts, the correction code symbols, their meanings, student examples of each error and how the researcher classified them are presented below.

Morphological errors. In line with the correction code used in the relevant institution, the morphological errors were comprised of verb tense (T), verb form (VF), singular / plural (S/PL), countable / uncountable (C/U), subject – verb agreement (Ag), article (AR), and active / passive (A/P). The analysis of the first draft revealed that morphological errors constituted a comparatively major part of the errors made by the students. The symbols for coding morphological errors along with their meanings and the sample sentences were presented in Table 2.

Table 2

The Symbols for Coding Morphological Errors and the Sentences Situated at the Correction Code¹

Code	Meaning	Incorrect Sentence	Corrected Sentence	
T	Tense	T Carol has worked in Rome in 2008.	Carol worked in Rome in 2008.	
VF	Verb Form	VF I enjoy to play cards.	I enjoy playing cards.	
S/PL	Singular / Plural	S/PL He is wearing a jean.	He is wearing jeans.	
Ag	Subject-verb Agreement	Ag She come from Italy.	She comes from Italy.	
C/U	Countable / Uncountable	C/U I need some informations.	I need some information.	
AR	Article	AR	Tonight we are having a party.	
A/P	Active / Passive	A / P Hamlet written by Shakespeare.	Hamlet was written by Shakespeare.	

Selected examples of morphological errors made by the participants and the researcher's indirect feedback on their first draft are presented below. In the examples, "S" represents "student", and this is followed by a number. This numbering system was used to identify students while simultaneously conserving their anonymity. "El." and "Int." represent the proficiency levels at the institution;

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¹ In tables 2 to 5, the codes, their meanings and sample sentences have been taken from the standard correction code used by the writing instructors and the students at Uludağ University School of Foreign Languages.

"elementary – the lowest proficiency level", and "intermediate – the highest proficiency level". ²

<u>Example 1 (S8 – El.):</u>

Student's text with the teacher's correction:

VF

During a day, we have a lot of negative energy and we getting angry. (S8 - El.)

<u>Example 2 (S23 – Int.):</u>

Student's text with the teacher's correction:

AR AR

While you are reading book, you see new life. You think that other people

S/PL

have difficult life.

Errors in word choice. During the error categorization process, the errors of omission (Λ), word form (WF), wrong word (WW), preposition (PR), not necessary (/), informal (INF), and repetition (R) were classified as errors in word choice according to the error code used at the institution. The researcher used the relevant symbols to identify the errors in word choice on the first written output of the learners of each proficiency level. Following the completion of the error coding process of the students' first draft, this type of error was the most common error type among the students regardless of their proficiency levels. Table 3 indicates the

² All examples provided were taken from the students' work and display the correction code symbol used by the teacher. The level of each student is given in parentheses following the example. "El." refers to "elementary", and "Int." refers to "intermediate" learners.

symbols for coding errors in word choice, their meanings, and the sample sentences on the correction code used by the students.

Table 3

The Symbols for Coding Errors in Word Choice and the Sentences Situated at the Correction Code³

Code	Meaning	Incorrect Sentence Corrected Sentence	
Λ	Omission	He is going to frightened. He is going to be frighten	
		Λ	
WF	Word Form	WF	He is an ambitious person.
		He is an ambition person.	
WW	Wrong Word	$\mathbf{W}\mathbf{W}$	I never borrow money from
		I never lend money from	friends.
		friends.	
PR	Preposition	PR	I need to talk to her.
		I need to talk at her.	
R	Repetition	R	I know and like the boy
		I know the boy and I like	OR-
		the boy.	I know the boy and like him.
/	Not	We live in the another city.	We live in another city.
	Necessary		

Having defined what is meant by errors in word choice and presented the way they appear in the correction code, I will now move on to selected examples from the students' first draft on this type of error.

³ In tables 2 to 5, the codes, their meanings and sample sentences have been taken from the standard correction code used by the writing instructors and the students at Uludağ University School of Foreign Languages.

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Example 1 (S2 – El.):

Student's text with the teacher's correction:

WF

Secondly, if you move, you can make new friends and neighborhoods. (...)

INF

However, they will realize that it isn't a good idea.

Example 2 (S21 – Int.):

Student's text with the teacher's correction:

WF

To conclusion, if you want to escape the stress of modern life, you have a lot of (...)

(Note. The symbol "(...)" stands for the omission of words, phrases or sentences.) Example 3 (S11 – El.):

Student's text with the teacher's correction:

PR

So, I think it is too early for tell about my fortune.

Syntactic errors. Syntactic errors were divided into four main error types in the correction code. In reference to the correction code used at the institution, errors in unclear sentences (?), word order (WO), fragment (Frag.), and run on sentences (RO) were identified as syntactic errors. The data appear to support the assumption that this type of errors were not as frequent as the other types of errors among the students participated in the study except the error type indicating the meaning is unclear. Table 4 presents data on the codes, their meanings and sample sentences related with syntactic errors.

Table 4

The Symbols for Coding Syntactic Errors and the Sentences Situated at the Correction Code⁴

Code	Meaning	Incorrect Sentence	Corrected Sentence	
?	Unclear	(The meaning is unclear.)	Rewrite the sentence.	
WO	Word Order	wo		
		Some students speak well English.	Some students speak English well.	
Frag.	Fragment	Frag.		
	Error	It a red bicycle.	It is a red bicycle.	
		Some people are very		
RO	Run on	friendly,	Some people are very friendly. Although I don't know her, she waved at me.	
	Sentence	RO		
		although I don't know her,	,	
		she waved at me.		

Selected examples of syntactic errors on the students' first draft can be seen below.

Example 1(S5 - El.):

Student's text with the teacher's correction:

9

I think stay to moving in search of another place.

⁴ In tables 2 to 5, the codes, their meanings and sample sentences have been taken from the standard correction code used by the writing instructors and the students at Uludağ University School of Foreign Languages.

Example 2 (S26 – Int.):

Student's text with the teacher's correction:

?

I think people chance staying living stay, (...)

Example 3 (S5 - El.):

Student's text with the teacher's correction:

Frag.

Although my problems very big, (...)

Orthography and punctuation errors. The final types of errors in the correction code used at the institution were identified as orthography and punctuation errors. The errors related to capitalization (C), separating words ($\leftarrow \rightarrow$), combining words ($\rightarrow \leftarrow$), spelling (SP) and punctuation (P) are categorized under orthography and punctuation errors. The instructors' way of marking these kind of errors based on the correction code can be seen in the Table 5.

Table 5

The Symbols for Coding Orthography and the Sentences Situated at the Correction

Code

Code	Meaning	Incorrect Sentence	Corrected Sentence	
SP	Spelling	SP	He is a tourist.	
		He is a turist.		
P	Punctuation	P	Is that a good book?	
		Is that a good book.		
→ ←	Combine	\rightarrow \leftarrow	Do whatever you want.	
	Words	Do (what ever) you want.		
← →	Separate	\leftarrow \Rightarrow	That may be true.	
	Words	That (maybe) true.		
C	Capitalizatio	C	Italy	
	n	italy		

Selected examples of orthography and punctuation errors are indicated below including the students' texts and the researcher's indirect correction.

Example 1 (S1 - El.):

Student's text with the teacher's correction:

C

To sum up, Everybody should stay where they were born (...)

<u>Example 2 (S18 – Int.):</u>

Student's text with the teacher's correction:



I do not know any body, any where.

Example 3 (S12 – El.):

Student's text with the teacher's correction:

SP

Therefor, people want the best job to earn a lot of money (...)

Example 4 (S29 – Int.):

Student's text with the teacher's correction:

P

If we join a social group we can (...)

In this part of Chapter 4, error categorization was presented. Each error category was illustrated using examples of students' errors accompanied by the teacher's correction. The next section of this chapter will elaborate further on the analysis of students' think-aloud protocols while revising their paragraphs.

The Analysis of Students' TAPs

For this study, the students were asked to write a paragraph about a given topic under the supervision of the researcher as the first draft of process writing, according to the procedure followed during the writing evaluation in the institution. During the data collection period, students wrote their first draft on their own under the researcher's supervision, and they wrote their final draft with the help of the correction code and a dictionary. The "think-aloud" component of the data collection occurred while the students re-drafted their paper.

This section of the chapter will provide information and analysis of the participants' thoughts as well as the interpretations of the correction code symbols

while writing their final draft. The verbal data provided by students were used to respond to this study's first research question (How do students from different proficiency levels interpret and respond to the correction code symbols on their draft while revising their essay?).

The verbal data were transcribed for the analysis. The examples of the students' TAPs used as examples in this work were translated into English. The results obtained from the transcriptions of the TAP sessions were divided and will be presented in four main categories according to the error types of the correction code:

- 1) The analysis of students' TAPs on morphological errors
- 2) The analysis of students' TAPs on errors in word choice
- 3) The analysis of students' TAPs on syntactic errors
- 4) The analysis of students' TAPs on orthography and punctuation errors.

The Analysis of Students' TAPs Relating to Morphological Errors

When the students' drafts were analyzed in accordance with the correction code sheet, it was seen that a major part of the morphological mistakes made by the students were verb form, singular-plural, and article mistakes regardless of their proficiency levels. The comparison of the frequencies of these kinds of errors for each student level, and the strategies employed by the students are presented below.

The analysis of elementary level students' TAPs relating to morphological errors. As can be seen in Table 6 below, the most common mistakes made by elementary level students involved verb form, singular-plural, and article mistakes. Although a typical foreign language teacher would highlight the basic grammar point as "verb tenses" and therefore expect many verb tense mistakes, the data in Table 6 show that elementary level students made only a few mistakes on verb tenses. In addition, they hardly ever had subject-verb agreement mistakes.

Table 6 illustrates the number of times each morphological mistake was made, to what extent the correction code was used and whether the errors were corrected during the revision process by elementary level students. The data were obtained from the two drafts and the verbal data of the students as well as the notes of the researcher during the collection of the verbal data.

Table 6

Morphological Mistake Distribution for Elementary Level Students

Code	Number of	nber of Correction Code Correction of Erro		n of Error	Both Code Use and		
	Errors	Use				Correction	
	•	Yes	No	Yes	No	Yes	No
T	3	3	0	3	0	3	0
VF	16	8	8	10	6	6	2
S/PL	20	18	2	19	1	17	1
Ag	6	5	1	6	0	5	0
AR	11	4	7	7	4	3	1
Total	56	38	18	45	11	34	4
	(100%)	(68%)	(32%)	(80%)	(20%)	(89%)	(11%)

It can be seen from the data in Table 6 that elementary level participants were reported to have consulted the code 68%⁵ of the times when addressing an error. In addition, they corrected the mistakes 89% of the times when consulting the code. The data in the columns were obtained from the students' two drafts, TAPs, and the researcher's notes taken during each TAP. In order to make the calculations clear, the errors on the first drafts were counted first, and then the transcriptions along with the notes taken by the researcher during the verbal data collection were examined.

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⁵ Percentages have been rounded to the nearest full number.

During this process, further analysis revealed that students employed three different strategies to interpret and respond to the correction code symbols on their draft while revising morphological errors: reference to the correction code sheet when correcting an error with no discernable pause to reflect on the error, immediate correction by using the correction code and pausing to reflect on the error, and correction without using the correction code sheet. In addition, the difficulties in interpreting the correction code symbols, the reasons for this and how elementary level participants handled these challenges are also presented below.

Reference to the correction code sheet when correcting an error with no discernable pause to reflect on the error. Elementary level students consulted the code thirty-eight times without any hesitation when they saw a morphological mistake, and sample sentences helped them to understand what that symbol meant as exemplified below.

Example 1 (S5 –El.):

The student's first draft with the teacher's correction:

I think the best ways of escaping stress is do exercise.

The related transcription from the TAP:

I think the best way – umm, doing some exercise, umm [the student was looking at the code]⁶ "ways", singular – plural [the student read the meaning of the symbol and the sample sentences], so "way" should be "singular" because "the best way", "only one way".

⁶ The information in the square brackets describes what the researcher observed and noted during the students' TAPs.

For "do", I made a "verb form mistake" [the student quickly had a look at the sample sentence], so it should be "doing exercise".

Corrected sentence on the final draft:

I think the best way of escaping stress is doing exercise.

Example 2 (S1 –El.):

The student's first draft with the teacher's correction:

Ag.

I think every human want to stay where they were born ...

The related transcription from the TAP:

"Every human want to stay", here, ummm, yes [the student was looking at the code], here the mistake is Ag [the student spelled the symbol], "subject-verb" [the student read aloud the meaning of the symbol]. Aha! Here, it should be "every human wants", I forgot the suffix –s. It is a simple present tense sentence.

Corrected sentence on the final draft:

I think every human wants to stay where they were born ...

Example 3 (S14 –El.):

The student's first draft with the teacher's correction:

AR AR

When I have a lot of problems, I read book. I think reading book is great activity for every human.

The related transcription from the TAP:

55

What was "AR"? "Article" mistake, okay. "The", ummm [the student read the sample sentence], my sentence should be "I read a book". And for the second mistake, it may probably be "reading book is a great activity", because I'm talking about the activity here.

Corrected sentence on the final draft:

When I have a lot of problems, I read a book. I think reading book is a great activity for every human.

Immediate correction by using the correction code and pausing to reflect on the error. As a result of employing process writing in the institution, the students revise their first draft according to the marked errors. They know that they will be graded only on the final draft. This was perhaps the reason why students took less care with their first draft and made simple drafting mistakes on the first draft, so during revision, they were able to explain immediately why the sentence or phrase was incorrect. The examples of this strategy are demonstrated below, showing the full range of students' awareness of the mistakes.

Example 1 (S3 –El.):

The student's first draft with the teacher's correction

VF

Maybe I will travelling (...)

The related transcription from the TAP:

"Maybe I will travelling" I made a Verb Form mistake here [the student had a quick look at the correction code], as I have made it before. The correction should be "I will travel". I don't know how I made this mistake here, because I wrote "will" and it is required to use the bare infinitive here, not –ing form. "I will travel".

Corrected sentence on the final draft:

Maybe I will travel (...)

Example 2 (S12 –El.):

The student's first draft with the teacher's correction

Ag.

First, some people love to work for surviving because everyone need to have money.

S/Pl

They want a silent place that has beautiful views.

The related transcription from the TAP:

For "need", umm [the students had a very quick look at the meaning of the symbol], it should have the suffix –s because "everyone" is singular, at least English people use it that way.

And "views" cannot be plural, so it should be "view". It is uncountable, and as I have said "a silent place", I need a singular noun here as well. Therefore, "that has a beautiful view".

Corrected sentences on the final draft:

First, some people love to work for surviving because everyone needs to have money.

They want a silent place that has beautiful view.

Example 3 (S7 –El.):

The student's first draft with the teacher's correction:

T

I have never change my opinion (...)

The related transcription from the TAP:

[The student quickly looked at the code for the meaning of the symbol first] "I have never change", I wrote "I have never" because I wasn't doing these errors in the past [the student was talking about content-related errors then], and I meant "up to now" here, so I used that structure. I think I forgot to use the past participle of this verb [the student said this without any hesitation]. "I have never", umm, should this verb take "-ed" or was it irregular? "Change", umm, I think it's regular because I have seen that it was used as regular many times before.

Corrected sentence on the final draft:

I have never changed (...)

Correction without using the correction code sheet. The third strategy employed by elementary level participants was memorization of the symbols, or realizing that the structure was wrong when they saw their errors. As the students were familiar with correction code symbols, some of them did not use the code for their morphological mistakes; instead, they corrected their errors while reading their first draft. The examples below illustrate this strategy of revising.

Example 1 (S4 –El.):

The student's first draft with the teacher's correction:

VF

Such as read a book.

The related transcription from the TAP:

"Such as reading a book", I guess. Because the verb here needs to be a "noun", "reading a book" is a noun.

Corrected sentence on the final draft:

Such as reading a book.

Example 2 (S8 –El.):

The student's first draft with the teacher's correction:

VF

During a day, we have a lot of negative energy and we getting angry.

The related transcription from the TAP:

We, "we get angry" because if I had written "we are getting angry", it would be true, but "we getting angry" makes no sense. I didn't use "be" verb or something else. So, "we get angry".

Corrected sentence on the final draft:

During a day, we have a lot of negative energy and we get angry.

The difficulties of elementary level students in interpreting the correction code symbols. Apart from the above strategies for responding to the correction code symbols on morphological errors, some elementary level participants had difficulties

in interpreting some symbols. These difficulties may have mainly been the result of the resemblance of the letters of the symbols, as can be seen below.

Example 1 (S11 –El.):

The student's first draft with the teacher's correction:

S/PL Ag

(...) because my entire lifes are in the city.

The related transcriptions from the TAP:

"My entire lifes", the error is "spelling". [The student had a look at the correction code and went on.] Hmm, it is "singular/plural" mistake. "My life", it should have been singular. And as the noun is singular, it won't be "are"; instead, it should be "is".

Corrected sentence on the final draft:

(...) because my entire life is in the city.

Example 2 (S15 –El.):

The student's first draft with the teacher's correction:

PR

Books on My Life

The related transcriptions from the TAP:

"Books on my life", this is the title of my paragraph. I made a mistake with "on". [The student looked at the code and read the sample sentences.] The mistake is "preposition". The sample sentences - it is written "at her" and "to her", so should this "on" be "at" instead? Or should it be "the"? I think it should be "the". I'm writing it. Hmm, "books", should it be "in"? I think "in".

"In my life" because it can't be "at" or "on", I meant "inside", so I will write "in". I made it wrong.

Corrected phrase on the final draft:

Books in My Life

What is interesting in the analysis of the students' TAPs is that the difficulty in interpreting the symbols was only at the first stage when the students realized there was a mistake in their writing. After a short while, they were able to realize that they mistook the symbols, therefore they could correct their mistakes. The first reason for mistaking the symbols may be the similarity of the letters of the symbols as in Example 1, and the second reason may be the general accompanying of the components of English, for example prepositions and articles are usually used respectively in a sentence as in Example 2.

The results of elementary level students' TAPs on morphological errors and the employed strategies to deal with the errors were illustrated above. As the main concern of this study was to compare students' interpretations and responses to the correction code symbols during revision, the following part of this chapter will present analyses about intermediate level students' TAPs on morphological errors.

The analysis of intermediate level students' TAPs relating to morphological errors. Table 7 illustrates the number of times each morphological mistake was made, to what extent the correction code was used, and whether the errors were corrected during the revision process by intermediate level students.

Table 7

Morphological Mistake Distribution for Intermediate Level Students

Code	Number of	Correction Code		Correction	n of Error	Both Code Use and	
	Errors	Use				Correction	
	-	Yes	No	Yes	No	Yes	No
T	1	1	0	0	1	0	1
VF	9	9	0	9	0	9	0
S/PL	11	5	6	11	0	5	0
AR	24	9	15	17	7	8	1
Total	45	24	21	37	8	22	2
	(100%)	(53%)	(47%)	(82%)	(18%)	(92%)	(8%)

It can be seen from the data in Table 7 that intermediate level participants were reported to have consulted the code 53% of the times when addressing a morphological error while the students with elementary proficiency level consulted the code 68% of the times (See Table 6). In addition, intermediate level students corrected the mistakes 92% of the times when consulting the code whereas the other group of students could correct their mistakes 89% of the times. A comparison of these four percentages may reveal that intermediate level students had the need to consult the code less than the other group, and they were able to correct their morphological mistakes slightly more easily.

As Table 7 shows, the most common mistakes made by intermediate level students were singular-plural and article mistakes while elementary level students had also quite a few verb form mistakes as well as singular-plural and article mistakes. Furthermore, verb tense mistakes were the least common morphological

⁷ Percentages have been rounded to the nearest full number.

error type among both intermediate and elementary level students. It was also revealed that the participants with intermediate proficiency level did not have any subject-verb agreement mistakes while elementary level students occasionally made that mistake (3% of the times when the participants made morphological errors).

Further analysis of the drafts and TAPs of intermediate level students revealed that like elementary level students, students with intermediate proficiency level also employed the same three diverse strategies to interpret and respond to the correction code symbols on their draft while revising morphological errors: reference to the correction code sheet when correcting an error, immediate correction by using the correction code with a reflection on the error type, and correction without using the correction code sheet. In addition, the difficulties in interpreting the correction code symbols, their reasons and how intermediate level participants handled those challenges are also presented below.

Reference to the correction code sheet when correcting an error. Of the study participants, some intermediate level students also used the correction code sheet without any hesitation when they saw a morphological mistake, and sample sentences helped them to understand what that symbol meant as exemplified below.

Example 1 (S31 –Int.):

The student's first draft with the teacher's correction:

VF

Nowadays many people moving in search of another place because of several reasons (...)

The related transcription from the TAP:

[The student looked at the code and read the sample sentences.] There is a verb form mistake in this sentence. "Moving", we have to say "move". "Nowadays many people move in search of another place because of several reasons."

Corrected sentence on the final draft:

Nowadays many people move in search of another place because of several reasons (...)

Example 2 (S21 –Int.):

The student's first draft with the teacher's correction:

Ag.

Secondly, sports are the best way to reduce stress for many people (...)

The related transcription from the TAP:

[The student looked at the code for the symbol.] Here, I said "sports are", and the mistake was "subject-verb agreement". Hmm, "sports are", should I say "is"? I thought so because of the suffix –s. "Sports is the best way to reduce stress for many people".

Corrected sentence on the final draft:

Secondly, sports is the best way to reduce stress for many people (...)

Immediate correction by using the correction code with a reflection on the error type. Like elementary level students, intermediate level students also made simple drafting mistakes on the first draft, and during revision, they were able to explain immediately why the sentence or phrase was incorrect as demonstrated in the selected examples below.

Example 1 (S29 –Int.):

The student's first draft with the teacher's correction:

AR

... it is rainy day and you are at home. Then, you sit opposite the window and

VF

you start read.

The related transcription from the TAP:

"it is", "AR", what was it? [The student consulted the code.] Hmm, there is an article mistake. I have to write "a, an, the". "It is a rainy day" because it is not as it is in Turkish, so article mistakes are the ones that I make the most. We have to write "a, an, the" there.

What is that? VF? [The student consulted the code.] Hmm, there is a mistake with the thing, umm, it should be "you start reading" because it [the verb] comes after the verb. That [the verb] can't be there, because two verbs came together.

Corrected sentence on the final draft:

... it is a rainy day and you are at home. Then you sit opposite the window and you start reading.

Example 2 (S20 –Int.):

The student's first draft with the teacher's correction:

VF

When I get used to live ...

The related transcription from the TAP:

[The student consulted the code.] Verb form, ummm, "get used to live", isn't 'live' used after 'used to'? What can I write there? Shall I write another verb? Aha! After it [get used to], "living".

Corrected sentence on the final draft (S13):

When I get used to living ...

Correction without using the correction code sheet. Just as elementary level participants, the third strategy employed by intermediate level students was memorization of the symbols, or automatic correction when they saw their errors. The main reason for this may have been being familiar with the correction code symbols, so they did not consult the code for some of their morphological mistakes. They chose to correct their errors while reading their first draft. The selected examples below illustrate this strategy of revising.

Example 1(S19 –Int.):

The student's first draft with the teacher's correction:

AR T

World is became harder day by day.

The related transcription from the TAP:

I started the sentence with "world", but it has to be "the world" because there is only one "world" that we know.

There is a "tense" mistake. "Became", umm, I meant "the world is becoming harder day by day" [the student said this sentence in Turkish], "became", let's omit "is". "Becomes"! "The world becomes harder day by day."

Corrected sentence on the final draft:

The world becomes harder day by day.

The difficulties of intermediate level students in interpreting the correction code symbols. Only one intermediate level participant among sixteen also had a momentary difficulty in interpreting a symbol related to the morphological errors. This difficulty may have been the result of the resemblance of the letters of the two symbols. The example below shows this point.

Example (S17 –Int.):

The student's first draft with the teacher's correction:

AR VF VF

I think best way of reducing stress is watch a match. I like watch a football match (...)

The related transcription from the TAP:

"Watch", "word form", should it be "watching"? Aha!, "verb form", I looked at the wrong place. There I have to write "watching" because it is a general activity.

Corrected sentence on the final draft:

I think the best way of reducing stress is watching a match. I like watching a football match (...)

In this example, the participant was able to correct the mistake without knowing the exact meaning of the symbol, and had concerns only with revising the draft in a proper way. Therefore, it can be deduced that intermediate level students

had fewer difficulties in interpreting the symbols compared to elementary level students while they were revising their output.

The Analysis of the Students' TAPs Relating to Errors in Word Choice

The second group of errors of the correction code was determined as word choice errors. These errors were the most common errors among the students regardless of their proficiency levels.

The analysis of elementary level students' TAPs relating to word choice errors. Table 8 presents an overview of the word choice error distribution on elementary level participants.

Table 8

Word Choice Mistake Distribution for Elementary Level

Students

Code	Number	Correction Code		Correcti	Correction of Error		Both Code Use and	
	of Errors	Use				Correction		
	-	Yes	No	Yes	No	Yes	No	
Λ	16	4	12	8	8	2	2	
WF	7	3	4	5	2	2	1	
WW	9	4	5	6	3	4	0	
PR	14	8	6	13	1	8	0	
/	17	0	17	17	0	0	0	
INF	11	5	6	9	2	5	0	
Total	74	24	50	58	16	21	3	
	(100%)	(32%)	(68%)	(78%)	(22%)	(88%)	(12%)	

From Table 8 we can see that elementary level students consulted the code 32% of the times when addressing an error. Furthermore, the participants corrected the mistakes 88% of the times when consulting the code. The data in the columns were obtained from the students' two drafts and TAPs.

When their two drafts, TAPs, and the researcher's notes taken while collecting verbal data were examined, it became obvious that the students employed three different strategies during the revision of word choice errors just as they did for morphological mistakes: reference to the correction code sheet when correcting an error, consulting the dictionary, and correction without using the correction code sheet. In addition, the difficulties in interpreting the correction code symbols, their reasons and how elementary level participants handled those difficulties are also presented below.

Reference to the correction code sheet when correcting an error. The first strategy was consulting the correction code without any hesitation upon seeing the related symbol on the first draft. The elementary level students both checked the meaning of the symbol and the sample sentences situated on the error code. The most common error that made the participants consult the code was the "INF" (informal) mistake.

Example 1 (S3 –El.):

The student's first draft with the teacher's correction:

INF

The person doesn't have difficulty in his life.

The related transcription from the TAP:

⁸ Percentages were rounded to the nearest full number.

"The person – the person doesn't have difficulty in his life." Umm, for "doesn't" [the student looked at the code and read the sentences silently], I seem to have an "informal" mistake, so I should have written as "does not". I have made a mistake. "The person does not – does not have difficulty in his life" [the student wrote the sentence aloud]. It's okay.

Corrected sentence on the final draft:

The person does not have difficulty in his life.

Some students even alleged to have seen or noticed this mistake for the first time while collecting verbal data.

Example 2 (S2 –El.):

The student's first draft with the teacher's correction:

INF

In my opinion, people shouldn't stay in the same city.

The related transcription from the TAP:

"People shouldn't stay" [the student was reading the sentence silently], is this [the symbol] "W", teacher? Or is it, umm [the student looked at the code], aha! "Informal", "I don't think that's true, I do not" [the student read aloud the sample sentences on the code]. Hmm, okay. "People should not". I have learned "informal" now; I mean I have learned it at this moment. I have never noticed it before.

Corrected sentence on the final draft:

In my opinion, people should not stay in the same city.

In another case, the participant questioned the reason for the error for a moment, and then consulted the code sheet to correct the mistake.

Example 3 (S9 –El.):

The student's first draft with the teacher's correction:

INF INF

If people don't move anywhere, they can't enjoy their lives.

The related transcription from the TAP:

Is it (the symbol) "enough"? [The student associated the two words, thought the meaning of the symbol is "enough" first, and then looked at the correction code for its meaning and the sample sentences.] Therefore, "If people do not move", but what is the reason for this [mistake]? "Do not, do not move anywhere". I have made the same mistake, "they cannot, they cannot enjoy their lives".

Corrected sentence on the final draft:

If people do not move anywhere, they cannot enjoy their lives.

Besides INF (informal) mistakes, the participants consulted the code for other word choice errors as well.

<u>Example 1 (S14 –El.):</u>

The student's first draft with the teacher's correction:

WW

(...) we forget own problems, and we focus (...)

The related transcription from the TAP:

What was this [the symbol]? [The student consulted the code and the sample sentences.] Hmm, "word", can it be "each problems"? By "own problems", actually I meant "our own problems" [the student said this in Turkish].

Therefore, it must be "Our – our problems", of course.

Corrected sentence on the final draft:

(...) we forget our problems, and we focus (...)

Example 2 (S11 –El.):

The student's first draft with the teacher's correction:

INF

Despite that, I have never bored yet and I won't be ...

Λ

The related transcription from the TAP:

"Despite that, I have never bored yet", here, umm, [the student consulted the code], there is an "omission" mistake. It must be "never be bored", "I have never been bored" because it's the perfect tense, "been bored yet".

"I won't be", it's written "INF" here, [and then the student consulted the code] "Informal" mistake because I had to write it [not] separately. "I will not be".

Corrected sentence on the final draft (S11):

Despite that, I have never been bored yet and I will not be ...

Consulting the dictionary. The other strategy employed by elementary level participants during revision for word choice errors was using the dictionary. Upon analyzing the TAPs and the notes of the researcher while the students were thinking-aloud, it was revealed that the students used the dictionary not only for "wrong word" mistakes, but also for other error types.

Example 1(S16 –El.):

The student's first draft with the teacher's correction:

WF

I prefer walking because I need to relaxed.

The related transcription from the TAP:

[The student quickly looked at the code for the meaning of the symbol.] For "relaxed", I made a "word" mistake. I wrote here the noun version of the word, and I have to make it an adjective [the student made the explanation wrong, but did the correction properly]. The adjective version of "relaxed" [the student looked up the dictionary] – relax.

Corrected sentence on the final draft:

I prefer walking because I need to relax.

Example 2 (S14 –El.):

The student's first draft with the teacher's correction:

PR

(...) and we focus to other people's lives.

The related transcription from the TAP:

"and we focus", what was "PR" [the student consulted the code],
"preposition" mistake. Hmm, what did I write there? "to other people's
lives", yeah the dictionary is important! [The student was looking up.] Is
"focus" used with "of? Will I use "on"? Oh, I have to use "on".

Corrected sentence on the final draft:

(...) and we focus on other people's lives.

Correction without using the correction code sheet. Some students did not use the correction code sheet to check either the meaning of the symbol or the sample sentences. They memorized the correction symbols and did the revising.

Example 1 (S7 –El.):

The student's first draft with the teacher's correction:

INF

I don't escape problems.

The related transcription from the TAP:

Aha! I always make this mistake! As this is a formal writing, not "don't", instead "do not". Unfortunately, these kinds of mistakes are always neglected.

Corrected sentence on the final draft:

I do not escape problems.

In the following example, the student corrected the mistake while reading the first draft.

Example 2 (S10 –El.):

The student's first draft with the teacher's correction:

First, I had lived in hometown for all my life until I started university.

Λ

The related transcription from the TAP:

"First, I had lived in my hometown", there was a mistake in this sentence. I forgot to write "my". I have to write it to indicate "it is mine", now [without 'my'] it is not clear "which" life.

Corrected sentence on the final draft:

First, I had lived in my hometown for all my life until I started university.

The most common mistake that was automatically corrected was the "not necessary (/)" mistake. When the students noticed they had this error, they simply did not feel the need to consult the code and omitted the word or phrase without considering the reason. The reason for it may have been the students' view of the teacher as the ultimate authority of the language, and therefore they relied on the teacher without questioning.

Example 1 (S2 –El.):

The student's first draft with the teacher's correction:

There are a some several reasons about why they should move their self.

WF

If you move your house, you can make a new friends and neighbourhoods.

The related transcription from the TAP:

"There are a some – there are some reasons why they should move", hmm, okay. I was going to write "house" instead of "self", why did I write "self"? [The student did not write "house", on the final draft.]

"You can make new friends", "a" will not be there, because the word is "friends", "new friends".

I know I wrote it [neighbourhoods] incorrectly, I haven't checked it. I'll look up now [the student did not use the correction code, but used the dictionary]. "Neighbour", aha! "Neighbour", okay.

Corrected sentences on the final draft:

There are several reasons about why they should move.

If you move your house, you can make new friends and neighbours.

Example 2 (S5 –El.):

The student's first draft with the teacher's correction:

I like changing and being all happy.

The related transcription from the TAP:

"I like changing and", not "all", happy.

Corrected sentence on the final draft:

I like changing and being happy.

The difficulties in interpreting the correction code symbols. Elementary level students had some difficulty in interpreting the correction code symbols. The main reasons for this can be the similarity of the words or roles that these words have in a sentence. In the example below, the student confused "preposition" and "article", neither of which exists in their L1. Therefore, the students had general confusions about these two grammatical categories of English.

Example 1 (S9 –El.):

The student's first draft with the teacher's correction:

 $PR \rightarrow \leftarrow$

I hope I will live an other country in the world.

The related transcription from the TAP:

Hmm, "PR", do we have an "article" mistake? [The student consulted the code and read the sample sentences] "To"? There is a "preposition" mistake. In the examples, there are "at" and "to". Shall I use "at" or "in"? "In another country", because before the cities, "in" should be used. This is a rule.

Corrected phrase on the final draft:

I hope I will live in another country.

Example 2 (S5 –El.):

The student's first draft with the teacher's correction:

WF

(...) because different places are very excited.

The related transcription from the TAP:

"Different places are very excited", hmm, I have a mistake here. Will I change the places of the words? [The student confused "WW – wrong word" with "WO – word order" mistake.] Umm, "word form", the word should be, but what did I use here? "Excited". Okay, I'm using the dictionary now. Just a moment. "Excited, excited", yes we found it! "Excitedly, very excitedly, an exciting adventure" [from the sample sentence of the dictionary], so I have to use an adjective after "very". So, "very exciting"! Period. "Exciting".

Corrected phrase on the final draft:

(...) because different places are very exciting.

The analysis of intermediate level students' TAPs relating to word choice errors. The revision process of elementary level students on word choice errors and the strategies employed by the participants were presented and exemplified above.

The data for the intermediate level participants is presented in Table 9.

Table 9

Word Choice Mistake Distribution for Intermediate Level Students

Code	Number of	Correction Code		Correc	Correction of		Both Code Use and Correction	
	Errors	Use		Error				
	-	Yes	No	Yes	No	Yes	No	
Λ	1	1	0	1	0	1	0	
WF	13	11	2	12	1	10	1	
WW	20	14	7	18	2	13	1	
PR	33	31	2	28	5	26	5	
/	26	0	26	26	0	0	0	
INF	12	10	2	12	0	10	0	
R	2	2	0	2	0	2	0	
Total	107	69	39	99	8	62	7	
	(100%)	(64%)	(36%)	(93%)	(7%)	(90%)	(10%)	

Table 9 illustrates that intermediate level students consulted the code 64% of the times when addressing an error. Moreover, the participants corrected the mistakes 90% of the times when consulting the code.

Taken Table 8 and 9 on word choice errors together, intermediate level students made a lot more word choice errors when compared to elementary level participants. As we can see in Table 9, intermediate level participants had preposition (PR) and not necessary (/) errors more than the other word choice errors.

Further analysis also showed that intermediate level participants consulted the code 64% of the times while the other group did 32% of the times, and could correct their errors 90% of the times while elementary level participants could 88% of the

⁹ Percentages were rounded to the nearest full number.

times. The rates of consulting the code may indicate that intermediate level students either had not memorized the errors, or wanted to feel secure by checking the meanings of the symbols during revision.

Additionally, it was revealed during the TAPs that intermediate level students were observed to be employing more strategies than the other group did. The strategies they employed were reference to the correction code sheet when correcting an error, consulting the dictionary, correction without using the correction code sheet, and avoidance strategy. In addition, the difficulties in interpreting the correction code symbols, their reasons and how intermediate level participants handled those difficulties are also presented below.

Reference to the correction code sheet when correcting an error.

Intermediate level students consulted the code and the sample sentences very often.

Example 1 (S31 –Int.):

The student's first draft with the teacher's correction:

PR WW

 (\ldots) they move another place. For example, they are big family \ldots

The related transcription from the TAP:

There are no mistakes in the beginning of this sentence, but there is something missing in the middle, I'll correct it. What was it? [The student mentioned the symbol PR, and consulted the code.] I cannot find it! Okay, "preposition". I'll write "to" after "move", because I memorize it like that, "move to", teacher. I mean "moving to somewhere".

And for the other sentence, there is a "WW" [the student immediately consulted the code], hmm, wrong word. Why is it wrong? What did I want to tell is, umm, "to own", so I'll write "have". Okay. True. Not "are".

Corrected sentences on the final draft:

(...) they move to another place. For example, they have big family (...)

Example 2 (S30 –Int.):

The student's first draft with the teacher's correction:

WW

Firstly, people have to work and everybody wants to work in a good job.

The related transcription from the TAP:

I have a mistake here. What was it? [The student consulted the code.] "Wrong word", let me check the sample sentences, "I never lend money from friends – I never borrow" so I used the word wrong. "Everybody wants to", I meant "possess" [the student said it in Turkish], but there, umm, I need to use "have".

And I misused "in" there. It won't be there.

Corrected sentences on the final draft:

Firstly, people have to work and everybody wants to have a good job.

The students consulted the code for the mistake "INF" (informal) most of the time. For some students, it was the first time that they had seen this mistake, as the case was for elementary level students. As in this case, the student seemed not to be satisfied with the mistake he made, because it was probably because the mistake could not affect the meaning.

Example 1 (S32 –Int.):

The student's first draft with the teacher's correction:

INF

It's important to have a hobby in modern life.

The related transcription from the TAP:

Here, we have "infinitive", "gerund – infinitive"? Hmm [the student consulted the code and sample sentences], informal, "I don't think that's true" [this was the sample sentence]. Here, should they be separate, "It is important"? Wow, that's new for me, okay, let it be so.

Corrected sentence on the final draft:

It is important to have a hobby in modern life.

Example 2 (S27 –Int.):

The student's first draft with the teacher's correction:

INF

(...) because the first one doesn't talk to anyone, (...)

The related transcription from the TAP:

"INF" [the student is looking for the symbol on the correction code], informal? "I don't think that's true – I do not" [the student read the sample sentences], hmm, so it will be "does not".

Corrected sentence on the final draft:

(...) because the first one does not talk to anyone, (...)

Consulting the dictionary. Intermediate level participants used the dictionary, as much as elementary level students did. Although they used the dictionary for various mistakes, the most common mistake for which the students looked up a word was for a "wrong word" mistake. Sometimes the students had

problems in finding the right words or phrases that expressed their own feelings as illustrated in S4's example.

Example (S20 –Int.):

The student's first draft with the teacher's correction:

WW

Secondly, I always depend on things. For example, when I like a house, I

WW

want to live in the house for the end of my life.

The related transcription from the TAP:

There is a mistake with "depend on". As a matter of fact, I knew there would be a mistake. I wanted to mean "I always connect things emotionally, interiorizing, connecting, wanting to live there forever" [the student expressed herself in Turkish]. Shall I look up the word as "internalizing" [the student said it in Turkish and started to look up the word]? "Internalizing, connecting", but I want an "emotional" meaning. How else can I say this? Shall I omit this sentence? No, because I gave an example based on this sentence. I really cannot write what I really think in English! Hmm, what shall I write? Nothing comes to my mind. Can I use "personalizing"? Because I have to write something like that, that was how I felt while I was writing that sentence. [The student started using the dictionary again.] Umm, can I use "to apply oneself to", or? No, there is no "or", I have to use that word.

And here [for the other "wrong word" mistake], I meant "I want to live there till the end of my life", so I cannot use "for" here, right, why would I use "for" there! Shall I say "until I die"? What shall I say? "when I die, "till I die", don't I have to make it past tense? No, now the sentence is "when I die". What about "for a long time", although this is not what I actually meant, but "I want to live there for a long time".

Corrected sentence on the final draft:

I always apply oneself to one place. For example, when I like a house, I want to live in the house for a long time.

Another case that the student consulted the dictionary is presented by S5's example.

Example (S21 –Int.):

The student's first draft with the teacher's correction:

WF

To conclusion, if you want to escape the stress of modern life, (...)

The related transcription from the TAP:

What is wrong with "to conclusion"? Hmm [the student consulted the code], word form. I meant "finally", but [the student said it in Turkish and started consulting the dictionary], "conclusion – in conclusion!" It has to be "in conclusion" because I have started a new sentence, and I cannot use "to" in the beginning of a sentence.

Corrected sentence on the final draft:

In conclusion, if you want to escape the stress of modern life, (...)

Correction without using the correction code sheet. Intermediate level students also chose not to use the code in some cases just as elementary level students did. The most common mistake that the students corrected automatically was the "not necessary (/)" mistake, too. Although intermediate level students were more likely to question the reason for omitting, only a few did that.

Example 1 (S27 –Int.):

The student's first draft with the teacher's correction:

People do something for the escaping stress and difficulties of modern life. In my opinion, spending time with friends is the best way of the reducing stress.

The related transcription from the TAP:

"People do something for the", umm I think "the" is correct, but the teacher deleted it. So, not "for the escaping", but "for escaping". For the other sentence, the teacher deleted "the" again, but in my opinion, "the" has to be there. As the teacher deleted it, I will delete it. The teacher said it was unnecessary.

Corrected sentence on the final draft:

People do something for escaping stress and difficulties of modern life. In my opinion, spending time with friends is the best way of reducing stress.

Example 2 (S20 –Int.):

The student's first draft with the teacher's correction:

And I can design it like I want.

[The student did not mention the error, and deleted the word without any hesitation.]

Corrected sentence on the final draft (S4):

I can design it like I want.

The intermediate level participants did not consult the code for unnecessary (/) mistakes. Like the elementary level students, some of them corrected their other word choice error mistakes without consulting the code.

Example (S25 –Int.):

The student's first draft with the teacher's correction:

AR WF

(...) best way of the escaping stress, because when people work in nature area, they should be happy.

The related transcription from the TAP:

"The" is unnecessary here, because after "of", the verb comes in —ing form. We changed the verb into a noun. "Work in a natural area". [The student corrected the two mistakes while reading the sentence on the first draft]. Here, the word form was incorrect I guess, so it must be "natural". I thought it like that, but I wrote it incorrectly. [The student did not mention the article mistake, but read aloud the sentence with the correct article.]

Corrected sentence on the final draft:

(...) best way of escaping stress, because when people work in a natural area, they should be happy.

Avoidance strategy. Intermediate level students employed an alternative strategy while they were dealing with word choice errors, which was avoidance strategy. When they saw their errors and realized that they could not correct it properly, they omitted the problematic language.

Example (S18 –Int.):

The student's first draft with the teacher's correction:

PR

As a result, I prefer staying in one place in all my life.

The related transcription from the TAP:

I have a preposition mistake. [The student did not consult the code.] I said "in my life", but, umm, actually I don't know. I'll finish the sentence with "place" and won't use the last part.

Corrected sentence on the final draft:

As a result, I prefer staying in one place.

The difficulties in interpreting the correction code symbols. Apart from employing these strategies, intermediate level students also had difficulties while interpreting code symbols. They sometimes interpreted the symbols wrong when they saw their mistakes, but after consulting the code, they could understand the meaning of the symbols. This difficulty was experienced mostly when they had informal (INF), wrong word (WW), and preposition (PR) mistakes, and the main reason can be the resemblance of the letters of the words as exemplified below.

Example 1 (S28 –Int.):

The student's first draft with the teacher's correction:

INF

I think they can't adjust this place easily because they are accustomed to ...

The related transcription from the TAP:

"I think they", "infinitive" [the student consulted the code], oh no, "informal". I mustn't write as "can't", I have to write it as "cannot". "cannot adjust to this place".

Corrected sentence on the final draft:

I think they cannot adjust this place easily because they are accustomed to ...

Example 2(S20 –Int.):

The student's first draft with the teacher's correction:

INF WW

(...) I don't want to transport.

The related transcription from the TAP:

[For "INF" mistake] Hmm, I shouldn't have contracted it. "Transport", I think I wrote it wrong, so the mistake is "word form". [The student consulted the code.] Hmm, "wrong word". Let me look it up. Actually I meant "I don't like moving" [the student said it in Turkish]. Shall I use the noun form of the verb? So I have to say "transportation" here. "I don't want to, umm, to be carried? Or move? Oh, it is written in the question [of the topic].

Corrected sentence on the final draft:

(...) I do not want to move.

Example 3(S24 –Int.):

The student's first draft with the teacher's correction:

PR

Firstly, if I move in another place, this situation ...

The related transcription from the TAP:

"Firstly, if I move", here, a "phrase" is missing, "phrase" [the student consulted the code]. "Preposition", hmm, "I move - I move at – I move to", I think "to". "To another place". I think so. "To another place".

Corrected sentence on the final draft:

Firstly, if I move to another place, this situation ...

The analysis of the students from intermediate and elementary levels on word choice errors was presented above. They employed many strategies, some of which were the same for both levels. In the next part, both level students' syntactic errors will be analyzed.

The Analysis of Students' TAPs Relating to Syntactic Errors

The third group of errors of the correction code was syntactic errors. These errors were not as common as the other types of errors among the students regardless of their proficiency levels.

The analysis of elementary level students' TAPs relating to syntactic errors. Table 10 presents an overview of the distribution of syntactic errors on elementary level participants.

Table 10
Syntactic Mistake Distribution for Elementary Level Students

Code	Number of	Correction Code		Correction of Error		Both Code Use	
	Errors	Use				and Correction	
		Yes	No	Yes	No	Yes	No
?	17	11	6	7	10	6	5
WO	5	5	0	5	0	5	0
Frag.	2	2	0	2	0	2	0
Total	24	18	6	14	10	13	5
	(100%)	(75%)	(25%)	(58%)	(42%)	(72%)	(28%)

Table 10 shows that elementary level students consulted the code $75\%^{10}$ of the times when addressing an error. Moreover, the participants corrected their mistakes 72% of the times when consulting the code.

When their two drafts, TAPs, and the researcher's notes were examined, it became obvious that elementary level students employed three main strategies during the revision of syntactic errors just as they did for the other error types: reference to the correction code sheet when correcting an error, consulting the dictionary, and reformulation strategy without consulting the correction code sheet.

Reference to the correction code sheet when correcting an error. The first strategy was consulting the correction code without any hesitation upon seeing the related symbol on the first draft. The elementary level participants both checked the meaning of the symbol and the sample sentences situated on the error code. The most common error that made the participants consult the code was the "word order"

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 $^{^{10}}$ Percentages were rounded to the nearest full number.

(WO) mistake. Sometimes they could explain the reason for their word order mistakes, but sometimes they just consulted the code and corrected their errors.

Example 1 (S4 –El.):

The student's first draft with the teacher's correction:

WO

So, reading books makes happy everybody.

The related transcription from the TAP:

We are talking about the future, "so, reading books – reading books make", what is the mistake here? [The student consulted the code and read the sample sentences.] "Some speak English" [that was the sample sentence on the code], hmm, okay, "everybody happy", I think it will be like this.

Corrected sentence on the final draft:

So, reading books makes everybody happy.

Example 2 (S8 –El.):

The student's first draft with the teacher's correction:

WO

(...) we often should breathe.

The related transcription from the TAP:

[The student consulted the code first.] "We", word order, hmm, "we should often", because "should" is a model verb like "can", and it has to come directly after the subject.

Corrected sentence on the final draft:

(...) we should often breathe.

The influence of the first language also led to some syntactic mistakes. They tried to translate their sentence from Turkish to English, but the different sentence structures of the two languages do not overlap, therefore causing mistakes. One example of a word order error is illustrated below.

Example (S9 –El.):

The student's first draft with the teacher's correction:

WO

People need new something such as new school, new friends and new hobby.

The related transcription from the TAP:

"New something", umm [the student consulted the code]; it will be "something new". We have written it in the wrong place; I mean the ordering is wrong. "People need something", here we made the sentence like a Turkish sentence. "People need something new such as new school, new friends and new hobby."

Corrected sentence on the final draft:

People need something new such as new school, new friends and new hobby.

Consulting the dictionary. The unclear (?) mistake was the most common mistake among the students. In order to deal with this mistake, some students consulted the dictionary to find the best words as what they wanted to express and what they wrote did not match.

Example (S5 –El.):

The student's first draft with the teacher's correction:

?

I am easy adaptation.

The related transcription from the TAP:

"I am", umm, I think I have a verb mistake here. "Easy adaptation", this will be an adjective, did I use it as a noun again? Hmm, adaptation. "I can adapt easily" [the student said this correct sentence in Turkish], being, easy, adaptation. What I meant was "I can adapt easily", so I cannot write "I am easy adaptation". It means "I am an adaptation". Hmm, I, being, shall I use "being"? Like "I'm being easy adaptation"? "Easy being adaptation", became, being, begin, being? Wasn't the meaning of this word "being"? "I being", no I cannot write it. So, "adapt", [the student consulted the code], there is only "adaptation" in the dictionary! There are also some sample sentences in the dictionary. Adapt, to change, alter, different situation, umm, "She has adapted" [the student read aloud the sample sentence from the dictionary]. Hmm, "I have – I have easy adaptation"? "I have got adaptation, I have adapt, situation?" Aha! "I adapt easy"? "I easy adapt"? I cannot use it. "I adapt" is okay. "easy, be easy, easy be"? I'll add "easy" there, but "easy, umm, easily"? Yes, I have to make it an adverb to define it [the verb]. Umm, so as to define the verb, I have to use an adverb there. In blood, sweat and tears, I write "I adapt easily".

Corrected sentence on the final draft:

I adopt easily.

Reformulation strategy without consulting the correction code sheet. In order to deal with the unclear (?) mistake, some students consulted the dictionary and reformulated what they wanted to express as shown above, while others used only

the reformulation strategy without consulting the correction code sheet or the dictionary.

Example (S7 –El.):

The student's first draft with the teacher's correction:

?

Some problems are stress.

The related transcription from the TAP:

"Some problems are stress." There is a question mark, so the teacher didn't understand what we meant. What I meant was "Some problems are stress", yes this sentence was quite wrong and nonsense. I have to write this sentence again by trying other words. I think if I say "Problems cause stress", it will make more sense. [The student said this correct sentence in Turkish.] "To cause – some problems are to cause?" "Be to cause", "to cause"? I have to use the verb form, but is it "is to cause"? "Are to"? "To cause"? "Cause"!

Corrected sentence on the final draft:

Some problems cause stress.

The analysis of intermediate level students' TAPs relating to syntactic errors. The revision process of elementary level students on syntactic errors, and the strategies employed by the participants were presented and exemplified above. Data for intermediate level participants is presented in Table 11.

Table 11
Syntactic Mistake Distribution for Intermediate Level Students

Code	Number of	Correction Code		Correction	Correction of Error		de Use	
	Errors	Use					and Correction	
	•	Yes	No	Yes	No	Yes	No	
?	12	1	11	10	2	1	0	
WO	3	2	1	2	1	1	1	
Total	15	3	12	12	3	2	1	
	(100%)	(20%)	(80%)	(80%)	(20%)	(67%)	(33%)	

From the data in Table 11, it is apparent that intermediate level students consulted the code 20% ¹¹ of the times when addressing an error. Moreover, the participants corrected the mistakes 67% of the times when consulting the code. The data in the columns were obtained from the students' two drafts and TAPs. In order to make the calculations clear, the errors on the first drafts were counted first, and then the transcriptions along with the notes taken by the researcher during the verbal data collection were examined.

When compared to elementary level participants, intermediate level students had fewer syntactic errors (See Table 11). Due to having most of the errors in unclear (?) and mostly knowing the meaning of this symbol, intermediate level students consulted the correction code sheet less than the other group of students for syntactic errors.

Although syntactic errors include fragment (Frag.), run on sentence (RO), word order (WO), and unclear (?) mistakes, intermediate level participants had only unclear and word order mistakes. While dealing with their mistakes, they also employed different strategies. They were reference to the correction code sheet when

¹¹ Percentages were rounded to the nearest full number.

correcting an error, consulting the dictionary, correction without using the correction code sheet, and reformulation strategy without consulting the correction code sheet.

Reference to the correction code sheet when correcting an error. Consulting the code is the most common strategy among the students regardless of their proficiency levels or errors. For syntactic mistakes, intermediate level students also consulted the correction code and read the sample sentences.

Example (S26 –Int.):

The student's first draft with the teacher's correction:

WO

New people gain with you new experience.

The related transcription from the TAP:

"New people gain with you new experience", hmm, what I wanted to write was "you gain new experience from new people" [the student said this sentence in Turkish], umm [the student consulted the code], word order, "some students speak well English, some students speak English well" [the student read aloud the sample sentences on the code]. I'm writing "new people" now on my final draft. "New people gain"? I don't know. Aha! It will start with "you gain", because I wrote the object in the beginning of the sentence. "You gain with new people new experience", I feel something is missing in this sentence, let me write "to new experience".

Corrected sentence on the final draft:

You gain with new people to new experience.

Consulting the dictionary. Intermediate level students consulted the dictionary to make the meaning of their sentences clear for unclear (?) mistake.

Example (S25 –Int.):

The student's first draft with the teacher's correction:

?

They want to escape their problems and they appeal some ways such as ...

The related transcription from the TAP:

"And they appeal", I used "appeal" as "apply" [the student said "apply" in Turkish], but it is wrong. Let me look up the word, umm, aha! "Apply", but I knew that "apply" meant "implement". I knew the word started with the letter "a", anyways.

Corrected sentence on the final draft:

They want to escape their problems and they apply some ways such as ...

Correction without using the correction code sheet. In some cases of unclear (?) mistake, the students corrected their mistakes without consulting the code or the dictionary.

Example (S20 –Int.):

The student's first draft with the teacher's correction:

?

Live in the Own Place

The related transcription from the TAP:

There is a problem with the title. I think what I meant wasn't understood, yes. In my opinion, I have to correct this as "my own place", because it *[using "the"]* was not clear enough.

Corrected sentence on the final draft:

Live in My Own Place

Reformulation strategy without consulting the correction code sheet.

Intermediate level students also employed reformulation strategy when they had unclear (?) mistakes.

Example (S22 –Int.):

The student's first draft with the teacher's correction:

?

People feel tired and stress of modern life.

The related transcription from the TAP:

Does this [the question mark] mean the sentence is incorrect? "People feel tired and stress of modern life." Hmm, in Turkish, I meant "People feel tired and stressed because of modern life." So, the verb is "feeling stressed", hmm, "of modern life", because of [the student said it in Turkish], shall I use a connector here? "People feel tired and stress because of modern life", I think I have to say "have stress" instead. "Stressful", yes! As I used "feel", I have to say "tired and stressful".

Corrected sentence on the final draft:

People feel tired and stressful because of modern life.

The analyses of both level students' TAPs through their drafts have been presented above. The final analysis of students' TAPs is on their orthography and punctuation errors.

The Analysis of Students' TAPs Relating to Orthography and Punctuation Errors

Orthography and punctuation errors are the last group of errors of the correction code. These errors were common among the students regardless of their proficiency level. Due to time constraints and high anxiety during the writing tests, these kinds of errors, especially punctuation seems to be neglected by most of the participants regardless of their proficiency levels.

The analysis of elementary level students' TAPs relating to orthography and punctuation errors. Table 12 presents an overview of the orthography and punctuation error distribution on elementary level participants.

Table 12

Orthography and Punctuation Mistake Distribution for Elementary Level Students

Code	Number	Correction Code		Correction	n of Error	Both Code Use and		
	of Errors	Us	Use		Correction			
		Yes	No	Yes	No	Yes	No	
C	10	3	7	9	1	3	0	
\rightarrow \leftarrow	2	1	1	2	0	1	0	
SP	5	4	1	4	1	3	1	
P	28	27	1	25	3	22	5	
Total	45	35	10	40	5	29	6	
	(100%)	(78%)	(22%)	(89%)	(11%)	(83%)	(17%)	

Table 12 shows that elementary level students consulted the code 78% ¹² of the times when addressing an error. Furthermore, the participants corrected the mistakes 83% of the times when consulting the code.

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 $^{^{\}rm 12}$ Percentages were rounded to the nearest full number.

The strategies employed by elementary level students while revising their orthography and punctuation errors were as follows: reference to the correction code sheet when correcting an error, correction without using the correction code sheet, and consulting the dictionary.

Reference to the correction code sheet when correcting an error. The correction code on which the sample sentences and the meaning of the symbols were written was used by all the students to revise and correct their mistakes. Elementary level students also used it for different orthography and punctuation errors.

Example 1 (S3 –El.):

The student's first draft with the teacher's correction:

P

For example, I was born in Tekirdağ so I want to live in Tekirdağ because I know Tekirdağ very well.

The related transcription from the TAP:

"For example, I was born in Tekirdağ so I want to live in Tekirdağ because I know Tekirdağ very well." Umm, something is missing after "I was born in Tekirdağ", [the student consulted the code], "punctuation" is missing, but what was it? "Is that a good book — is that a good book" [the student read aloud the sample sentences on the code to understand what that code meant]. The mistake is, there is no comma, umm, after that, no, I had to put a comma before the connector. I made it wrong. "For example, I was born in Tekirdağ, so I want to live in Tekirdağ because I know Tekirdağ very well" [the student read aloud the sentence and wrote it down.]

Corrected sentence on the final draft:

For example, I was born in Tekirdağ, so I want to live in Tekirdağ because I know Tekirdağ very well.

Example 2 (S9 –El.):

The student's first draft with the teacher's correction:

 \rightarrow

I hope I will live in an other country in the world.

The related transcription from the TAP:

[The student consulted the code immediately after seeing the mistake.] Hmm, "whatever" [the student read aloud the part of the sample sentence on the code], will the words be combined? I think so. "I hope I will live in another country in the world" [the student read aloud the sentence and wrote it down.]

Corrected sentence on the final draft:

I hope I will live in another country in the world.

Consulting the dictionary. For the spelling (SP) errors, the students preferred to consult the dictionary for the right spelling of the words. The students did not need to consult the dictionary for punctuation (P), capitalization (C), and combine words $(\rightarrow \leftarrow)$ errors.

Example 1 (S12 –El.):

The student's first draft with the teacher's correction:

SP

Therefor, people want the best job to earn a lot of money (...)

The related transcription from the TAP:

I made a mistake with "therefor". I think it will be "therefore", but I have to check the word in the dictionary. [The student consulted the dictionary.] Yes, I guessed it right.

Corrected sentence on the final draft:

Therefore, people want the best job to earn a lot of money (...)

Example 2 (S16 –El.):

The student's first draft with the teacher's correction:

SP

(...) because I feel healty and energetic.

The related transcription from the TAP:

[The student consulted the code quickly.] I made a spelling mistake with "healty". The right spelling of this word, umm [the student consulted the dictionary], "healthy", with an "h".

Corrected sentence on the final draft:

(...) because I feel healthy and energetic.

Correction without using the correction code sheet. Students corrected their orthography and punctuation errors automatically when they saw they had an error without consulting the correction code or the dictionary.

Example (S11 –El.):

The student's first draft with the teacher's correction:

$$P \rightarrow \leftarrow$$

(...) in this place but may be I will go (...)

The related transcription from the TAP:

Here, the period - I put a period, but it isn't clear. Hmm, sorry, as I went on the sentence with "but", there will be a comma before it.

And "maybe" should be one word here.

Corrected sentence on the final draft:

(...) in this place but may be I will go (...)

The results of elementary level students' TAPs on orthography and punctuation errors were demonstrated above. As the main aim of this study was to compare students' interpretations and responses to the correction code symbols during revision, the following part will present analyses about intermediate level students' TAPs on orthography and punctuation errors.

The analysis of intermediate level students' TAPs relating to orthography and punctuation errors. Table 13 illustrates the number of times each orthography and punctuation error was made, to what extent the correction codes were used and whether the errors were corrected during the revision process by intermediate level students.

Table 13

Orthography and Punctuation Mistake Distribution for Intermediate Level

Students

Code	Number	Correction Code		Correction	n of Error	Both Code Use and		
	of Errors	Use				Correction		
		Yes	No	Yes	No	Yes	No	
C	11	2	9	11	0	2	0	
\rightarrow \leftarrow	2	0	2	2	0	0	0	
SP	9	8	1	9	0	8	0	
P	40	36	4	39	1	35	1	
Total	62	46	16	61	1	45	1	
	(100%)	(74%)	(26%)	(98%)	(2%)	(98%)	(2%)	

Intermediate level participants were reported to have consulted the code 74% ¹³ of the times when addressing a morphological error whereas the students with elementary proficiency level consulted the code 78% of the times (See Table 13). In addition, intermediate level students corrected the mistakes 98% of the times when consulting the code while the other group of students corrected their mistakes %83 of the times. A comparison of the these four percentages may reveal that intermediate level students had the need to consult the code less than the other group, and they were able to correct their orthography and punctuation mistakes more easily.

As Table 12 and 13 show, the most common orthography and punctuation mistake made by both intermediate and elementary level students was punctuation (P). Furthermore, combine words ($\rightarrow \leftarrow$) mistake was the least common orthography and punctuation error type among both intermediate and elementary level students. It

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¹³ Percentages have been rounded to the nearest full number.

was also revealed that the participants with both intermediate and elementary proficiency levels did not have any separate words (\iff mistakes.

Further analysis of the drafts and TAPs of intermediate level students revealed that like elementary level students, students with intermediate proficiency level also employed the same strategies to interpret and respond to the correction code symbols on their draft while revising orthography and punctuation errors: reference to the correction code sheet when correcting an error, correction without using the correction code sheet, and consulting the dictionary.

Reference to the correction code sheet when correcting an error. Of the study population, intermediate level students also used the correction code without any hesitation when they saw an orthography and punctuation mistake, and sample sentences helped them to understand what that symbol meant as exemplified below.

Example 1 (S28 –Int.):

The student's first draft with the teacher's correction:

P

(...) different from their previous place I think they (...)

The related transcription from the TAP:

The mistake is the letter "P" [the student consulted the code], "punctuation", so I have to put a period here because I finished my sentence and the other sentence started with a capital letter.

Corrected sentence on the final draft:

(...) different from their previous place. I think they (...)

Example 2 (S26 –Int.):

The student's first draft with the teacher's correction:

 \mathbf{C}

Another thing, If you go to another place, you will see (...)

The related transcription from the TAP:

[The student consulted the code and scanned the sample sentences.] I had to make "I" lower-case.

Corrected sentence on the final draft:

Another thing, if you go to another place, you will see (...)

Correction without using the correction code sheet. Intermediate level students did not use the code or the dictionary to deal with their orthography and punctuation errors while revising their output in some cases as exemplified below.

Example 1 (S24 –Int.):

The student's first draft with the teacher's correction:

P

Secondly when I move in another place, I must try to (...)

The related transcription from the TAP:

"Secondly", I always forget using a comma.

Corrected sentence on the final draft:

Secondly, when I move in another place, I must try to (...)

Example 2 (S18 –Int.):

The student's first draft with the teacher's correction:

$$\rightarrow$$
 \leftarrow \rightarrow \leftarrow

I do not know any body, any where.

The related transcription from the TAP:

"I don't know", I have to combine "any body", and "any where" as well.

Corrected sentence on the final draft:

I do not know anybody, anywhere.

Example 3 (S31 –Int.):

The student's first draft with the teacher's correction:

C INF

(...) small house. they don't fit into their house, so (...)

The related transcription from the TAP:

Umm, I started the new sentence with a lower-case letter after the period, I'll correct it.

Corrected sentence on the final draft:

(...) small house. They do not fit into their house, so (...)

Consulting the dictionary. As the last strategy, consulting the dictionary was employed for only spelling (SP) mistake by intermediate level participants.

Example 1 (S27 –Int.):

The student's first draft with the teacher's correction:

SP

I believe the second one is the best choise because (...)

The related transcription from the TAP:

"The second one is the best choise", we wrote this wrong, "SP" – there is a mistake with the spelling, yes. The dictionary [the student consulted it], what I meant was "choosing", no, actually "choice", I wrote it wrong. Let me check it, hmm, "choice", yes we wrote it wrong.

Corrected sentence on the final draft:

I believe the second one is the best choise because (...)

Example 2 (S17 –Int.):

The student's first draft with the teacher's correction:

SP

I try to learn new tecnics.

The related transcription from the TAP:

Here is a "spelling" [mistake]. Hmm, the dictionary. "Techniques". Yes, it's okay.

Corrected sentence on the final draft:

I try to learn new techniques.

The Analysis of the Students' Interviews

Following the TAPs, interviews with the thirty two participants were conducted in their L1. These interviews provided data to address the research question the second research question of this study in particular, which was about the general attitudes of the participants on the usage of the correction code while revising their written output. The interviews were conducted individually subsequent to the TAPs and recorded digitally. Then the excerpts which were used as examples were translated to English. During the interviews, the students were provided with their first and revised drafts to make sure they mention the positive and negative aspects of using and interpreting correction code symbols. The questions asked to the participants are listed below.

- Do you think the correction code use is helpful while revising your draft? Do you think the sample sentences are helpful in understanding what the symbols mean? Do you use them often?
- Do you ever have difficulties in interpreting the symbols of the correction code?

Of the thirty-two participants who responded to the first question, all the students reported finding the use of the correction code sheet during revision very helpful regardless of their proficiency levels. Here are some participants' answers on the general attitude related to the correction code sheet use:

(S7 – El.): This correction code [sheet] is very helpful, yes. When our writing instructor introduced it for the first time, I supposed it would be very difficult to use it because we had just started to learn English, and we would make many mistakes. I also wondered what kind of a code system it would be.

Then, we were given the code, and I felt that using it would be an ease for us. Moreover, I seriously wondered how the instructors could prepare that code. Maybe they had identified the students' errors for many years, and then they

came up with such a code. I quite like using and this correction code sheet. Having it is an ease for me.

(S19 – Int.): I find the using of the correction code useful. If the teacher only shows the error without any clue, we cannot understand easily what the error is on our own.

(S29 – Int.): I consult the code for all the mistakes. I don't need to memorize the symbols because we can use it while writing our final drafts. Consulting the code for the mistakes is easier than memorizing all the errors. I think consulting the correction code sheet for our errors is very fun. We look at the code, and then we correct our mistakes. It's fun.

(S32 – Int.): The correction code sheet is 90% helpful. Without this code, I could correct my mistakes harder. By writing many paragraphs and essays, you can realize what your mistakes are in general. Therefore, it's good to know that "P" means "punctuation", "PR" means "preposition", "WF" means "word formation", and these are my common errors, I usually don't make mistakes with the general structures of the sentences. If you showed the errors without indicating the error type, it would take up our time too much. For example, if you say "you have a mistake, but we are not guiding you", that would be compelling. Now (with the code), you say that "you have a ... mistake here", so it makes it easy for us to correct it.

Among the students who agreed on the usefulness of the correction code during the revision process, two intermediate level students mentioned that using it is easy for the teacher as well as for the students. The related transcriptions are below.

(S22 – Int.): I find the use of the correction code sheet beneficial for me because we cannot memorize all the errors. Thanks to this code, we can see the mistakes easily. Furthermore, the teachers also have the chance to apply the codes to our drafts and communicate with us through them.

(S23 – Int.): I quite like having my written output evaluated and examined by the others because I cannot notice my own mistakes by reading my draft. I think it is a must. Evaluating through the symbols is an ease for you as well, because if the code hadn't been existed, you would have explained our errors by many words instead of these letters. So, using the correction code is very

nice. I'm planning to keep this sheet (the correction code sheet), I think it's very useful, and I may need it.

In response to the first question, all the students said that the sample sentences were helpful and they consult them very often during the revision. Five students specificially mentioned the benefits of the sample sentences of the correction code sheet, and explained why they are useful for them.

(S5 – El.): The sample sentences are very beneficial and give explanatory information. For example, "WO" (word order) mistake. If I have many mistakes on word order, I can understand that the symbol "WO" stands for "word order" mistake. When I cannot understand the meaning of a symbol and check the sample sentences, how to correct my mistake directly becomes clear.

(S9 – El.): Actually, I cannot understand the meanings of the symbols at all. I can only understand my mistake when I read the sample sentences on the code. I cannot remember the symbols, so if there weren't these sentences, I couldn't correct anything. For example, the omission mistake (A), I look at the sentence and say: "Hmm, "going to be", so the verb would come there". I couldn't do the revision without the sample sentences.

(S16 – El.): Of course I use the sample sentences. When I have a mistake, I check the samples. I always compare my sentence with the incorrect sentence to see if I had the same kind of mistake.

(S20 – Int.): The availability of the correction code is nice, especially the sample sentences. Our teacher also introduced the usage of the code through the sample sentences on the code. I couldn't have understood some of my mistakes if I hadn't used the code.

(S24 – Int.): The use of the correction code sheet is very helpful, especially with the samples. Sometimes the meanings of the symbols are not clear, so reading the samples help. As we have written many things this term, I know and memorize most of the symbols.

When the participants were asked if they had any difficulties in interpreting the correction code symbols, they mentioned some problems although they all find consulting the code very useful.

Five participants interviewed reported that they sometimes had some difficulties finding the symbols on the correction code sheet.

(S23 – Int.): Finding the symbols on the correction code sheet can sometimes cause a time loss, as most of the symbols start with either "S" or "P".

(S31 – Int.): I sometimes confuse the places of the symbols.

Two students even had some suggestions to overcome this problem as demonstrated below.

(S7 – El.): The order of the errors sometimes cause a loss of time, I mean to find the symbols on the code. I think the color of the symbols on the code and on our draft can be the same, and it would be easier to use the code. For example, let's say punctuation mistake is written in red on the correction code sheet, and it is coded in red on our draft. Finding the mistake would be easier, and it would be an ease for us during the exam. About the order of the symbols, hmm, it would be from the easiest errors to the most difficult ones, but I'm not sure about the order.

(S26 – Int.): If the correction code symbols were in the alphabetical order, it would be easier to find them.

According to two students, the availability of the sample sentences was good, but their number could be increased.

(S19 – Int.): The sample sentences aren't sometimes enough to correct my mistakes. For example, for preposition mistake, I cannot figure out which preposition will come. In the example sentence, "to" is the correct preposition, and I sometimes tend to use "to" for my preposition mistake.

(S22 – Int.): Apart from the sample sentence of preposition, the sample sentence of "word order" also lead me change the order of the last two words in my sentence. The sample sentences can be more explanatory and less general.

Four participants found the meaning of the "unclear (?)" mistake insufficient, and stated that they could not decide how to deal with unclear sentences as there were not any sample sentences for it on the correction code sheet.

(S27 – Int.): We cannot consult the code and correct our unclear mistakes. Apart from that, the sample sentences are quite clear.

(S23 – Int.): If the whole sentence is wrong, I mean if it is unclear, this causes some distress. Changing the whole sentence and especially noticing our own mistakes are necessary. It's a little bit hard, though. I guess it is harder for you to understand our incorrect sentences as well.

Two participants stated that they sometimes confuse some symbols of the correction code. The example is shown below along with the suggestion of the student.

(S17 – Int.): I find it difficult to find the places of the symbols. For example, "S/PL" (singular / plural) and "SP" (spelling) is sometimes confusing. I think it would be easier for us if these symbols were in sequence on the correction code sheet. I could see each easier then.

In summary, the participants' general attitudes towards the correction code sheet use were identified through the interviews. It was revealed that all the students find correction code use helpful. The students commented that they could not have found and corrected their mistakes if the teachers had not used coding. They reported using the correction code sheet during revision. They expressed their belief that the availability of sample sentences was important, and many claimed they would not be able to understand the meaning of the symbol without reading the sample sentences.

However, eleven participants found the correction code sheet use sometimes difficult. The reasons they stated were that it was occasionally difficult to find the symbols, the number of the sample sentences was not enough, and the positions of some symbols were confusing.

Conclusion

This chapter analyzed the findings of the research conducted to investigate the cognitive processes experienced by L2 student-writers from different levels while revising their written work on interpreting and utilizing correction code symbols in the revising process. The data were obtained from the students' first and final drafts, the students' TAPs, and the interviews with the students. The data were analyzed qualitatively.

The data show that the students, regardless of their proficiency levels, utilize certain strategies while responding to the correction code symbols on their draft.

The results of the individual interviews following the TAPs show that all the students find the use of the correction code sheet while revising their written output beneficial although they sometimes had difficulties in interpreting the symbols.

The next chapter discusses the findings, pedagogical implications, limitations of the study, and suggestions for further studies.

CHAPTER V: CONCLUSION

Introduction

This study investigated how the students from two different proficiency levels interpret and respond to the correction code symbols while revising their written output. In addition, it aimed to explore the students' perceptions of the use of the correction code symbols.

The study was conducted at Uludağ University School of Foreign Languages (SFL) in Bursa, Turkey. The sample was comprised of thirty-two volunteer students, half of whom had elementary, and the rest had intermediate proficiency level at the institution. In an attempt to fulfill the aims of the study, three sets of data were collected, namely, the students' two drafts (32 first, and 32 final drafts), student TAPs, and student interviews. Students from both levels were assigned the same topics. Both groups wrote the first draft in the presence of the researcher without consulting any sources. During the writing of their final draft, TAPs were conducted individually and digitally recorded. These were used to respond to the first research question. Student interviews were conducted after collecting the verbal data. The interviews aimed to shed light on the strategies used to responding and utilizing the correction code symbols in an attempt to respond to the second research question.

The data gathered through the study were analyzed in three stages. As the first step of data analysis, the researcher categorized the correction code symbols and counted the students' errors on the first draft for each category, and then analyzed the students' verbal data to determine the strategies they employed (e.g. reference to the correction code sheet, correction without using the correction code sheet, immediate

correction by using the correction code with a reflection on the error type) to interpret and decode the symbols. Finally, the student interviews were transcribed and categorized to explore the similarities and differences of the participants' responding and interpreting processes in revising their texts through coded feedback.

This chapter includes the discussion of the research findings regarding the research questions and the relevant literature, the limitations of the study, the pedagogical implications obtained from the results, and the suggestions for further research.

Discussion of Findings

The discussion of findings is organized into sub-sections in relation for each of the research questions. The first sub-section, the interpretation of the correction code symbols, is presented in four subtitles comprising of the error categories: morphological errors, errors in word choice, syntactic errors, and orthography and punctuation errors.

The Interpretation of the Correction Code Symbols

The results of the analyses on the four main sections of correction code errors indicated that the students consulted the code most of the times when revising their coded output. Both levels of students utilized the correction symbols by employing certain strategies.

Table 14 summarizes the instances in which the students consulted the correction code and made changes which were correct. The first column, "able to correct" gives the percentage of students' corrected errors after they consulted the correction code when there was an error. The second column, "unable to correct"

gives the percentage of students' uncorrected errors after they consulted the correction code when they had a mistake.

As a general overview, Table 14 shows that elementary level students could correct their morphological, word choice, and orthography and punctuation errors less frequently than intermediate level students when consulting the correction code sheet. For syntactic errors, elementary level students could correct their mistakes more frequently than intermediate level students.

Table 14

Error Correction Based on Correction Code Consultation

Error Type	Elementary Level Students'		Intermediate Level Students'			
	Em	cors	Errors			
	Able to Unable to		Able to	Unable to		
	correct	correct	correct	correct		
Morphological errors	89% 14	11%	92%	8%		
Errors in word choice	88%	12%	90%	10%		
Syntactic errors	77%	23%	67%	33%		
Orthography and punctuation errors	83%	17%	98%	2%		

Morphological errors. Table 14 shows that elementary level students who had morphological errors corrected them 89% of the times after consulting the code while intermediate level students who had morphological errors corrected them 92% of the times. This finding can be explained in several ways.

These data suggest that the effect of the proficiency level seemed not to affect the correction when consulting the correction code sheet. This finding is inconsistent

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¹⁴ The percentages were rounded to the nearest full number.

with other findings in the literature. Sakallı (2007), who investigated the students' feedback preferences in writing, found that the feedback preferences of the learners had changed from direct feedback to coded feedback over a ten-week period. In interviews made with the students who changed their feedback preference, he found that the participants thought that they had progressed in English, so they were able to correct their errors when teachers provided coded feedback. Similarly, Montgomery and Baker (2007) and Lee (2004) showed that students' ability to understand feedback changes as their proficiency levels change over time.

Additionally, elementary level students were able to correct their morphological mistakes slightly more often than their other types of feedback. Therefore, it can be concluded that providing coded feedback was good for elementary level students' grammatical errors. This finding contradicts with that found in Beuningen et al. (2012), in which they found that coded feedback was better for non-grammatical errors. This finding also does not support Bitchner and Knoch (2008) and Ferris (1995), who claimed that coded feedback did not help writers improve their grammatical errors.

While previous research documented students' belief in the utility of feedback in improving writing and grammar in the second language (Ferris, 1995; Hyland 1998), the findings of this study provide evidence that this form of feedback does indeed support students' self-correction of their writing.

Previous studies evaluating feedback types presented inconsistent results on whether direct or indirect feedback was utilized by the students. Çağlar (2006) investigated how much students utilized teacher feedback through TAPs and interviews with students, and she found that students had problems interpreting symbols of the correction code.

To date no study has investigated how student writers deal with interpreting and responding to correction code symbols. This study focused on the interpretation phase of revising, the cognitive process they went through, and the data suggest that all the students employed some strategies during interpretation. For morphological mistakes, they employed: a) reference to the correction code sheet when correcting an error with no discernable pause to reflect on the error, b) immediate correction by using the correction code and pausing to reflect on the error, c) correction without using the correction code sheet. These revising strategies are examples from direct and indirect strategies adapted from Oxford (1999) (See Figure 1 and 2). Table 15 presents an overview of the strategies employed by elementary and intermediate level learners while dealing with morphological errors, and whether the groups employed each strategy or not.

Table 15

Revision Strategies for Morphological Errors

Revising strategy		Elementary		mediate
	Level	Level Students		Students
	Yes No		Yes	No
a) Reference to the correction code sheet when	•		•	
correcting an error with no discernable pause to				
reflect on the error				
b) Immediate correction by using the correction	✓		~	
code and pausing to reflect on the error				
c) Correction without using the correction code	~		•	
sheet				

Ferris and Roberts (2006) conducted a study with two groups of students; receiving feedback through correction code and without correction code. They found that the frequency of errors were in the order of verb category, sentence structure, word choice, noun endings, articles. The findings of the current study support the literature to some extent. The data indicate that elementary level students had singular / plural errors the most while intermediate level students had article errors the most. According to the same study by Ferris and Roberts (2006), except article mistakes, the "codes" group was able to correct their errors more frequently than the "no code" group. In contrast to their findings, this study indicates that codes helped both levels of students to correct their article errors. In other words, three out of four article errors of elementary level students and eight out of nine article errors of intermediate level students were corrected after consulting the code.

The study conducted by Bitchener, Young and Cameron (2005) investigated whether three types of feedback on three types of error (prepositions, the past simple tense, and the definite article) improved accuracy. Their findings suggested that articles (definite and indefinite) constituted 19.99% of the errors in total, which made the article errors the second highest in number among 53 post-intermediate ESOL learners. Similarly, the findings of this study show that article mistakes were the highest in number among intermediate level participants of this study.

Previous studies evaluating grammar correction observed inconsistent results on whether it should be employed or not. The debate initiator, Truscott (1996) claimed that grammar correction should be abandoned in writing courses by indicating error correction does not help student writers improve their accuracy. Upon Truscott's study, the research of Ferris (1999) suggested that error correction helps at least some student writers as long as it is selective and clear. In his response to Ferris (1999), Truscott (1999) suggested that grammar correction should not be

employed unless forthcoming researches denote the contrary. On the question of grammar correction, this study found that coded feedback had a positive effect on correcting grammatical structures. Both levels of student writers did have quite a few morphological errors, and during revision, they even felt the need to explain why their sentences were morphologically incorrect by providing grammatical explanations. Therefore, it can be said that the students were able to utilize correction code symbols to improve their morphological structures. In addition, the elementary level students hardly ever had subject-verb agreement mistakes, which can be the result of focused grammar instruction for elementary level students.

Errors in word choice. According to Table 14, elementary level students who had word choice errors corrected 88% of them after consulting the error code, and intermediate level students who consulted the code were able to correct 90% of the word choice errors. There are two likely causes for the slight difference between these ratios.

First of all, elementary level students may have had a number of word choice errors in their previous writing. Therefore, they might have been slightly better at recalling the word choice error symbols because they occasionally consulted the code for word choice errors. Intermediate levels of students, on the other hand, consulted the code more often than elementary level students. Yet, the correction of this error type does not have a significant difference among the two proficiency levels.

Another possible explanation for different correction code use ratio between two levels of students can be that intermediate level students may have been more cautious than elementary level students when revising their written output. They may have wanted to feel secure by consulting the correction code every time they had a

word choice error. Previous studies have not examined how students use coding to address word choice errors or how students from different proficiency levels interpret the error code symbols for this error type.

On the other hand, the amount of word choice errors made by the two different language proficiency level students differs greatly. The elementary level students made 74 word choice errors while the intermediate level participants made 107 errors (See Table 8 and 9). For intermediate level students, this can be the result of focusing on the meaning and therefore neglecting the small components of the target language. Table 9 also shows that intermediate level participants had preposition (PR) and not necessary (/) errors more than the other word choice errors. Besides that, intermediate level students could have the feeling of expressing themselves decently in the light of the courses they had taken, which may have resulted in many word choice errors in their first draft.

With respect to responding to correction code symbols on word choice errors, elementary level students writers adopted three strategies: a) reference to the correction code sheet when correcting an error, b) consulting the dictionary, c) correction without using the correction code sheet, which were adapted from Oxford's (1999) direct and indirect learning strategies (See Figure 1 and 2). However, intermediate level participants employed these three strategies and avoidance strategy. In addition to employing one strategy more than elementary level participants, intermediate level students also had quite a few more word choice errors (107 errors) than elementary level participants did (74 errors). Table 16 presents an overview of the strategies employed by elementary and intermediate level learners while dealing with word choice errors, and whether the groups employed each strategy or not.

Table 16

Revision Strategies for Errors in Word Choice

Revising strategy name		Elementary		Intermediate	
	Level	Level Students		Students	
	Yes	No	Yes	No	
a) Reference to the correction code sheet when	✓		✓		
correcting an error					
b) Consulting the dictionary			•		
c) Correction without using the correction code			•		
sheet					
d) Avoidance strategy	X		•		

Among word choice errors, the "unnecessary word" error was the most frequent error among elementary level participants while intermediate level students had preposition errors the most. The main reason for his could be the high number of vocabulary items that elementary level learners must learn. In the institution where this study took place, all level students take the same proficiency exam at the end of the program. Thus, elementary level students have to cover more lessons and different topics, which would mean that they encounter different lexical sets associated with different topics. Accordingly, they are expected to learn more words during the same period than the intermediate learners. In writing, they generally try to use all the structures they know, and it may have caused elementary level participants of this study to make unnecessary word mistakes more frequently. The findings of this study on intermediate level students' having preposition errors the most seem consistent with those of Bitchener, Young and Cameron (2005) who found that 53 post-intermediate participants made preposition errors 171 times, the

highest percentage of the total errors (29.23%) in their study. Moreover, some students questioned the "INF" (informal) and "not necessary" errors, and corrected their mistakes by consulting the code. The students may have perceived them as a spelling mistake rather than an error; therefore they corrected these mistakes without thinking elaborately. This may have been the result of the complete trust with the teacher.

Syntactic errors. According to Table 14, the percentage of errors corrected appropriately was a little higher for elementary level participants (72%) than it was for intermediate level learners (67%) after consulting the correction code sheet.

The analysis of the TAPs on syntactic errors showed that elementary level students employed the following strategies: a) reference to the correction code sheet when correcting an error, b) consulting the dictionary and c) reformulation strategy without consulting the correction code sheet, and intermediate level students also used these strategies in addition to d) correction without using the correction code sheet. Both levels of students applied these strategies, adapted from Oxford's (1999) direct and indirect learning strategies (See Figure 1 and 2), for their word order and unclear errors. Table 17 illustrates an overview of the strategies employed by elementary and intermediate level learners while dealing with syntactic errors, and whether the groups employed each revising strategy or not.

Table 17

Revision Strategies for Syntactic Errors

Revising strategy name	Elen	Elementary		mediate
	Level	Level Students		Students
	Yes	No	Yes	No
a) Reference to the correction code sheet when	✓		~	
correcting an error				
b) Consulting the dictionary	•		✓	
c) Reformulation strategy without consulting	•		✓	
the correction code sheet				
d) Correction without using the correction code	X		•	
sheet				

For syntactic errors, the interference of L1 was reported to be the most common reason for errors of both levels of students. This result is in agreement with those obtained by Bhela (1999), Camilleri (2004), and Weijen, Berg, Rijlaarsdam, and Sanders (2009), in which they support the idea that L1 interference causes errors in writing. Bhela (1999) investigated L1 interference in L2 writing with four participants of different language backgrounds. According to the findings; the student writers were unable to produce effective outputs with appropriate structures because of the influence of their L1. L1 influence made the students in Bhela's (1999) study employ L1 syntactic features to L2 inappropriately. The negative transfer of L1 features to L2 writing was also observed in the study by Camilleri (2004), who investigated Maltese transfer to English writing and classified thirteen most frequent error types including word order errors. Although the literature partly supports the finding that L1 interference causes word order problems, the case of

unclear sentences has not previously been described by the literature. This research suggests that the reason for forming unclear sentences was also because of wrong L1 transfer to L2 writing. During the TAPs, the students tried to explain immediately what they wanted to mean in L1 when they saw the code for unclear sentences.

The number of errors made by both level students in ungrammatical sentences (?) seems to outnumber the errors in fragment and run on sentences in this category. As the teaching of English in the institution is skill-based, a frequent observation by the researcher is the students' probably having the difficulty of transferring the knowledge of the other skills to the writing skill. This may have resulted in producing more problematic sentences than run-ons or fragments.

Orthography and punctuation errors. Table 14 shows that elementary level students were able to correct these errors 83% of the times after consulting the correction code sheet. Intermediate level learners, however, corrected their mistakes 98% of the times after consulting the code. Furthermore, using the wrong punctuation was the most frequent error among all the students (68 punctuation errors in total; 40 of which were made by intermediate level students and 28 of which were made by elementary level students). A possible explanation for this might be performance errors because both levels of students were able to correct their punctuation errors immediately. This result may also be explained by the fact that the level difference influenced the participants' outputs. In the institution, intermediate level students begin writing paragraphs and essays before the students with other proficiency levels, namely elementary and pre-intermediate level students. Therefore, they are expected to write longer output including more complex structures, and the orthography and punctuation errors can be neglected during

writing the first draft due to time considerations or limited attention given to punctuation.

The revising strategies utilized by both levels of students are divided into three types for orthography and punctuation errors. These are: a) reference to the correction code sheet when correcting an error, b) correction without using the correction code sheet, and c) consulting the dictionary. Table 18 presents an overview of the strategies employed by elementary and intermediate level learners while dealing with orthography and punctuation errors, and whether the groups employed each strategy or not.

Table 18

Revision Strategies for Orthography and Punctuation Errors

Revising strategy name	Elementary		Intermediate	
	Level	Level Students		Students
	Yes	No	Yes	No
1) Reference to the correction code sheet when	✓		✓	
correcting an error				
2) Consulting the dictionary			~	
3) Correction without using the correction code	•		✓	
sheet				

The students referred to the correction code when they had all kinds of orthography and punctuation errors while they consulted the dictionary only for spelling mistakes. The students corrected some punctuation and capitalization mistakes, which were simply drafting errors, as they were able to explain why they made those mistakes. Moreover, the punctuation mistake ratio of intermediate level

students outnumbered those of elementary level students, but they were able to correct them more frequently than elementary level learners.

Several studies also focused on orthography and punctuation errors. Olsen (1999) found that orthography plays an important role in writing, and many students had problems with English orthography, causing poor writing. The results of this study are consistent with Olsen (1999) as the students had quite a few orthography and punctuation errors. When Agustin Llach (2011) examined the lexical errors of the fourth and sixth grade students to see the improvement in two years, she noted that misspelling was the most frequent lexical error type among the students. However, the findings of the current study do not support the previous research as both levels of students had punctuation mistakes more frequently than spelling mistakes. Agustin Llach (2011) also found a strong relationship between the proficiency level and misspellings. She noted that spelling errors occur "less and less common as proficiency increases" (p. 144). In contrast to her findings, this study showed that intermediate level students had more spelling errors than elementary level learners. Moreover, the results of this study are in agreement with Alonso Alonso and Palacios Martinez's (in Agustin Llach, 2011) findings which showed orthographic errors including punctuation were one of the most frequent error types among Spanish learners of advanced English.

All in all, the students were able to undertake the necessary corrections by using the correction code, and they also employed various revision strategies to do the corrections.

The Students' Perceptions on Using the Error Code

In the light of the analysis of the interviews in accordance with the first and revised drafts of the students, it was found that all the students regardless of their

proficiency levels found correction code use during revision very helpful. This result seems to be consistent with other research which found that the learners prefer coded feedback. For example, Ferris and Roberts (2001) investigated 72 university ESL students' abilities to edit their texts. According to the questionnaire they conducted, the students' most preferred feedback type was marking the error and labeling it with an error code. According to a survey by Oladejo (1993) on error correction, showing the error along with providing cues for self-correction was the most preferred correction type among the students. Similarly, Lim (1990) found that a great deal (61%) of the students prefer the method of indicating errors and providing clues for self-correction. The results of the survey by Liu (2008) also indicated that most students preferred underlining and description of their errors in their writing since "they wanted to know what kind of errors they made" (p. 76).

However, the findings of the current study do not support some of the previous research. Sakallı (2007) found that the preference of the students on the feedback type depends on the level of the learners. According to that study, higher level students utilize implicit feedback more than the learners with a lower proficiency level. This finding differs from the findings presented here, as all the students agreed on the assistance provided by the correction symbols. Similarly, Çağlar (2006) conducted a study to find out how much the students could utilize written feedback types, and found that the students had difficulties in understanding the meaning of the symbols although the teacher provided all the necessary explanations of them beforehand. Altan (1998) also mentioned the problems students had in interpreting the symbols when given coded feedback.

It is somewhat surprising that the students reported that revising with correction symbols saved time for both teachers and students. This result may be explained by the fact that the learners were aware of their mistakes, and they also

could handle the corrections through symbols easily. They also mentioned their awareness of the importance of sample sentences on the correction code sheet. However, some students suggested that the number of these sentences should be increased. To date, previous studies have not mentioned the availability of the sample sentences on correction codes.

The interviews also revealed some problems the students had when using the correction code sheet. The main problems were with: a) the places of the symbols on the correction code sheet, b) the number of the sample sentences, c) dealing with the "unclear" mistake, d) confusion of the symbols. Although previous studies indicated the difficulty of interpreting the symbols, the participants of this study seemed to have only surface-level difficulties. There are several possible explanations for this result. To start with, the participants of this study were familiar with the correction code because they used it at least three times before in their coursework. The second reason can be the availability of the sample sentences including the error in a sentence. When the students see incorrect sentences with correction symbols and see the corrected version of the same sentences, they can easily understand the mistake. Therefore, the students in this study may not have had as many interpreting difficulties.

To conclude, although the students confronted some problems while using error code in the revision process, they were reported to find error code use helpful.

Pedagogical Implications

The findings of this qualitative study show that students from elementary and intermediate proficiency level can utilize indirect feedback through error symbols.

The study also confirms that the students find the use of correction symbols useful in the revision process. These findings suggest a number of significant pedagogical

implications for writing instructors on the local and international foreign language teaching settings.

First of all, students should be trained more on how to interpret the correction code symbols appropriately. Writing instructors can provide feedback through correction symbols on the students' texts more often, and then they may need to discuss the reasons of the mistakes. Furthermore, while collecting the students' verbal data, TAPs, the researcher realized that they made mistakes which were similar to those they had made in their earlier writings. Therefore, it would be worthwhile for the writing instructors to focus on the most common mistakes of the students during teaching writing.

The interview findings suggest that the student-writers had some difficulties using the correction code sheet. The first problem they sometimes had was the location of the symbols on the correction code sheet. As a suggestion from the student who participated in this study, the alphabetical order of the symbols would overcome this problem. The second problem some students had was that only one sentence illustrating the correction symbol was situated on the correction code sheet, and they were prone to correct their mistakes as in the sample sentences. They also had difficulty in dealing with "unclear" sentence errors, for which they have to rewrite their sentence. There is no sample sentence for it on the current correction code, so only the code may not be helpful. Confusion of some symbols should be overcome through more practice. Finally, a single way to overcome these problems can be applying the symbols more often to their texts rather than increasing the number of these sentences on the error code sheet. In this way, they would be more familiar with the symbols and have less difficulty.

Limitations of the Study

This study investigated the revision process of the students on the correction code use through the students' individual TAPS and interviews, and was conducted at the researcher's home institution. As a direct consequence of the data collection methods, the study encountered some time-related limitations, which need to be considered.

The main limitation of the study was the number of participants. The study was conducted with only thirty two students from two different proficiency levels. Since the study design required meeting the students individually and these meetings took a lot of time, the research could not be carried out with more participants. In a different setting with a different sample, different findings and/or more insights into the use of the correction code during revising might reveal.

Another limitation of the study, which was because of the limitation of time again, was that the TAPs were conducted by only the participants since there was not enough time for the researcher to conduct TAPs while coding for each paper. If the teacher (the researcher herself) had conducted her own TAP while applying the correction code symbols on each paper, the research might have revealed different findings.

In addition, the research was confined to one writing task and one revision over a two-week period. Because of time limitations, the researcher conducted individual trainings only once to practice think-aloud method with the participants, and to collect the real data, only one writing task (mock-exam) with the same students. Deeper insights into the revision process might have been revealed by the same study with a longitudinal research design.

Finally, the students were not familiar with the researcher who was not a practicing teacher at the institution conducting the study. It is possible that some students were extrovert while the others were timid and needed regular encouragement during the TAP process. If the researcher were teacher familiar to the participants, the students might have been more extrovert and less timid, allowing the researcher to conduct the study in a relaxed atmosphere where the researcher and participants knew each other well.

Suggestions for Further Research

This research shows that the students from different proficiency levels can utilize correction code symbols in the revision process by employing certain strategies for each error category. Despite these promising results, some questions remain unanswered.

Based on the limitations of the current study, further research with more participants should be undertaken to investigate the responding strategies of the student-writers when interpreting the correction code symbols during the revision process. In order to have a more general view of the students' use of correction symbols, additional studies with more participants will be needed. Similarly, the same procedure can be repeated with more texts with a focus of improving accuracy of students with more than two different proficiency levels. It may help to draw a full picture of the students' attitudes toward indirect coded feedback.

Prospective researchers may also consider replicating the current study with conducting the writing instructors' own TAPs while applying the correction code symbols on each paper. This procedure might provide more insights on the revision process, as this process includes both the writers and the instructors. Therefore, the strategies of the instructor would be revealed.

Another idea for future research could be investigating learner differences and corrective feedback preferences. This study was conducted without taking the students' individual differences into consideration. According to Shintani and Ellis (2015), students who had strong language analytical ability utilized direct feedback and metalinguistic explanation more than those who had weaker abilities. There is abundant room for further progress in determining either language analytical ability or other individual difference factors affect feedback preferences or revision strategies.

Conclusion

This study investigated the real thoughts and practices of tertiary level students from two different levels on using correction code symbols while revising their written output. The research questions aimed to answer 1) how students from different proficiency levels interpret and respond to the correction code symbols on their draft while revising their essay; 2) how useful they find the use of the correction code symbols.

The sample was thirty two tertiary level students having elementary and intermediate proficiency levels to analyze whether there was a significant difference between the levels on interpreting and responding to the correction code symbols while redrafting their papers. After individual training sessions on practicing TAPs, all the students were required to write a paragraph about the same topic similar to the proficiency exam at the end of the year. Following this, the researcher applied coding to the first drafts of the students. The final drafts were written individually in the presence of the researcher while students participated in thinking-aloud. All the verbal data were recorded digitally, and the researcher took some notes during each TAP in order not to miss any non-verbal information.

When the manner in which the students from different proficiency levels interpreted the correction symbols was investigated, the results showed that regardless of their proficiency levels, the students employed certain strategies while interpreting the symbols for different error categories. Moreover, intermediate level participants were able to correct their errors slightly more frequently than elementary level students with the exception of syntactic errors. The data retrieved from the interviews indicated that all the students found using correction code helpful, yet they had some surface-level difficulties.

All in all, the findings of this study denote that the students have positive attitudes toward indirect coded feedback. Therefore, indirect coded feedback can be utilized by foreign language learners regardless of their proficiency levels when they employ certain strategies.

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APPENDICES

Appendix A: Error Correction Code

<u>CODE</u>	<u>MEANING</u>	INCORRECT SENTENCE	CORRECTED SENTENCE
SP	Spelling	SP	He is a tourist.
		He is a turist.	
Λ	Omission	He is going to frightened.	He is going to be frightened.
		٨	
T	Tense	Т	Carol worked in Rome in 2008.
		Carol has worked in Rome in 2008.	
WF	Word Form	WF	He is an ambitious person.
		He is an ambition person.	
VF	Verb Form	VF	I enjoy playing cards.
		I enjoy to play cards.	
S/PL	Singular /	S/PL	He is wearing jeans.
	Plural	He is wearing a jean.	
Ag	Subject-verb	Ag	She comes from Italy.
	Agreement	She come from Italy.	
WW	Wrong Word	WW	I never borrow money from
		I never lend money from	friends.
		friends.	
Р	Punctuation	Р	Is that a good book?
		Is that a good book.	
?	Unclear	(The meaning is unclear.)	Rewrite the sentence.
C/U	Countable /	C/U	I need some information.
	Uncountable	I need some informations.	
/	Not Necessary	We live in the another city.	We live in another city.
AR	Article	AR	Tonight we are having a party.
		Tonight we are having igwedge party.	
PR	Preposition	PR	I need to talk to her.
		I need to talk at her.	
INF	Informal	INF INF	I do not think that is true.
		I don't think that's true.	
WO	Word Order	WO	Some students speak English well.
		Some students speak well English.	

→ ←	Combine Words	→ ← Do (what ever) you want.	Do whatever you want.
< >	Separate Words	← → That (maybe) true.	That may be true.
С	Capitalization	<i>C</i> italy	Italy
R	Repetition	R I know the boy and I like the boy.	I know and like the boy. -OR- I know the boy and like him.
Frag.	Fragment Error	<i>Frag.</i> It a red bicycle.	It is a red bicycle.
RO	Run on Sentence	RO Some people are very friendly, although I don't know her, she waved at me.	Some people are very friendly. Although I don't know her, she waved at me.
A/P	Active / Passive	A / P Hamlet written by Shakespeare.	Hamlet was written by Shakespeare.

Appendix B: Sample First Draft of a Student (St-3)

			5-2
Time Allowed: 30 minutes			3
Name:	Class:	19.03.14	First Draft
A	Elementory 11		
Choose one of the follo	owing topics and write an opinion	paragraph about 100-1	20 words.
a) Some people spend th	eir entire lives in one place. Other	s move a number of time	es
throughout their lives	looking for a better job, house, co	ommunity, or even clima	ute. Which
	in one place or moving in search	of another place? Use re	easons and
specific examples to s	upport your opinion.		
h) Paopla have different	numer of accoming the state of 1 !		
	ways of escaping the stress and dig work in their gardens. What do yo		
	pecific details and examples in you		s oj
_	Regular Life		
T 1,	•	TI	
_ Lunt to	live in one places	s. I think, a	person
chould live a	olore where was	loca loca	. 110
, , , , , , , , , , , , , , , , , , ,	West 2 August 1	s will beca	<u>USE</u>
the person k	nows excepting	around. The	person
INF	JIMI II II III	1- ("
	difficulty in his 1		
I was born	· Telindag so I	not to live in	Terrolani.
	on Telandon very		
Ingadvaded	of Ulday University	T Con col-	+-
	- :	3	3 19
go to lekird	59 and I will live	I like and I	ded.
	netount so I will		
VE	PR . S/PL	100 K-1100	De la
I will towelling	Amother city but	Tyllue in on	2
dare.			
T			

Appendix C: Sample Final (Second) Draft of a Student (St-3)

Time Allowed: 30 minutes			
Name:	Class:	Date: 25.03;	Second Dra
Rewrite your paragraph mak	ing the necessary char	ges.	
	Regular Li	Le	
I ct from I			k, a pers
should live in			
the person kno			
does not ha			
born in letir			
gradute from			
go to Teludas			
Idie. I love			
there I will to	avel to 'ana-	ther cities	blI
will live in or	le place.		
710 311			

Appendix D: Sample Think-Aloud Procedure Transcript Excerpt (Student-3)

Eveet, başlığımızı yazalım. Başlığımızda bir hata yokmuş. "Regular Life". Re-gu-lar li-fe (the student wrote aloud).

"I want to live in one places" (by quickly looking at the codes), burada, Singular / Pl
- Plural hatası var (S/PL). Eee, "I", bir saniye, I – want – to – live – in – one place.

Veya "a place" yazayım daha da doğru olur. A place.

"I think a person should live a place where was born because the person knows everything around" (first he read the whole sentence, then focused on the mistakes). Eee, a person should live'den sonra "pronunciation", "preposition" hatası var (code'a bakmadan "pronunciation" dedi). Eee, I think a person should live in a place (corrected the mistake immediately while writing-aloud). (the sentence was going on) Where, eee, "live in" çünkü böyle bir kalıp bu bildiğim kadarıyla. Bu yüzden "live in" yaptım.

(The previous sentence was going on) where'den sonra - burada bir eksiklik var herhalde. Burada da "where I was born" diye yazıyoruz, özneyi unutmuşum (immediately understood that the subject was missing). "Where I was born" (writing aloud), "because", buralarda hatam yok, "because the person knows, person knows, everything, the person knows everything around". Tamam.

"The person, the person doesn't have difficulty in his life" (first, read the whole sentence). Eee, "doesn't" ta "informal" (INF) (looked at the code sheet) yani "does not" olarak yazmam gerekiyormuş, yanlış yazmışım. "The person does not – does not have difficulty – have difficulty in his life" (writing aloud). Tamam.

Appendix E: Örnek Sesli Düşünme Protokol Transkipti Alıntısı (Öğrenci-3)

All right, let's write our title. There was no mistake with our title. "Regular Life".

Re-gu-lar li-fe (the student wrote aloud).

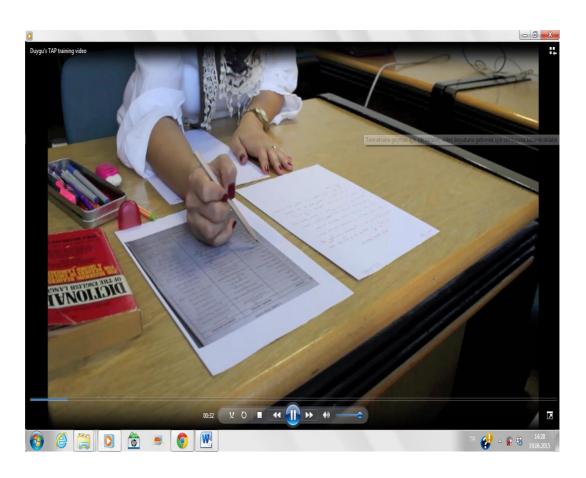
"I want to live in one places" (by quickly looking at the codes), here, there is a "Singular / Pl – Plural" mistake (S/PL). Hmmm, "I", one second, "I – want – to – live – in – one place". Or, I'll write "a place" because it'll be more correct. A place.

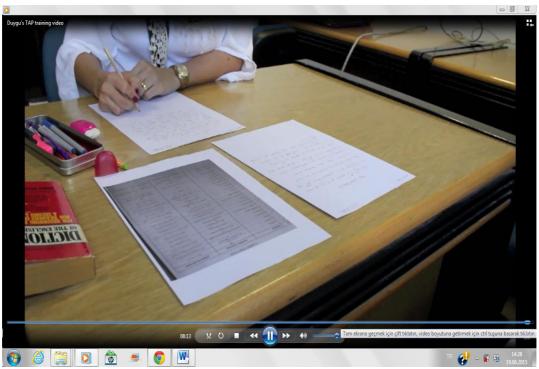
"I think a person should live a place where was born because the person knows everything around" (first he read the whole sentence, then focused on the mistakes). Hmmm, after "a person should live", there is a "pronunciation", "preposition" mistake. (He said "pronunciation" without looking at the code). Hmmm, "I think a person should live in a place" (corrected the mistake immediately while writing-aloud). (The sentence was going on) Where, hmmm, "live in" because it is a grammar rule as much as I know. Therefore, I wrote "live in".

(The previous sentence was going on) after "where" – I think something is missing here. Here, we should write "where I was born", I forgot to write the subject. (he immediately understood that the subject was missing). "Where I was born" (writing aloud), "because", I don't have any mistakes here, "because the person knows, person knows, everything, the person knows everything around". Okay.

"The person, the person doesn't have difficulty in his life" (first, read the whole sentence). Hmmm, at "doesn't" - "informal" (INF) (looked at the code sheet), in other words, I had to write it as "does not", I wrote it wrong. "The person does not – does not have difficulty – have difficulty in his life" (writing aloud). Okay.

Appendix F: Screenshots of the Training Video for TAP





Appendix G: Sample Paragraph for Training Think-Aloud Procedure

Ċ

An important Postcard

Frag. WW

I have a postcard of a beach that in my country. It is a special beach who has bright blue water,

Ag

purple flowers, and white sand. It might looks exotic to some people, but it reminds me of home. I

lived near to the beach, so I went often when I was young. When I received the postcard in the mail, I

T R WO

cry. My friend sent it. My friend knew that I missed the beach. I put the postcard that evening next to

AR

my bed. Four years later, it is still there! I look at it every night. I know I will return to beach one day.