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Department of Foreign Languages Education

Doctor of Philosophy in English Language Education

THE EFFECT OF FLIPPED LEARNING APPROACH ON EFL LEARNERS' WRITING
ACHIEVEMENT

İlknur PAMUK

Ph.D. Dissertation

Ankara, 2023



With leadership, research, innovation, high quality education and change,

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TERS YÜZ ÖĞRENME YAKLAŞIMININ İNGİLİZCEYİ YABANCI DİL OLARAK
ÖĞRENERLERİN YAZMA BAŞARISINA ETKİSİ

İlknur PAMUK

Ph.D. Dissertation

Ankara, 2023

Acceptance and Approval

To the Graduate School of Educational Sciences,

This thesis / dissertation, prepared by **İLKNUR PAMUK** and entitled “The Effect of Flipped Learning Approach on EFL Learners’ Writing Achievement” has been approved as a thesis for the Degree of **Ph.D.** in the **Program of English Language Education** in the **Department of Foreign Languages Education** by the members of the Examining Committee.

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This is to certify that this thesis/dissertation has been approved by the aforementioned examining committee members on 06/02/2023 in accordance with the relevant articles of the Rules and Regulations of Hacettepe University Graduate School of Educational Sciences, and was accepted as a **Ph.D. Dissertation** in the **Program of English Language Education** by the Board of Directors of the Graduate School of Educational Sciences from/...../.....

Prof. Dr. Selahattin GELBAL

Director of Graduate School of Educational Sciences

Abstract

This study aims to explore the effect of flipped learning approach on writing achievement and self-regulation levels in the writing of learners in the Academic Writing Skills course at a state university in Türkiye. The intervention lasted ten weeks within one academic term. Participants were the second-year university students, being classified into two groups: Flipped classroom group as the experimental group (n=25) and traditional classroom group as the control group (=26). In the study, a pre-test and post-test quasi-experimental design was adopted as the groups were not randomly assigned. In the study, the control group was taught by traditionally-instructed L2 writing while the experimental group received flipped instruction in L2 writing. Writing Strategies for Self-regulated Learning Questionnaire was adapted to be used in a new cultural setting (Türkiye), and the data which was obtained from a sample (n=430) was analysed via Confirmatory Factor Analysis (CFA), confirming the prior factor structure. Writing scores and the levels of self-regulated learning strategy use as pre-tests and post-tests were gained. The results of descriptive and inferential statistical analyses indicated that the flipped classroom model favoured the flipped classroom group in terms of higher writing achievement and higher self-regulation levels in writing significantly. Regarding self-regulated learning strategies, the flipped classroom model did not make significant improvement in motivational regulation dimension despite an increase in post-test scores of WSSRLQ. Lastly, the study revealed a positive correlation between writing achievement and self-regulation of writing in the flipped classroom group. Relevant implications are discussed in detail.

Keywords: academic writing, flipped learning, self-regulation, writing achievement

Öz

Bu çalışma, Türkiye'de bir devlet üniversitesinde Akademik Yazma Becerileri dersinde ters yüz öğrenme yaklaşımının öğrencilerin yazma başarısına ve yazma öz düzenleme düzeylerine etkisini araştırmayı amaçlamaktadır. Ters yüz eğitimi bir akademik dönem boyunca on hafta sürmüştür. Katılımcılar, deney grubu olarak ters yüz sınıf grubu (n=25) ve geleneksel sınıf grubu (=26) kontrol grubu olmak üzere iki gruba ayrılan üniversite ikinci sınıf öğrencilerinden oluşmaktadır. Çalışmada gruplar seçkisiz olarak atanmadığı için, ön test ve son test yarı deneysel desen benimsenmiştir. Bu çalışmada, kontrol grubuna geleneksel yolla İngilizce yazma becerileri öğretilirken, deney grubu ters yüz edilmiş İngilizce yazma öğretimi almıştır. Öz Düzenlemeli Öğrenme için Yazma Stratejileri Anketi yeni bir kültürel ortamda (Türkiye) kullanılmak üzere uyarlanmış ve bir örneklemden (n=430) elde edilen veriler, Doğrulayıcı Faktör Analizi (DFA) ile analiz edilerek önceki faktör yapısını doğrulamıştır. Öğrencilerin ön test ve son test olarak yazma puanları ve öz-düzenlemeli öğrenme stratejilerini kullanma düzeyleri elde edilmiştir. Tanımlayıcı ve çıkarımsal istatistiksel analizlerin sonuçları, ters yüz edilmiş sınıf modelinin daha yüksek yazma başarısı ve yazmada daha yüksek öz düzenleme düzeyleri açısından ters yüz edilmiş sınıf grubunu istatistiksel olarak anlamlı şekilde desteklediğini göstermiştir. Öz-düzenlemeli öğrenme stratejileri ile ilgili olarak, ters yüz edilmiş sınıf modeli, WSSRLQ son test puanlarındaki artışa rağmen motivasyonel düzenleme boyutunda anlamlı bir gelişme sağlamamıştır. Son olarak, çalışma, ters yüz sınıf grubunda yazma başarısı ile yazma öz düzenlemesi arasında pozitif bir ilişki olduğunu ortaya koymuştur. İlgili çıkarımlar ayrıntılı olarak tartışılmıştır.

Anahtar sözcükler: akademik yazma, ters yüz öğrenme, öz düzenleme, yazma başarısı

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Symbols and Abbreviations

CEFR: The Common European Framework of Reference for Languages

CFA: Confirmatory Factor Analysis

CFI: Comparative Fit Index

EAP: English for Academic Purposes

EFL: English as a Foreign Language

EMI: English as a Medium of Instruction

ESL: English as a Second Language

ESP: English for Specific Purposes

FLN: Flipped Learning Network

GFI: The Goodness of Fit Index

L2: Second/Foreign Language

NFI: The (Non) Normed Fit Index

RMSEA: The Root Mean Square Error of Approximation

SRL: Self-Regulated Learning

TLI: Tucker-Lewis Index

WSSRLQ: Writing Strategies for Self-Regulated Learning Questionnaire

ZPD: Zone of Proximal Development

Chapter 1

Introduction

The utilization of technology so as to achieve ideally pedagogical goals has recently come into prominence in the field of second language teaching. Present-day technologies have transformed the practices of language teaching and learning in a way that pedagogy, theory, and technology are intricately interwoven (Garrett, 2009).

Bearing in mind that learners in this age are described as digital natives, technology can be conceptualized as affording tools to be integrated into the learning process. To meet the expectations of learners in the digital age, institutions in higher education seem to be supposed to experience a transformation in pursuing the methodologies that go beyond the traditional ways of instruction in order to facilitate the learners' engagement and promote their learning (O'Flaherty & Phillips, 2015). In this sense, flipped learning has gained much importance in recent times with the help of digital technology advancements. Flipped learning approach can be assumed as educational contexts in which some modules, content in particular, are reversed rather than teaching the whole course in classes. Accordingly, class time can be allocated to in-class activities and giving feedback. It is argued that the crucial point in flipped instruction is how teachers best use in-class time with students (Bergmann & Sams, 2012).

Writing in L2 is regarded as a complex skill to be improved as it requires higher demands of cognition, metacognition, and simultaneous processes to be dealt with (Graham, Harris, & McKeown, 2013). Rather than assuming writing as just a literacy skill, in higher education, learners need to improve their writing skills in order to do their university coursework in English-medium departments. Skilled writers are associated with high level of self-regulation and the use of a range of strategies (Graham & Harris, 2000). In this sense, in order to cope with the challenges of academic writing, some technological innovations integrated into traditional teaching methods can enhance learners' self-regulation and performance in L2 writing.

Specifically, students in higher education have challenges and face failure in academic writing courses (Al Mubarak, 2017; Cakir, 2010; Lee & Tajino, 2008; Mwangi, 2017). Faculties and professors expect students who are enrolled in English-medium departments to master English language skills and to expand these skills in order to be accomplished in their majors.

Academic writing is described as a unique style of writing that needs a specific skill to express, interpret, and present knowledge with a specialized way of thinking, mastery of academic conventions, and even some experience. Unfortunately, most of the students cannot deal with the challenges that they have faced when they start to study in their disciplines. In this respect, the niche between the instructions in high schools and universities may hinder students to adapt to the materials in universities as many points seem to be different such as the terms, genres, argument, process, and audience. In addition, a large number of university students do not have a direct and explicit idea of what academic writing is like (Crank, 2012). Dong (1997) states that academic writing consists of a series of new conventions that need to be obeyed. In addition, they may vary according to the audience targeted and the objectives across different contexts. According to Kellogg and Raulerson (2007), teachers should make students aware of the distinctive feature of academic writing at the university level rather than only just teaching them. To be able to write effectively, mechanics of writing such as punctuation, structure, spelling, coherence and cohesion within the paragraph, and organized structure of essays are fundamental, but these are not sufficient. Efficient application of knowledge means the practice of writing by creating the right and suitable settings after the transmission of knowledge.

Zimmerman (2006) suggests a series of steps such as individual effort, attentiveness, and practice to gain mastery in a specific field. Practice matters in teaching writing as it triggers skill development and academic performance. In order to promote practice in writing courses, student-centred teaching is crucial because it facilitates a

learning setting in which students get involved more and take more responsibilities during the learning process. In order for teachers to create such a learning environment, it is essential that they abandon the existing teacher-centred instruction and adopt student-centred approaches.

Zimmerman and Risemberg (1997) state that writing requires more than the knowledge of vocabulary and grammar as it demands high levels of self-regulation. Writing activities are self-planned, self-initiated, self-sustained processes. Writing is more than representing cognitive skills. Zimmerman and Risemberg (1997) state that writing is “a social cognitive process wherein writers must be aware of readers’ expectations and must be willing to devote the personal time and effort necessary to revise text drafts until they communicate effectively” (p. 76).

Considering the fact that technology is an important part of education, a large number of studies show that the use of technology with the approaches based on constructivism, student-centred learning, and feedback contributes to learning outcomes (Amara et al., 2016; Cook et al., 2012; Lai & Bower, 2020; Manathunga & Hernandez-Leo, 2015). In this sense, flipped classroom approach is an option to create educational settings including more student-centred activities and active learning. Flipped classroom makes time in class to apply student-centred tasks fostering collaboration among students (Caudill, 2014). Class time may be utilized for the exercises that enhance interaction through which students can use their newly-learnt concepts with the help of their teacher. In-class activities in flipped classrooms embody features that help to be engaged in and incorporate the material into their own pre-existing knowledge with the assistance of peers and the teacher. In this way, self-regulated language learning can be promoted through student-centred and active learning environment. As a result, rather than being a standard classroom, it may be more participatory, dialogue-based, dynamic, and autonomous for students (Talbert, 2012).

Statement of the Problem

In higher education, academic writing has a key asset with respect to students' own disciplines. Most students in Türkiye, however, experience failure in L2 academic writing. In the dominant way of instruction, learners' engagement matters as few tend to actively participate in teacher-student dialogues, and the rest prefer to take a back seat. Such a traditional method of teaching does not allow teachers to tailor the content in line with students' needs, abilities, and goals. The current situation in L2 academic writing classes can be defined as a sum of low-motivated and unwilling student profiles that have paid little attention to the course and teachers who have no idea of keeping their students motivated and engaged. This sense of unease regarding the quality of students' writing performance has directed research studies to suggest new ways of improving instruction in writing. Technology-integrated classes have become popular in language learning in this sense. With the advent of multimedia classrooms, both teachers and students have become to open to technologically aided education in language learning. Thanks to the facilities that technology provides for both teachers and students, modes of teaching and learning can be aligned with the needs of learners, faculties, educators, and other stakeholders in the field of education.

On the other hand, the existing literature has few studies with regard to improving writing classes within the framework of technology integration (Ahmed, 2016; Ekmekci, 2017; Hidayat & Praseno, 2021; Qader & Yalcin Arslan, 2019). However, they do not focus on students' self-regulatory behaviours in writing, which is an essential attribution as being a skillful writer is positively correlated to a high level of self-regulation with the processes of self-planning, self-initiating, and self-sustaining (Zimmerman & Risemberg, 1997).

In response to these concerns, flipped learning classes can allow teachers to deploy assisting tools via technology in their classes to create an interactive learning environment, and make their learners more engaged and self-regulated in this process.

With the support of the digital tool Edpuzzle, flipped learning classes can be utilized by teachers in a sense that the design of content at learners' own pace and convenience in an interactive way, data to track their progress with analytics and more time for in-class activities are offered. Such a digital tool can provide tailor-made content that will suit learners' needs, interests, and expectations. Moreover, the underlying assumption is that the flipped academic writing classes at the tertiary level can increase students' responsibility for their own learning. Becoming more self-directed in a flipped classroom compared to a traditional classroom environment, students can learn to manage their time working in an online course, developing self-study and autonomous learning skills. In line with these assumptions, the present study aims to explore the effects of the flipped learning approach on learners' self-regulation and achievement in academic writing.

Aim and Significance of the Study

This study is expected to make a significant contribution to the implications and development of teaching writing in EFL classrooms. From the review of the literature searched, few research and studies have reported the effectiveness of flipped learning classes (Basal, 2015; Bauer-Ramazani et al., 2016; Hung, 2015). This review puts an emphasis on the gap regarding how flipped learning approach in L2 contexts, L2 writing in particular, affects learning and provides conclusive outcomes. In addition, no other studies have specifically focused on the influence of flipped learning approach on students' self-regulation processes in writing to date. In this regard, it aims to provide some insights into understanding the effects of flipped learning approach on students' self-regulating processes and their writing achievement in academic writing classes. This study, therefore, can inform both teachers and course designers with respect to the effectiveness of teaching writing with the integration of technology.

Research Questions

This study aimed to investigate the effect of flipped learning approach on writing achievement and writing self-regulation in the Academic Writing Skills course. Thus, this study proposed the following main and sub research questions:

What is the effect of flipped learning approach on EFL learners' writing achievement and self-regulation in writing?

Sub Research Questions

1. Is there a significant difference between the flipped classroom group and the traditional classroom group with regard to writing achievement?
2. Is there a significant difference between the flipped classroom group and the traditional classroom group in terms of self-regulation in writing?
3. Is there a correlation between self-regulation in writing and writing achievement in the flipped classroom group?

Assumptions

It is assumed that all participants respond to all survey questions honestly. Another assumption in the study is that all the participants have not had a flipped classroom experience before. This has been confirmed by the declarations of the participants on the first week of the term.

Lastly, all the participants in the flipped classroom group are assumed that they do their homework as viewing video lessons before coming the class every week.

Limitations

The current study is designed to explore the effect of flipped learning approach on writing achievement and self-regulation in writing. In the flipped class designs, the workload of creating materials, video recordings, and outside quizzes to check students' understanding are considerable to deal with for teachers; thus, before the designation of a flipped class, an L2 writing course in particular, requires well-planned time schedule to make curriculum and decide on the flipped and in-class content. Thus, a group of teachers can work collaboratively when planning a flipped class model.

Another limitation of the study as in other research is the sample size, which affects the determination of whether an obtained result from the data is true or not. For example, students in the study improved their motivational regulation levels in writing; but this improvement is not statistically significant. However, if the study is conducted with more participants, the result may be evaluated more objectively.

Definitions

Academic Writing: “Is designed for anybody who is studying (or planning to study) at English-medium colleges and universities and has to write essays and other assignments for exams or coursework. On top of the complexity of the vocabulary of academic English they have to learn a series of conventions in style, referencing and organization” (Bailey, 2003, p. 1).

“Academic Writing involves learning a new set of academic rules and learning how to play by these rules. Often these rules change from discipline to discipline, and the audience and the purpose of writing vary according to each writing context. For non-native students, the mismatch of writing difficulties and expectations operating in their home countries compound their writing difficulties” (Dong, 1997, p. 10).

English as a Medium of Instruction (EMI): “The use of the English language to teach academic subjects (other than the English course itself) in countries where the majority of the population’s first language is not English” (Dearden, 2015, p. 2).

Flipped Learning Approach: “A pedagogical approach in which direct instruction moves from the group learning space to the individual learning space, and the resulting group space is transformed into a dynamic, interactive learning environment where the educator guides students as they apply concepts and engage creatively in the subject matter” (Flipped Learning Network [FLN], 2014).

In addition to the definition above, Bishop and Verleger (2013, p. 5) provide a broader perspective based on the recent applications in classes as in the following: “interactive group learning activities inside the classroom, and direct computer-based individual instruction outside the classroom”.

Flipped Instruction: “At home, students watch online lectures, while class time is spent on...processing activities. The teacher, freed from front-of-class lecturing, works more intensively with individuals and groups of students.” (Carpenter & Pease, 2012, p. 37).

Traditional Instruction: “A traditional classroom is an educational place where the teacher delivers knowledge to the students in person without any third-party medium” (Teachmint, n.d.).

Self-Regulation: “The self-directive process through which learners transform their mental abilities into task-related skills” (Zimmerman, 2002, p. 65).

Self-regulation is “a multidimensional construct, including cognitive, metacognitive, motivational, behavioral, and environmental processes that learners can apply to enhance academic achievement” in different learning contexts” (Dornyei, 2005, p. 101).

Self-Regulated Learning: “A proactive process that students use to acquire academic skill, such as setting goals, selecting and deploying strategies, and self-monitoring one’s effectiveness, rather than as a reactive event that happens to students due to impersonal forces” (Zimmerman, 2008, pp. 166-167).

Self-regulated learning is “an active, constructive process whereby learners set goals for their learning and then attempt to monitor, regulate, and control their cognition, motivation, and behaviour, guided and constrained by their goals and the contextual features in the environment” (Pintrich, 2000, p. 453).

Chapter 2

Theoretical Basis of Research and Literature Review

This chapter presents a survey of the relevant research studies and theoretical background for second language writing, academic writing, flipped learning approach, and self-regulation in writing. The chapter begins with the theoretical background of second language writing and continues with the definition of academic writing. Narrowing the topic toward technology-integrated learning environments, flipped classroom approach is described within a framework of various theoretical backgrounds. Afterwards, self-regulation in writing with sub-dimensions is elaborated in relation to the flipped learning approach. The chapter includes a summary at the end.

Theories in Second Language Writing

Second language writing (hereafter called L2 writing) is a challenging skill to be acquired as it constitutes a range of mosaics of different skills in linguistic, cognitive, and sociocultural domains; the synchronic occurring of the competencies that students need to have when writing makes it complex to develop as well. Teachers of writing conceptualize, make curriculum, and teach in classroom settings. Practical implications provide valuable insights into teaching L2 writing; however, it is vital to ground the arrangements on theories and orientations. This way, teachers act more robustly in their classrooms and reflect upon what they have observed and experimented with in classes. Based on the assumption of the multifaceted nature of it and the different purposes for which people deal with it, L2 writing does not have a single theory; however, several approaches and orientations have been suggested from the beginning of the emergence of second language teaching in the 1970s (Silva, 1990). Hence, it would be misguidance to assume that each theory emerged, and was replaced with the new coming one. Each theory seems to be complementary in a way that it supplies what and how students learn to write and teachers need to teach effectively (Hyland, 2019).

During the earlier period of the 20th century, L2 writing was dominated by audio-lingual method under the structural linguistics and behaviourist learning theories (Silva, 1990). The approach to second language writing was controlled or guided composition which took the form of the audio-lingual method with a focus on habit formation, formal accuracy, and correctness. In this sense, writing was not viewed as a major skill, but as a means for individuals to practice the language. For scholars adopting this approach, writing stood for an extension of grammar in which manipulating vocabulary and structure led to a writing practice. Learning to write meant having the ability to use grammatical structures accurately, appropriate vocabulary choices, and cohesive devices resulting in well-formed sentences. Writing practice was to imitate the models provided by the teachers by using fixed patterns in the sentences. Writing was practiced with the guided composition samples by gap-fill exercises and completing sentences, in which the emphasis was on accuracy. In teaching writing based on language structure, a four-stage process is followed:

1. Familiarization: Learners are taught certain grammar and vocabulary, usually through close reading of a text.
2. Controlled writing: Learners manipulate fixed patterns, often from substitution tables.
3. Guided writing: Learners imitate model texts.
4. Free writing: Learners use the patterns they have acquired to write an essay, letter, etc. (Hyland, 2019, p. 4)

Until the 1970s, the teaching of L2 writing was mostly centred on features of the L2 texts. These included orthography, sentence-level and discourse-level structure, and the effect of L1 on L2 writing (Matsuda, 2003). However, As Hyland (2019) asserts, a structural orientation in L2 writing can lead to some concerns about the way that students may not be able to produce their own texts creatively and misguide them if they have to

write in real contexts. Such an orientation may prevent the relationship between a writer and reader, and ignore the existence of contexts.

Accuracy is not the only assessment through which teachers evaluate their students in writing; teachers report that their students who show perfect ability in accuracy while writing their texts do not necessarily have good writing skills. It is because they may be restricted in producing creative and genuine texts as they do not take any risks in order not to make errors (Hyland, 2019). In addition, while writing, writers mainly aim to communicate the intended meanings to their readers rather than being accurate and explicit. They also decide on what they would say and how they would say these messages in different genres based on the various relationships established and meanings.

As a reaction to the audio-lingual method in ESL classrooms, the needs of the students for whom English was not their first language became a major basis in the 1960s; as a result, new orientation called as contrastive rhetoric by Robert Kaplan in 1966 was required (Panetta, 2001). Kaplan (2001) describes contrastive rhetoric based on the Sapir-Whorf hypothesis of linguistic relativity as the organization of written texts depending on the culture which writers belong to, and states that two writers whose first languages are different from each other express the same reality in different written ways. From that perspective, the focus was on the product rather than the process and usage; and style and form were taken into consideration.

In the late 1970s and 1980s, the attention of researchers and teachers started to change from textual traits to the process of writing. Supporters of process approach to writing claim that contrastive rhetoric orientation focuses on the product only, which ignores the context from which the learners of L2 writing turn out and the processes they have undergone to create their texts (Leki, 1991). They also define it as prescriptive as it proposes a fixed pattern to be followed; and it leads writers to imitate well-written texts.

The process approach to L2 studies was introduced by Vivian Zamel in 1976, claiming that L2 writing followed the same process as L1 writing; thus, similar instruction can be applied in L2 teaching contexts. In the process approach to L2 writing, writing is viewed as a skill in which a number of processes are included, and organization and meaning gain importance rather than imitating of syntactic and discourse structures. Moreover, drafts and feedback by teachers and peers are important elements of process approach to L2 writing (Matsuda, 2003). As Stanley asserts (1992), writing within the framework of the process approach needs to follow some steps to be taken as a creative act with more time and feedback. In addition, in the process approach to writing instruction, students go through a cycle including drafting, editing, and revision with an emphasis on student-teacher and student-student interactions (Jacobs, 1987). According to Flower and Hayes (1981), process writing theory is based on four key elements as follows:

1. The process of writing is best understood as a set of distinctive thinking processes which writers orchestrate or organize during the act of composing.
2. These processes have a hierarchical, highly embedded organization in which any given process can be embedded within any other.
3. The act of composing itself is a goal-directed thinking process, guided by the writer's own growing network of goals.
4. Writers create their own goals in two key ways: by generating both high-level goals and supporting sub-goals which embody the writer's developing sense of purpose, and then, at times, by changing major goals or even establishing entirely new ones based on what has been learned in the act of writing. (p. 366)

The process approach is aligned with the cognitive models of composing. This approach views the writer as an independent producer of the text and focuses on what teachers should do to help writers improve their writing skills. It also emphasizes the basic processes of writing to follow, during which students should develop their abilities to plan,

define a problem and propose a solution to it (Hyland, 2019). The most common processes taught by writing teachers in L2 are planning, writing, and reviewing the scheme, which is non-linear, recursive, and interactive during the writing action. In fact, writers act while writing in an exploratory and generative way in which they repetitively regenerate new ideas, add on new ones, review the previous ones, and rewrite them after receiving feedback (Hyland, 2019).

Flower (1994) proposed that a basic model of process writing could have been developed with social factors. Scardamalia and Bereiter (1987) stated that two process models of knowledge-telling and knowledge-transforming were required to explain the differences between novice and skilled writers. Novice writers are more concerned with generating content and so fewer plan-makers, fewer revisers, and fewer goals are set, and the skilled ones are better at analysing texts, reflecting on the writing tasks, and setting more goals. It highlights the necessity of dealing with more challenging tasks, feedback, and revision in the course of writing for students.

Raimes (1992) emphasizes that the role of teachers in the cognitive models of composing is to help learners to develop cognitive and meta-cognitive strategies to plan, write, and review without focusing on the form. This is performed through the pre-writing activities allowing to generate ideas about relevant content or structure, brainstorming and outlining activities, drafts, feedback sessions, peer learning, and no form-based corrections till the final product has been completed. In-class implementations and activities have been performed to effectively apply process writing approach into learning environments like the use of portfolios, student-teacher feedback sessions, class or group discussions, and problem-based projects.

Despite the widely used approach to teaching writing in L2 settings and the existence of the studies documenting the effectiveness of cognitive strategies to develop L2 writing skills, some are concerned with the fact that it is impossible to explain how students learn to write by examining only psychological factors. Beyond the processes the

students go through while writing, other factors that affect their choices or how they pass from the cognitive phase to the knowledge-transforming model (Hyland, 2019). Cumming (2016) states that an approach to L2 writing should not be only in experimental or exam-type settings; but also, its development in natural and social written communication contexts should be examined from an outsider's perspective. He also claims that studies based on natural written communication settings have been conducted and found out that people exhibited multi-competence in writing.

As a counter-to-process approach, some scholars have intended to define second language writing in the post-process era (Atkinson, 2003). Post-process approach is the result of the social turn from the cognitive aspect into sociocultural practices. According to Atkinson (2003), the cognitive approach to L2 writing is asocial as it regards the students individualistically and writing as an internal process where the self is being uncovered. This orientation ignores the learners' relationship with their social environments. In this sense, post-process orientations view L2 writing as a socially-situated activity and highlight the importance of socialization into values, genres, and forms of the target community (Barkaoui, 2007). Literacy as an ideological arena has been central to researchers as reading and writing are actively and socially built within a relationship between society, culture, and writers themselves.

Grounded on the Dell Hymes in linguistics and Lev Vygotsky in psychology, Swales (1990) and others have proposed more social orientations to writing based on interpersonal and socially constructed practices. This kind of interest has led scholars to a new approach viewing writing as a process of socialization into specific groups or communities. One alternative to process writing teaching based on the analysis of language use patterns and thoughts peculiar to specific disciplines is the genre approach (Hyland, 2019). With genre approach, new courses like English for Specific Purposes (ESP) and English for Academic Purposes (EAP) emerged. Wide popularity has been gained by genre theories in ESP courses and teaching writing; however, some critics have

been suggested by scholars. Genre practices can only be understood through writing activities by specialized communities and for specific knowledge and purposes; and thus, in writing classes, this may not be achieved properly or be misinterpreted. Moreover, genre approaches may urge students to learn fixed patterns or expressions of language and write in accordance with the conventions genres require them to use (Cumming, 2016). The last limitation of genre approaches to L2 writing is that it does not comprehensively explain learning and development based on a psychological theory of learning.

Regarding the limitations of genre theories to explain L2 writing, the sociocultural theory of learning, which referred to a set of theories explicating how the human brain and abilities developed through culturally mediating tools and concepts, was proposed (Cumming, 2016). The sociocultural theory has been adopted by scholars as the ability to write does not take place due to only cognitive processes. In addition, learning occurs in a socialized communication with others. Their social and cultural surroundings affect learning. Cumming (2016) suggests “Languages and literacies are considered to be primary mediating tools through which people communicate, socialize, think, learn, and develop via ongoing, routine uses, and practices with other people via artifacts that are both symbolic (e.g., words, patterns of interaction) and material (e.g., printed texts or computers)” (pp. 75-76). He adds that sociocultural theories center on the collaborative environment between the students and the teacher, and between the students and students, not in the way of individual-focus by cognitive approaches, and analysis of text structures and functions by contrastive rhetoric and genre theories. In sociocultural approaches, people learn by means of interaction and collaboration with others, emphasising learning from experience and culture.

As Lantolf and Pavlenko (1995) assert, human psychological processes are arranged through three cultural elements: activities, artifacts, and concepts. These cultural elements mediate the relationships between people, people and the world, people and their inner world. The activities include education, work, play, legal and medical systems

whereas artifacts refer to books, use of physical tools, computers, technologies, language, diagrams, charts, music, and art. The concepts contain realizations that people build cultural, social, physical, and mental worlds.

The focal point in the sociocultural theory is mediation (Cumming, 2016). Higher order thinking processes such as reasoning and problem-solving are mediated through cultural tools called as symbolic and material in social practices. From Vygotsky's perspective, physical tools help people develop their physical abilities; in a similar way, mental tools mediate people to extend their mental abilities. This process takes place within Zone of Proximal Development called as ZPD, which indicates the distance between the actual ability of learners and potential ability of learners when supported by more knowledgeable others, as a route from socially constructed learning to the individual capability (Cumming, 2016).

Sociocultural theories in the post-process era accounting for L2 writing have been a prevailing premise among the researchers. Especially in oral abilities, many research and studies have been conducted; in L2 writing research, longitudinal studies have been performed with a few learners in more natural settings and instructional contexts. These types of studies have been designed in genetic method, which requires more detailed investigation of certain language development, literacy, talk, and so forth through interactions. Implementations of sociocultural theory in L2 writing have mainly been detailed examinations which ascribe the occasions for L2 writing in the course of one-to-one and collaborative interactions (Cumming, 2016).

In conclusion, theories and research in second language writing have addressed different aspects of writing concerning what students need in order to have a proficiency in writing skills. As Atkinson (2003) states, the aim is not to replace the previous approaches to L2 writing with the post-process orientations by articulating the term of post-process. Rather, the field of L2 writing is multifaceted and constructed by various factors which are interwoven within social, cultural, and individual concerns. The objective is to

bring the field of L2 writing beyond a set of traditional visions that centre on the drafts, feedback, editing, accuracy, and so on.

An outstanding development has taken place in the field of L2 learning and L2 writing recently; and several orientations in L2 writing have contributed to the L2 research. However, no one approach to L2 writing can account for L2 writing comprehensively and extensively in the way of conceptualizing of L2 within the involvement of readers, writers, contexts, texts, and their mutual interactions (Silva, 1990). As Hyland (2019) summarizes, each piece of writing can be individual, collaborative, social, and interactive as it is constructed in cultural and social contexts for certain purposes, and mirrors a type of relationship set between parties. In this manner, L2 writing is not refined into a set of cognitive or technical skills of composing, systematic patterns, discourse, or contextual aspects.

In classroom settings, teachers make use of different approaches or mix up them according to the curriculum and learner needs. Concerning the orientations of L2 writing, Hyland (2019) suggests five elements students bring to class to produce their writing. They are knowledge of content, system, process, genre, and context. Students need to know about what to write about; grammar, vocabulary and conventions; how to plan and write a task; socially recognized texts, the addressed readers and expectations. Considering all these points, he emphasizes the importance of the act of writing as a non-linear and goal-driven process in which students can utilize various strategies to plan, write, and revise their texts. In addition, writing is a part of social practices such as genres; and thus, teachers can introduce different forms of writing to students so that they can recognize their social functions and purposes. Keeping writing as a communicative activity in mind, teachers can create meaningful contexts wherein the act of writing is a response to others or other texts.

Lastly, theories inform the practical classroom implementations; however, to understand the classroom implications of the theories discussed, observing the whole process including prior to the implementations, during the process, and post-implementations may give better insights into evaluating the results of the research in terms of the effectiveness of the approaches on the development and achievements in L2 writing.

Academic Writing

Academic writing is an essential skill for students as they are compulsory to master it in order to achieve their academic goals in their majors. In a higher education setting, it turns out to be more specialized since it has its own codes and conventions regarding the audience, purpose, messages, genres, and so on. In Ballard's opinion (1984), success comes from students' understanding of writing conventions in universities and disciplines which they are involved in as well as their language proficiency. Students' written assignments determine their success mostly though they are educated in their fields of study through such mediation tools as lectures, readings, and discussions.

As Murray and Moore (2006) assert, writing for academia is not a simple, linear, and homogenous process; but it is defined as an iterative dynamism in which ebbs and flows and going back and going further take place. In this sense, it represents a journey of a person that undertakes in their professional learning and continuous series of actions including progress, revision, reflection, and achievement of different types through various assessments. Murray and Moore (2006) highlight that academic writing is more than printed versions of thoughts and opinions in one's mind. Indeed, it begins with fragmented ideas and opinions at first, and later, it is shaped with revising, revisiting, experimenting, repeating, and reconceptualizing the prior ideas. By concentrating on the phases and processes of academic writing, students can gain beneficial learning experiences on the route of writing as well as a completed final product.

One of the key points related to academic writing is its iterative nature with the phases of progression and regression. Moving back and forth, academic writing occurs in a repetitive process in which writers write a sentence and read it with the previous sentence. If it is necessary, they omit one or two words and then move on the next sentence until all the conditions such as coherence, cohesion, and unity are fulfilled (Murray & Moore, 2006). When students become aware of the iteration in academic writing, they can predict what they will come across as they are writing, and this may help them develop some learning strategies.

Bailey (2003) defines academic writing as follows: "is designed for anybody who is studying (or planning to study) at English-medium colleges and universities and has to write essays and other assignments for exams or coursework. On top of the complexity of the vocabulary of academic English they have to learn a series of conventions in style, referencing and organization" (p. 1). Irvin (2010) states that writing in college is specialized writing, and it has certain codes, rules and conventions that writers need to realize if they aim to achieve success at academic writing skills. He adds that writing assignments can be called as literacy tasks in college as they look like more than writing correct sentences or producing a certain number of paragraphs with their topic and supporting sentences. They are more related to the ability to read higher-level texts, analyse, synthesize, critically react to as a timed task. In addition, writing is not just the act of writing, but it is a kind of consideration that involves careful elaboration, critical approach, well support, and logical presentation.

Academic writing draws upon reading strategies involving differentiation of fact and opinion, inference, questioning, identification of biases, and assumptions (Irvin, 2010). Apart from high-school writing based on experiences mostly, academic writing requires student writers to do research and attain new information about the assigned topics in various disciplines. After access to new information, what it takes is to analyse and synthesise it. This contains breaking the information apart and evaluating it from different

aspects, and then make relationships of cause-effect, compare-contrast, and presenting a definition or process for the purpose of creating new information. Although these skills are vital to academic writing, most student writers find organizing their thinking and developing their own thoughts on the issues quite challenging about academic writing.

Analysing is one of the hardest forms of thinking as the students consider the ideas critically and develop arguments without any biases (Greetham, 2022). Based on critical thinking, analysing means questioning of everything students read; that's to say, assumptions, beliefs, facts, opinions, and arguments are critically evaluated with the evidence and reasoning. To some students, this skill may be unfamiliar because their prior learning environments and instructions may not allow such practices to be applied in the classes. The following step is related to synthesising which helps students develop a critical response by choosing the relevant ideas and point of views and placing them on a meaningful pattern (Hopkins & Reid, 2018).

According to Irvin (2010), academic writing is an argument, in which two parties can defend their own point of views with sufficient evidence and well-organized supporting points. The aim is not to win in a competitive environment; rather, it is more related to present both opposing viewpoints in an egalitarian way.

Flipped Learning Approach

Flipped learning is one of the most cutting-edge approaches that have emerged within the intersection of technology and education. Based on two academicians with a flash of insight tutoring in the field of chemistry, this method has caught on swiftly in educational settings (Bergmann & Sams, 2012). Simply put, flipped learning can be viewed as a teaching model in which instructional videos are studied by students outside the classroom, and students get involved in assignments and interractional activities in a class setting. While the time for recognition and transmission of the knowledge is allocated before a class at students' own pace and schedule, discussions, hands-on activities, and

problem-solving tasks that allow them to get involved in actively are employed during the in-class period. In this sense, flipped learning makes it possible to develop higher-order skills according to Bloom's taxonomy as students engage in activities that require problem solving, analysing, and synthesising (Loveys & Riggs, 2019).

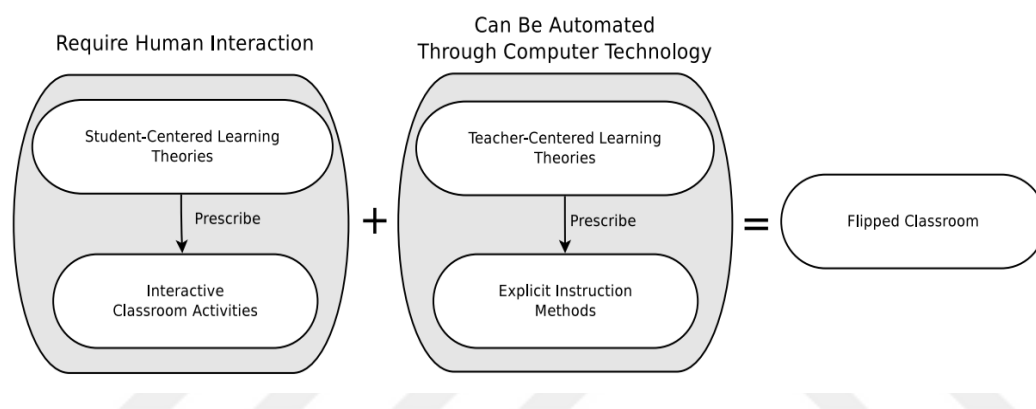
According to Flipped Learning Network (2014), flipped learning is based on an instruction shifting away from group learning space to individual learning space, leading to a more dynamic, interactive learning setting guided by a teacher in the role of facilitator and guide. Thus, flipping a class by having students read a text outside the class, see instructional videos and do problem-solving tasks does not always mean flipped learning; there are four pillars to be put into practice regarding the application of flipped learning: flexible environment, learning culture, intentional content, and professional educator. In flipped learning, a flexible learning environment is to be arranged in terms of where and when students learn. Moreover, different learning modes should be facilitated as group work or individual study. The second pillar is learning content. In traditionally-instructed classes, teachers are the main sources of knowledge; however, flipped learning models adopt a learner-centred approach to learning, which relies upon constructivist learning theory that promotes the vital role of learners in constructing knowledge from new content and previous experiences. In terms of intentional content, flipped learning allows teachers to create relevant content which matches students' needs and what they should learn outside the class. Furthermore, they should be able to use in-class time for learner-centred activities and active learning tasks with a well-designed curriculum. Lastly, in flipped learning, teachers as professional educators monitor students' work, give relevant feedback, and evaluate their work. They also collaboratively work with each other to revise the content after constructive feedback.

Lage et al. (2000) define the flipped classroom briefly as follows: "Inverting the classroom means that events that have traditionally taken place inside the classroom now take place outside the classroom and vice versa" (p. 32). On the other hand, Bishop and

Verleger (2013) assert that this definition does not comprehensively incorporate the way through which researchers specify the flipped classroom, and suggest a much broader definition with respect to the flipped classroom as follows: “interactive group learning activities inside the classroom, and direct computer-based individual instruction outside the classroom” (p. 5). Bishop and Verleger (2013) describe a flipped classroom model in the following representation:

Figure 1

A Graphic Representation of a Flipped Classroom Model



Note. This model is produced by Bishop and Verleger, 2013, summarizing a flipped class model.

From “The flipped classroom: A survey of the research”, by J. Bishop and M.A. Verleger, 2013, *American Society for Engineering Education (ASEE) Annual Conference & Exposition*, 30(9), p. 6. Copyright 2013, by ASEE.

While defining flipped learning approach, viewing it only as inverting teaching and learning processes can be restricting; thus, a comprehensive definition grounded upon a pedagogical framework can be more structured and systematic (Jenkins et al., 2017). Otherwise, teachers may not fully conceptualize how efficiently to apply flipped class models into traditional classes, and the fundamental components of flipped learning approach in practice. Jenkins et al. (2017) propose Goodyear’s pedagogical framework consisting of four layers as pedagogical philosophy, high-level pedagogy, pedagogical strategies, and pedagogical tactics. The following shows the hierarchical relations within a pedagogical framework (Goodyear, 2005):

- pedagogical philosophy (how we think people learn, what knowledge consists of, how we think people should be treated, etc.)
- high-level pedagogy (broad approaches such as problem-based learning, cognitive apprenticeship, collaborative knowledge building)
- pedagogical strategy (e.g. the use of an online debate)
- pedagogical tactics (the detailed methods we use to set tasks for students, encourage their participation, offer guidance and feedback, etc.) (p. 86)

As shown above, philosophy and high-level pedagogy offer more extensive objectives rather than providing “prescriptions for action” (Goodyear, 2005, p. 87). In flipped learning, these objectives should be to foster the interaction between teachers and students during in-class time, and facilitate a community of learners in which students assist each other.

Kolb’s model of Experiential Learning (1984) refers to an appropriate high-level pedagogy which addresses the active learning as an element of the flipped learning model. Dewey’s (1916) and Lipman’s (2003) theoretical approaches include a notion of community of learners through democratic education, and the Community of Inquiry Model (Garrison et al., 2001) represents a process of socialised learning and shared meaning-making in online learning. Student active engagement, high-order thinking skills, and self-learning skills are promoted through high-level pedagogies (Jenkins et al., 2017). In terms of tactics, identifying, pursuing, producing, and authoring are the four categories within which flipped learning approach is situated. A highly structured learning environment is present within the category of identifying, and this design is characterized by both outside and inside the class. Outside the class includes video or audio contents, online or paper-based readings, forms of quizzes to check the comprehension and discussion forums with the teacher. Inside the class refers to teacher-led discussions, sheets, activities, personal response systems as a game approach through which students actively engage in the activities by using remote or clickers in order to answer the questions asked by teachers

in classes, and providing immediate feedback to teachers and students. In this design, outside the class activities and contents address lower levels of Structure of Observed Learning Outcomes (SOLO) and Bloom's taxonomy as audio lectures are provided for the students to learn the information and embedded questions into these videos or a form of quizzes are prepared to monitor their understanding and track their view of videos (Jenkins et al., 2017). In-class activities are designed in order to get students to be engaged in deep structured learning which integrates higher levels of SOLO and Bloom's taxonomy through problem-solving tasks, think-pair-share activities, and using classroom response systems like Kahoot and Socrative.

Pursuing information actively shows a great amount of learner presence. Social interactions based on student-student and teacher-student are facilitated. Self-regulation, goal-setting, and monitoring are promoted by increasing student presence. An outside class setting allows students to regulate their own learning through studying the content and searching for sources themselves if needed. The main design objective of the flipped class approach here is to increase self-regulation and co-regulation of the students. This form of design in flipped class approaches can vary from student-led activities to group-led ones depending on the types of tasks. In this sense, a video recording prepared by students for the teacher for online feedback can be an example of the student presence, which facilitates students to self-regulate, set a goal and monitor their progress (Jenkins et al., 2017).

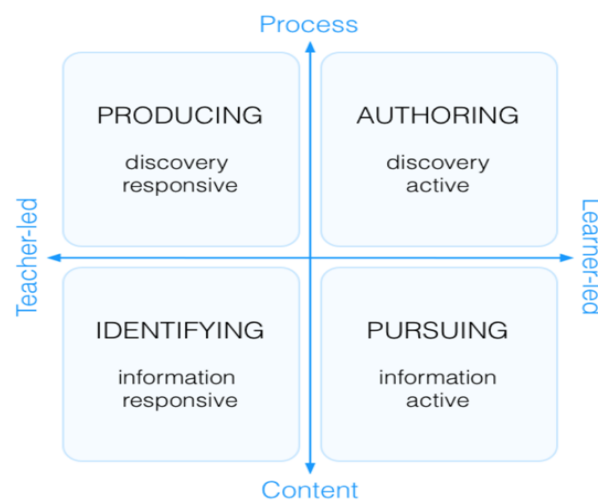
Producing category related to discovery responsive defines a process in which teacher presence is dominant in a highly structured learning setting. Student goal setting and reflective learning are addressed with teacher-facilitated group work. Jenkins et al. (2017) propose outside class activities include student presentation based on teacher defined criteria. Inside class tasks contain case-based activities, presentation, teacher feedback, and revision of student work. Teacher's providing flipped material prior to in-class meetings and expecting students' responding to the comprehension check questions

related to the material can address producing category in a flipped learning approach. Online questions prepared by the teacher and students' responses to these questions can be posted on online forums. The teacher can provide feedback to the students' online posts, and students can experience peer-to-peer evaluation for each other's posts.

In authoring category, learner autonomy and learning process are centred on within the framework of a flipped class approach. In this design, student-student interactions and scaffolding are primary objectives with the facilitating and guiding role of the teacher. Outside class can include creating resources and project work while in-class activities can refer to student-led discussions, peer feedback sessions, and project-based tasks facilitated by the teacher (Jenkins et al., 2017). Students are treated like collaborators when producing knowledge and gaining the sense of autonomy in the process of learning. To understand the categorization of flipped approaches across two continua, Figure 2 below can be examined as a matrix which is an adaptation of Levy et al. (2010) as an inquiry-based matrix:

Figure 2

Flipped Learning Matrix



Note. From “Enhancing the design and analysis of flipped learning strategies”, by M. Jenkins et al., 2017, *Teaching & Learning Inquiry*, 5(1). p.5.

<http://dx.doi.org/10.20343/teachlearninqu.5.1.6>. CC-BY-NC

Theoretical Frameworks for Flipped Learning

There are several theories that relate to flipped learning and may explain the theoretical underpinnings for it. Bloom's Taxonomy is among them, which describes various levels of learning with a pyramid. Bloom (1956) and his collaborators categorised learning into different stages including knowledge, comprehension, application, analysis, synthesis, and evaluation. A group of experts in various fields related to teaching revised the taxonomy with the new verbs and gerunds that sounded like action words. As a result, a more dynamic aspect in classifying the cognitive processes of dealing with knowledge has been aimed. These words include remember (recognizing and recalling), understand (interpreting, exemplifying, classifying, summarizing, inferring, comparing, explaining), apply (executing, implementing), analyse (differentiating, organizing, attributing), evaluate (checking, critiquing), and create (generating, planning, producing) (Anderson & Krathwohl, 2001). In the course of transmission of the information, lower level of learning occurs as a basis of learning; in flipped learning, it corresponds the work done outside the class or at home independently. A teacher delivers the content, video-recorded materials in particular, to the students online and expect them to study and learn the content by themselves before coming the class. Called as home-individual process, it requires new content or material to be reached and to be worked on by students who master terms and concepts in their own time and at a pace outside the class environment. After applying stage, analysing, evaluating, and creating levels of learning are conducted by students and teachers in-class settings with active learning tasks, hand-on activities, interactive discussions, and problem-solving tasks. On the other hand, traditional classroom models are designed like a setting in which home-individual process is done by students who complete their homework on the analysing, evaluating, and creating levels. In-class sessions, teachers deliver the content to the students who are instructed by the teacher during the process.

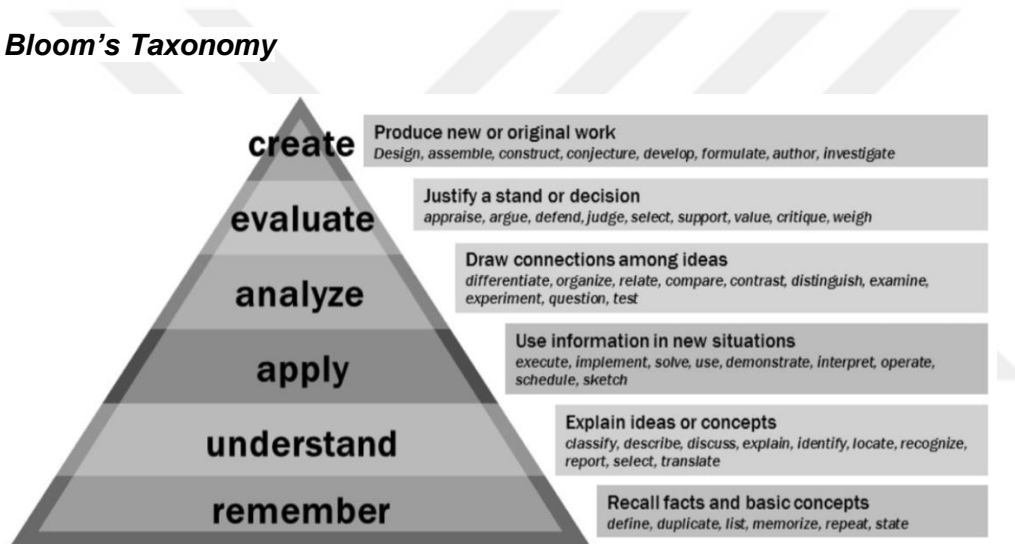
Regarding the implementation of thinking skills into learning process, teachers become aware of developing critical skills in students with an appropriate curriculum and content development. Klimova (2013) states that thinking skills are fundamental for learning how to learn. Li (2018) asserts that cognition and language development are closely interconnected to each other, and theorists, educators, and researchers are aware of this fact. Especially developing thinking skills may extensively enhance higher level of language development. Recent research and studies have mainly focused on thinking skills in various ways such as metacognition in L2 reading and writing skills, developing creative and critical thinking skills in L2 contexts, and self-regulation skills of L2 learners. Teaching thinking skills may vary across contexts; however, metacognition and critical thinking are the most popular areas of investigation. As Li (2018) claims, in second language acquisition, the existing research has shown that learners mainly get in charge of learning a second language while teachers play a vital role in guiding and facilitating this process. On the other hand, the process requires students to do more than remembering and recalling the knowledge as basic levels of learning. Analysis, synthesis and evaluation of the content with a critical and creative approach are essential high order thinking skills in order to internalise the language.

Regarding the higher thinking skills, some questions remain unanswered but focused on such as what higher-order thinking skills learners need to master for the purpose of regulating and progressing their learning; how teachers can create a learning setting in order to promote students' acquisition of higher levels of thinking; and whether there are methodological and instructional tools, methods, techniques that help teachers to improve these skills of the students. In this sense, the flipped classroom model can facilitate students' higher-order thinking skills during in-class sessions as it frees up the class time for activities that encourage students to analyse, synthesise, and evaluate the learning materials with hands-on and more interactive tasks such as idea generation, making an outline, critical thinking, essay writing, and monitoring the progress.

Harris et al. (2016) state that teachers and researchers have always investigated the ways of effective teaching and learning including motivating learners and making them critical thinkers. In addition, faculties hope students to master the content of the courses, and teachers make necessary adjustment to align the curriculum with the students' needs so that they can analyse, synthesise, create, and evaluate the materials (Clark, 2015). In this sense, Enciso (2021) states that flipped classroom models potentially make a contribution to developing learner autonomy and creative thinking skills as they have a cognitive basis grounded upon Bloom's Taxonomy.

Figure 3

Bloom's Taxonomy



Note. From Bloom's Taxonomy, Vanderbilt University Centre for Teaching, by P. Anderson, 1990.

CC-BY-NC.

Besides Bloom's Taxonomy to situate the flipped learning approach in a theoretical framework, Bishop and Verleger (2013) discuss some other theoretical orientations regarding as a guide to designate in-class activities to get flipped learning approach to be grounded upon. Collaborative learning, cooperative learning, and peer learning are among the theories wherein flipped learning approach is situated. These come from the studies and research based on student-centered learning, which dates back to the theories of Piaget and Vygotsky. According to their perspective, constructivism and collaborative learning are derived from Piaget's theory of cognitive conflict, while cooperative learning

is grounded upon Vygotsky's zone of proximal development. Peer-assisted learning can represent an overarching term to be situated by these two theories (Bishop & Verleger, 2013).

Piaget (1977) focuses on the interaction among the children on learning tasks, which leads to achievement. Learners learn from each other when cognitive conflict occurs; inadequate reasoning will be exposed; disequilibrium will happen, and higher comprehension will be experienced. With an emphasis on peer learning, Piaget evolved a constructivist theory in which human beings could extend their biological programming to cognitive functioning in order to organize their experiences with others and objects (Lefa, 2014).

Vygotsky (1978) proposes Zone of Proximal Development, which is the distance between what a student can do independently and what he or she can do with the help of more knowledgeable others. It describes the functions that have not been fully developed, but in the process of development. Both Piaget and Vygotsky emphasize the role of social interaction with peers and objects, relating to the function of flipped class models as a more interactive learning environment with collaboration, cooperation, and peer learning.

Collaborative learning applies to any educational approach to teaching and learning that advocates groups of learners who come together to solve a problem, to complete a task and make a product. Sirinivas (2011) states that collaborative learning environment facilitates learners to make conversation with their peers, communicate ideas and defend themselves. In addition, they can exchange their beliefs, question other perspectives, and engage actively. Thus, they can build their own point of views and conceptual frameworks. Moreover, in collaborative learning, teacher-centred learning is replaced with student-centred learning, which fosters student-student discussions and active engagement in course material. Relying less on lectures, teachers adopt a role of coach, guide, or facilitator more rather than being a knowledge transmitter (Smith & MacGregor, 1992).

In collaborative learning, higher level of learning and retaining information occur more than working as an individual (Johnson & Johnson, 1986). Similarly, the shared learning creates an environment in which learners can be actively engaged in discussions, become more autonomous in taking responsibility for their own learning, and thus, their ability to think critically can develop more (Gokhale, 1995). Liu et al. (2013) present a relationship between collaborative learning platform and a flipped classroom which fosters learners' motivation, teacher guidance, and effectiveness of instruction. Kim et al. (2014) report that flipped learning activities increase students' collaborative learning abilities as students express their own opinions clearly in speaking and writing activities and online discussions. Moreover, they share knowledge and skills to achieve group goals.

Cooperative learning is a kind of classroom techniques in which students work on learning activities in groups and some criteria are required to be met by the members of the group. Each member has a sense of accountability to complete the assignment, task or project. Doing something in learning can make sense more than just seeing and watching; and thus, cooperative learning facilitates learning in some ways. Weaker students and more knowledgeable students come together in a group and exchange in order to construct knowledge with the help of clarifying and explaining techniques. Some criteria are needed to achieve a complete application of cooperative learning in classes. Positive interdependence, individual accountability, face-to-face interaction and use of collaborative skills, and group processing are key elements of cooperative learning (Felder & Brent, 2007). Zhang (2018) conducted a research about a flipped classroom grounded on cooperative learning. He reported that a flipped classroom can create a learning environment in which interactive learning and building knowledge are supported. In addition, it promotes the emotional support among the students which triggers learning.

Peer learning relates to two-way, mutual learning activity as a way of shifting away from independent into interdependent learning as it should be reciprocally advantageous for learners by sharing knowledge, ideas, opinions, and experiences (Boud, 2001). It is

defined as “students learning from and with each other in both formal and informal ways” (Boud, 2001, p. 4). The focus in peer learning is on both learning task and the learning process, in which emotional support is significant. In addition, peer learning aims to promote some certain learning outcomes such as working with others, critical thinking and reflection, communication of knowledge, understanding and skills, managing learning and how to learn, self and peer assessment. In universities, as Boud (2001) asserts, there are some pragmatic reasons why teaching programs emphasize peer learning. Employers demand graduates with collaborative skills to work in teams or groups, which facilitates lifelong learning in students. In this sense, flipped classrooms enhance peer-assisted collaborative learning in which social-based activities help learning occur around a common goal. Each peer in a group contributes to the constructing knowledge with their prior experiences and new points of views, which promotes mutual and immediate feedback from peers in a group, learning the content more easily, and critical thinking abilities (Gomez-Lanier, 2018).

In flipped learning approach, the robust theoretical foundation is based on the sociocultural perspective with respect to learning with the assumption that interactive learning activities are employed (Bishop & Verleger, 2013). Its focus is mediation which can take different forms followed by individual internalization. Sociocultural theory highlights some regulation types playing mediating roles as object, other and self-regulation. Object regulation refers to the fact that learners’ cognitive activities are regulated through the artefacts in social settings such as digital tools (Lantolf et al., 2015). Other regulation is described as a scaffolding process by the more knowledgeable other like peers, teachers and tutors. The last stage is ‘self-regulation in which learners can make their own decisions in their learning process without getting any support or with the minimal amount of assistance. In relevance to the sociocultural learning theory, the aforementioned constructs above underlie flipped learning so that learners are scaffolded

in their novice-level by means of object and other regulating mediations, and they can reach their mastery (ZPD) that helps them be autonomous in their learning.

After discussing the theoretical orientations regarding the flipped class design, there are some points to be attentive of with respect to design of a flipped class. While exchanging the components of a course regarding the homework and classwork, the focus in the flipped class implementation should be how efficiently the class time is utilized by teachers; not the potential of instructional videos independently (Tucker, 2012). According to a study conducted by Rotellar and Cain (2016), in flipped classes, teachers free away from the limitations of supplying the content in timed period; thus, they can add more interactive activities which help students develop problem-solving skills, discussion skills, and peer learning abilities in classrooms. One of the main concerns that teachers have when teaching is to catch up with the curriculum, which may lead to some exclusions of the curriculum such as practical parts and hands-on activities. This situation can be overcome by the flipped class implementations as teachers can make use of the class time and resources effectively for more practice and interactive activities. In addition, teachers are more motivated to enrich their flipped content by means of video comments, checking analytics, and in-class discussion sessions (Ekineh, 2022).

He also emphasizes the fact that flipped classes allow teachers to reach students individually as class discussions and teacher-student feedback sessions are provided by the time left thanks to the flipped content delivered outside the class. In this sense, Bergmann, one of the pioneers of flipped classroom approach, sheds light on the fact that a teacher of a flipped classroom can access to each student individually in each class meeting much easily compared to the traditional class (Tucker, 2012). He highlights that the notion of interaction described in a traditional class setting is also transformed with the implementation of a flipped classroom model. Through the facilities that a flipped class provides for the teacher and students, teachers can interact with the students who are

trying hard to learn in real but pretend to understand material or avoid asking questions about vague points.

A traditional lecture can be conceptualized as linear order of ideas that are conveyed to a group of students at a certain time and place. It also includes a set of media such as texts, sheets, graphs, charts, photographic images, slides and audios (Leeder, 2000). To transform a lecture into multi-media module is a challenge for educators as they should create meaningful learning context that will incorporate interactivity and integration. Asensio and Young (2002) introduced a framework called as Three I's Framework with a focus on the educational use of videos which stands for image, interactivity and integration with their descriptions in the following: Image refers to the power of the moving image as an engaging educational medium; and interactivity means control and access. Integration stands for interlinking with other technologies or in a blended environment including communication and collaborative tools.

The main feature of video for educational use points to delivery of images; new technologies also facilitate interactive and integrated videos. Greenberg and Zanetis (2012) assert that video has a great contribution to the shift in education due to technology and is a powerful agent that improves the quality of learning experience. Using video in the context of education can address the different learning styles of learners and improve the way of how young generation deals with information such as absorbing, processing, interpreting and using it.

Quick accessibility of video tools has altered the role of educators in the 21st century. Educators can now produce and share content with their students easily in the context of both face-to-face and online education. They can mentor learning process for their students in a way that a variety of different media is included, and students are guided in this regard. Through multimedia classrooms, in which PowerPoint presentations, pre-recorded video content, a projection, audio systems, and computers are accommodated for teaching and learning, educators can reach a large amount of content and make them

available for the students in a short time. A wider audience and more personalized learning setting for students can help teachers to teach complicated materials and give feedback when necessary. As it is discussed earlier, collaboration, interaction, and discussion can be provided more among the students. As a result, Greenberg and Zanetis (2012) highlight the role video in education as a pedagogical affordance that can be a tool for learning, a medium for collaboration and a universal language in addition to the package of recording, transmitting, processing, storing, and reconstructing a set of images.

Self-Regulation

Self-regulation, the derivation of which is from educational psychology, is an overarching term that include cognition, metacognition, motivation, and social behaviour. Inquiries on academic self-regulated learning emerged with psychological examinations of self-control among the adults and its outgrowth in children (Zimmerman, 2001). In the pastime, much of the research on self-regulation was somehow therapeutic with an emphasis on dysfunctional behaviours, such as aggression and addiction (Schunk, 2005). However, more recently, researchers have begun to implement self-regulatory principles to other fields, such as academic achievement, social and motor skills. As a result, researchers aim to assist individuals to become more effective learners and achieve their goals by teaching them to regulate their own behaviours and affective states. The drive that directed the researchers to focus on academic self-regulated learning was the evidence coming from the research that students' capabilities and skills did not completely define student achievement. In this sense, self-regulation is viewed as a mechanism that can identify performance differences among individuals and a tool that helps them to improve achievement as well (Schunk, 2005).

With broadly definition, it stands for the ability of individuals to control their own thoughts, emotions, and behaviours in order to achieve their goals (Hofmann et al., 2012). Pintrich (2000) defines self-regulation or self-regulated learning as follows: "an active,

constructive process whereby learners set goals for their learning and then attempt to monitor, regulate, and control their cognition, motivation, and behaviour, guided and constrained by their goals and the contextual features in the environment” (p. 453).

According to Dornyei (2005), self-regulation is a multifaceted construct that incorporates cognitive, metacognitive, motivational regulation, and behavioural processes that help the learners achieve in academic contexts.

Zimmerman (2000) states that various definitions regarding self-regulated learning have been provided by researchers based on their theoretical approaches. To exemplify, from the constructivist perspective, activities that trigger learners’ mental functioning, create and change cognitive forms grounded on prior knowledge before coming to classes come into prominence. On the other hand, Borkowski’s process-oriented model (1996) focuses on metacognitive and information processing dimension (Jakešová & Kalenda, 2015). In this theoretical framework, cognitive and metacognitive processes are highlighted; and thus, individual differences in this aspect can cause individuals to self-regulate their learning processes accordingly. However, Zimmerman’s model (2002) is based on socio-cognitive theory, and under a broader definition, self-regulated learners control their learning metacognitively, motivationally, and behaviourally. Zimmerman (2000), who highlights the importance of socio-cognitive perspective, defines self-regulation as a construct that is more than metacognition in the way that it interacts with personal, behavioural, and environmental processes. He states that much of the research on self-regulated learning has been centred on the cognitive and metacognitive aspects; however, social cognitive theory asserts that students regulate themselves in socially, motivationally, and effectively in terms of intellectual functioning.

Pintrich (2000) categorizes self-regulated learning into four phases. Phase 1 includes planning and goal setting along with perceptions, knowledge of task and context, and the self in connection with the task. Phase 2 involves monitoring processes that focus on metacognitive awareness of self, task, and context. In Phase 3, efforts are included in

order to control and regulate different parts of self, task and context. Lastly, Phase 4 refers to a variety of reactions and self-reflections on the self, task and context.

Self-regulated learning refers to “a proactive process that students use to acquire academic skill, such as setting goals, selecting and deploying strategies, and self-monitoring one’s effectiveness, rather than as a reactive event that happens to students due to impersonal forces” (Zimmerman, 2008, pp.166-167). As it is more related to control and recognize people’s learning surroundings, they need to set some learning goals, prefer some certain strategies to use and apply them, and finally monitor their progress (Schunk, 1996).

Self-regulated theory is somehow a recent field that researchers have focused upon; however, it backdates to social cognitive learning theory of Albert Bandura (1997). From this perspective, reciprocal determinism matters as learning occurs as a result of personal, environmental, and behavioural determinants people get involved in. Personal factors consist of learners’ beliefs and attitudes that influence learning and behaviour. Environmental factors refer to instruction, teacher, teacher’s feedback, the way of obtaining information, and peers and parents as others. Behavioural factors include the impacts of the prior performance on learning. Reciprocal determinism suggests that each of these factors influences other two factors (Bandura, 1997).

Social cognitive learning theory claims that learners go through the levels of development during the process of becoming a self-regulated learner (Schunk, 1996; Zimmerman, 2000). These levels are observational, imitative, self-controlled, and self-regulated levels. Learning at observational level is related to modelling while social guidance and feedback are the focal points in the level of imitation. Both observational and imitative levels of development with respect to self-regulation require dependency on external and social factors. However, as students make progress in learning, they are more inclined to self-regulate their learning internally. At self-controlled level, students go through self-motivating process in which self-talk and feedback are provided with internal

construct of self-regulation. Lastly, students at self-regulated level perform strong self-efficacy beliefs along with robust cognitive strategies to self-regulate their learning (Schraw et al., 2006).

Schraw et al. (2006) assert that self-regulated learning embodies three primary components including cognition, meta-cognition, and motivation. Cognition refers to the skills that are required for encoding, memorizing, and recalling information. Meta-cognition includes the abilities to recognize and monitor the progress of cognitive functioning. Motivation involves the beliefs and attitudes that may influence the practices of cognitive and metacognitive skills. Without any of these components, self-regulation may not be completely fulfilled by the students. For example, a person is cognitively self-regulated learner; however, if he or she cannot achieve to motivate himself or herself to use cognitive skills, it is highly possible not to perform better academically when compared to the others who use all the self-regulatory skills efficiently. Besides, social environment is central to self-regulated learning as a person's behaviour is influenced by external social contexts, which Bandura sets forth in reciprocal determinism concept of socio-cognitive theory (1991). As a result, self-regulated learning has a broader definition when cognition, metacognition, social behavioural, and motivational regulation are included in the framework of self-regulation.

The emphasis in Bandura's socio-cognitive theory is on the fact that human behaviour and learning take place in social environments (Schunk & Usher, 2012). Dinsmore et al. (2008) point out that self-regulation highlights reciprocal interaction of the environment with people, influenced by behaviour, and thus the environmental or contextual factors are vital for self-regulation processes. Pintrich (2004) highlights that contextual control is a crucial part of regulatory processes, but in traditional classrooms it seems to be difficult to take control over the learning environment for students due to the dominant role of the teachers. Instead, student-centred learning environments can make

room for students to work or perform a task collaboratively and cooperatively, which can create opportunities for receiving more feedback and peer learning.

Andrade and Evans (2015), and Dembo et al. (2006) describe self-regulation as the ability of learners to control the factors and conditions affecting their own learning. In this sense, highly self-regulated learners achieve academically more than the ones with lower self-regulation (Zimmerman & Risemberg, 1997). Similarly, it is stated that self-regulation leads to effective results in academic achievement. Self-regulators of their own learning achieve better academically than the poorly self-regulated individuals (Zimmerman, 2000).

Various models regarding self-regulation in learning that suggest different construct and mechanisms exist; however, they all have a common assumption with respect to learners: An active learner who build their own thoughts, ideas, strategies, goals based on their external surroundings and their inner minds. In the process of learning, learners are regarded as non-passive meaning-makers rather than receiving information in a passive way (Pintrich, 2000).

Self-regulation incorporates learning strategies, motivation, and metacognition. In writing practice, students' self-perceptions in terms of efficacy can relate to academic success, attempts, efforts, and intrinsic motivation (Hammann, 2005). Additionally, the act of writing requires higher levels of cognitive functioning as well as self-monitoring strategies. The fact that students know what strategies to apply in different stages of writing may influence how they plan their pieces of writing, content production, using and searching resources. It is apparent in the literature that self-regulation instruction is continuously suggested area from research (Hammann, 2005). Writing is specifically in relation to self-regulation because it requires individual schedule, self-performance, intensive effort lasting long periods; in addition, the final product is needed to be revised until the individuals reach their target goals (Bandura, 1986).

In this sense, writing is one of the skills requiring self-regulating processes and so determining academic achievement due to its being hard and highly demanding task. It needs some sort of strategies being run simultaneously; in fact, a writer should employ rules and mechanics while monitoring overall organization, form, features, audience aspect and so on (Harris et al. 2003). According to Flower and Hayes (1981), the most essential thing in writing is one's skill in monitoring and self-directing writing processes.

As it has been previously reported in the literature (Sun & Wang, 2020; Teng & Zhang, 2020; Zimmerman & Risemberg, 1997), it is statistically proven that students using a set of strategies did writing better, had well-organized texts, received higher grades in writing. In terms of psychological aspect, students who used self-regulatory processes improved their self-efficacy to write. Thus, despite the nature of writing as an individual activity, writing deserves considerable amount of attention paid to the role of social impacts on self-regularity processes. It is because people as writers need others to learn new methods, to exchange information on the given topics, to give feedback to help revision processes.

The Research on Flipped Learning

A growing body of literature has indicated that numerous studies focused on the effectiveness of flipped learning models across disciplines and educational levels (Brewer & Movahedazarhouli, 2018; Chou et al. 2021; Gianoni-Capenakas et al., 2019; Safiyeh & Farrah, 2020). Strelan et al. (2020) conducted a meta-analysis research to explore the effectiveness of flipped classrooms. Among 193 studies including 174 studies in higher education, 21 at secondary level, and 3 in the primary level, they reported that flipped classrooms had a positive effect on students' performance. With moderate effect sizes regardless of disciplines, flipped class designs can foster active learning and problem-solving facilities, which is supported by some other moderators like group sizes, in-class activities, pre-class quizzes. Vitta and Hoorie (2020) conducted a meta-analysis study on

the effect of flipped classrooms upon language learning outcomes specifically, and their study displayed that flipped classroom models outscored the traditional instructed classrooms. According to their results, this difference varied across the proficiency levels of the students, not by age.

Additionally, it was reported the notable effect of flipped classes was observed on language learning outcomes. Shahnama et al. (2021) particularly meta-analysed the studies conducted in the context of English as a second or foreign language (ESL/EFL). Comparing flipped and lecture-based classes, they searched for the effectiveness of flipped learning on improving student achievement. They found out that there was a large and positive effect. In addition, the meta-analysis study revealed that design characteristics such as quizzes and exercises before class moderated the results. Extra activities and exercises along with the videos were found to support students for comprehending the content and materials, and enhancing the performance in EFL and ESL contexts.

The following studies was conducted on the effectiveness of flipped learning models. Basal (2015), Bauer-Ramazani et al. (2016), Ekmekci (2017), and Hung (2015) have searched the effectiveness of flipped learning classes in learning environments. Basal (2015) conducted a study to explore the teachers' perception towards the use of flipped classrooms and found positive results in this respect. Bauer-Ramazani et al. (2016) emphasize both the advantages and disadvantages that flipped classrooms have by highlighting its being promising approach to language learning. In his study, Ekmekci (2017) aimed to investigate the effect of flipped class on students' writing performance in EFL setting and their perception. His study revealed the students instructed in flipped class performed better than the other group. Hung in her study (2015) carried out a research which compared two types of flipped lessons with non-flipped one and revealed better learning outcomes, positive attitudes and more efforts devoted by participants.

According to the results of the meta-analysis studies and the studies in particular, flipped classroom models have an effect on performance, learning outcomes, and achievement if they are designed properly. As the reviewed literature points out, despite a large number of studies on the effect of flipped learning on achievement and performance across disciplines (Brewer & Movahedazarhouli, 2018; Chou et al. 2021; Gianoni-Capenakas et al., 2019; Safiyeh & Farrah, 2020; Strelan et al., 2020), there have limited numbers of studies targeting the students' achievement of in L2 educational settings, and L2 writing in particular. Thus, the current study aims to contribute to fill the salient gap regarding flipped L2 writing classes and improvement students' self-regulated learning skills in writing.

The Research on Flipped Learning and Writing Achievement

A series of recent studies and research has demonstrated that flipped class implementations have positive impacts on improving L2 writing performance (Bouchebra, 2017; Ekmekci, 2017; Florence & Kolski, 2021; Kansizoglu & Comert, 2021; Moussaoui & Moubtassime, 2022; Muluk et al., 2022; Shafiee et al., 2022; Tabassum, 2020).

To illustrate specifically, Hidayat and Praseno (2021) in their study reported that flipped classroom model and Edpuzzle enhanced students' participation in learning activities and achievement in the writing course. With the help of the instructional videos delivered by Edpuzzle, which was utilized in the present study as well, students completed the course with 78 average score out of 100. Similarly, Altas and Mede (2020) found out that the flipped classroom model resulted in better achievement in writing.

Fathi and Rahimi's study (2022) revealed that flipped classroom significantly enhanced students' writing performance and writing fluency. In fact, they reported that the development was on students' overall performance in writing; but there was no effect of flipped classroom on the complexity and accuracy in writing.

The study of Mubarak et al. (2019) suggested that the flipped class implementation positively influenced students' writing achievement. Moreover, they revealed that the flipped class model had a significant effect on students' achievement across the cognitive styles. Altas and Mede (2020) reported a similar result showing that flipped class model enhanced students' writing skills, but there was no significant effect on reading achievement.

The Research on Flipped Learning and Self-Regulation in Writing

Many studies in the literature have examined self-regulation in language learning contexts, with a focus on traditional classroom settings or an online learning environment for the learners' self-regulatory learning practices (Alotumi, 2021; Li et al., 2020; Sun & Wang, 2020; Teng, 2021). Alotumi (2021) revealed a positive relationship between motivational self-regulated language learning strategy use and speaking competence. In their study, Li et al. (2020) reported that online self-regulation skills were associated with collaborative learning in technology-supported learning settings. The results of the study conducted by Sun and Wang (2020) showed that self-efficacy and self-regulated writing self-regulated language strategies could predict students' writing proficiency in a face-to-face learning environment. Teng (2021) found out that self-efficacy and motivational beliefs were predictors of multiple dimensions of self-regulated language learning strategies in writing.

However, the area with an emphasis on the flipped learning environment promoting self-regulation processes of the learners seems to be much limited across the studies in the literature (Altas & Mede, 2020; Cakiroglu & Ozturk, 2017; Ozturk & Cakiroglu, 2021; Robbins et al., 2020;). These studies point to a need to be met in language learning with a focus on academic writing addressing the relationship between flipped learning approach and self-regulation processes in which the students get involved.

Ozturk and Cakiroglu (2021) carried out a relevant study on the effect of a flipped model with self-regulated learning strategies on the achievement in an EFL context. Their study indicated that through the flipped instruction with self-regulated learning strategies, students had higher scores in reading, writing, speaking, and grammar than the traditionally instructed group did. Another similar study was performed by Altas and Mede (2020), investigating the effect of flipped class model on self-regulated learning in writing classes. Their results illustrated no significant impact of the flipped class on self-regulated learning in writing.

To conclude, the foundation of this study has been directed by two conceptual frameworks as flipped learning approach and self-regulation in writing. The literature review shows that flipped learning is positively associated with academic achievement. Though there are many studies regarding flipped learning approach, the research in the relationship between self-regulation and achievement in L2 writing within the flipped class models remains limited. To fill this literature gap, this study identifies the effect of flipped learning approach on L2 writing achievement and self-regulation in writing. Moreover, another promising line of the study would be to find out whether there is a correlation between writing achievement and self-regulation in writing in the flipped L2 writing learning context.

Chapter 3

Methodology

This part presents type of research and research design of the study, and informs about the setting and participants of the study, data collection process, and instruments used to collect the data. It also includes the procedure part that explains the intervention and the process in detail, and data analysis including confirmatory factor analysis that was conducted for the WSSRLQ scale.

Type of Research

This research aimed to explore the effects of flipped learning approach on EFL learners' writing achievement and writing self-regulation. The design of the research is a pretest-posttest design in a quasi-experimental design (Creswell & Creswell, 2018). It is a quasi-experimental design as the participants in both experimental and control groups were not randomly assigned into their groups (Campbell & Cook, 1979). Quasi-experiments are the most probable to be employed when the random assignment is unfeasible, such as educational intervention is targeted. In experimental designs, researchers manipulate the independent variable by using a different method. One method is by a presence or absence of a technique (Johnson & Christensen, 2010), in which the experimental group receives an intervention, but the control group does not.

In this research, the groups were assigned into classes by the administration in the higher education institution at the beginning of the term. Experimental research aims to obtain several beneficial insights into casual relations between dependent and independent variables. In this research, the experimental group was exposed to the flipped classroom intervention while the control group received traditional instruction. Flipped-instructed classroom and traditionally-instructed classroom in teaching academic writing are independent variables whereas the use of self-regulated learning strategies in writing

and students' writing achievement are dependent variables in the study. Table 1 below shows the research design of the study.

Table 1

Research Design of the Study

Groups	Pre-test	Treatment	Post-test
Flipped Class Group	Essay Writing	Flipped Instruction	Essay Writing
Traditional Class Group	Essay Writing	Traditional Instruction	Essay Writing
Flipped Class Group	WSSRLQ	Flipped Instruction	WSSRLQ
Traditional Class Group	WSSRLQ	Traditional Instruction	WSSRLQ

Research Questions

This study aimed to respond to the following main and sub research questions:

What is the effect of flipped learning approach on EFL learners' writing achievement and self-regulation in writing?

Sub Research questions.

1. Is there a significant difference between the flipped classroom group and the traditional classroom group with regard to writing achievement?
2. Is there a significant difference between the flipped classroom group and the traditional classroom group in terms of self-regulation in writing?
3. Is there a correlation between self-regulation in writing and writing achievement in the flipped classroom group?

Hypotheses

In this study, the hypotheses stated in the null form in the following assume that the flipped intervention has no effect on EFL learners' writing achievement and self-regulation in writing:

Null Hypothesis 1. There is no significant difference between the flipped classroom group and the traditional classroom group with regard to writing achievement.

Null Hypothesis 2. There is no significant difference between the flipped classroom group and the traditional classroom group in terms of self-regulation in writing.

Null Hypothesis 3. There is no correlation between self-regulation in writing and writing achievement in the flipped classroom group.

Setting and Participants

This research was conducted at a state university in Ankara, capital city of Türkiye, consisting of 16 faculties as one of the leading universities in the country. At the university, the medium of instruction is English and Turkish, depending the departments that students study as a major. For the English-medium-instructed departments, in which students have to complete a whole-year preparation class instruction or exempt if they submit a valid English Proficiency Exam Result such as TOEFL or IELTS. The School of Foreign Languages offers various English courses. Students may exempt these courses by valid scores for the exemption exams set by the Modern Languages Department or for the proficiency exam set by the Preparatory Department. Otherwise, they are required to take compulsory English courses in order to obtain enough credits for graduation.

Academic Writing Skills is one of the compulsory English courses offered to students in second-year of university studies. It provides instruction to help to develop writing skills for academic purposes in order to meet the needs of intermediate and upper-intermediate learners. As a three-credit course, it is taught in both terms as I and II

respectively, which is a three-hour-class each week. This course is aligned with their departmental needs and requirements in a way that students are expected to academically write for exams and coursework.

The study was conducted in one of the departments in which EMI was applied and Academic Writing Skills course was taught. Language proficiency level of the participants who took Academic Writing Skills was B1 on the CEFR scale as they had to complete two first-year pre-requisite courses in which B1 level of English was the objective to achieve. In this setting, the random assignment of the groups was impossible as intact classes were formed at the beginning of the term by the administrative unit (Polio & Friedman, 2016). Before the data collection process started, all the participants were informed of the research and asked for their permission through a consent form.

The participants of this research were composed of fifty-one ($n= 51$) sophomores enrolled in the departments whose medium of instruction was English at a state university in Türkiye. They took Academic Writing Skills as a compulsory course in the academic term of 2019-2020. Fifty-one participants were classified as an experimental group consisting of twenty-eight ($n=28$) participants and a control group composed of twenty-eight ($n=28$) participants. In the experimental group, three of the participants were absent during the term; similarly, two participants of the control group did not attend the class during the term. The total number of the participants who voluntarily joined the research was 51. The experimental group consisted of 9 females (36%) and 16 males while the control group was composed of 10 females (38.5%) and 16 females (61.5%). The average age of the experimental group was 22.3 ($SD = 0.99$), varying from 21 to 26 while the ages in the control group ranged from 21 to 25 with the mean age of 22.2 ($SD = 0.77$). Table 2 below displays the demographic characteristics of the study.

Table 2***Demographic Characteristics of the Groups***

Group	Gender			
	Female		Male	
	N	%	N	%
Control	10	38.5	16	61.5
Experimental	9	36	16	64

Data Collection

Prior to the data collection process, ethical approval was obtained from the Ethics Commission of the higher education institution (Appendix G). At the beginning of the term, all the participants were informed about the study and voluntary participation. Then consent forms from the voluntary participants were attained.

In the first week, the experimental group was told about the flipped classroom intervention, materials, and syllabus of the course that would be followed during the term. A brief introductory video that contained necessary information about a flipped class for students was viewed by the experimental group. Likewise, the control group was informed about the content, materials, and curricular outline of the course.

Following the introduction to the course, WSSRLQ scale was administered as a pre-test to both groups to complete. Then a pre-test essay writing task was conducted for both groups in order to make sure their language level was equal and to find out if any improvement in their writing skills after the intervention occurred.

The experimental group was instructed through flipped classroom design in which an average of 20 minute-video lessons produced and pre-recorded by the researcher was included. These video lessons were prepared via a screen capture and recording software,

Snagit, and delivered through a video sharing platform, Edpuzzle, which assists teachers in video editing and adding comprehension questions into videos in order to engage students.

Edpuzzle is one of the most popular and widely-used educational tools that combine image, interactivity, and integration in video making. It allows the users to make video lessons in an interactive way in which students can answer questions and receive feedback, and distribute them by means of other learning platforms such as Google Classroom. It is a free web-based application through which users can upload videos and adapt them by editing, cropping, doing a voiceover of a current video, and inserting quiz questions directly into the video (Western University, 2020). Users can insert questions, audios, texts and links to the videos, and also share their lessons with a class and have students registered by using a class code. Edpuzzle, in this sense, allows teachers to create flipped classrooms and get their students to be engaged in learning outside of the classrooms. By tracking students' viewing history and quiz results, it helps teachers to overcome the concern about whether they complete their pre-class assignments or not (Mehring, 2016).

Instead of consuming the information without any awareness, it is significant that students can critically ponder that information and take the next step to exploit the content deeply in a flipped class setting. Edpuzzle, in this regard, can offer some facilities to teachers by having the students get engaged in focusing on the questions in a video, analysing the content, and making some inferences from it.

The flipped intervention took 10 weeks within a 14-week academic term. The video contents were delivered to the experimental group one week earlier than every face-to-face classroom meeting. In this case, they were able to watch the videos at their own speed and as many times as they needed. The control group was taught by traditional instruction of writing. Table 3 below demonstrates the timeline of the study.

Table 3

Timeline of the Study

Week	Date	Content	Flipped class	Traditional class
1	7-11 October	Introduction to the Course	Introduction to the Course: Informing students about the course content, material, attendance, exams etc. Informing the students about the flipped class process. (A sample introductory video) Essay Writing (Pre-test) Writing Strategies for Self-Regulated Learning Questionnaire (Pre-test)	Introduction to the Course: Informing students about the course content, material, attendance, exams etc. Essay Writing (Pre-test) Writing Strategies for Self-Regulated Learning Questionnaire (Pre-test)
2	14-18 October	Introduction to Paragraph Writing: How to write a paragraph	A 10&20-minute video lecture (out of class) <ul style="list-style-type: none"> How to write a paragraph 	How to write a paragraph
3	21-25 October	Chapter 1 Writing a Process paragraph	A 10&20-minute video lecture (out of class) <ul style="list-style-type: none"> Writing a Process paragraph 	Writing a Process paragraph
4	28 October -1 November	Chapter 1 Writing a Process paragraph	A 10&20-minute video lecture (out of class) <ul style="list-style-type: none"> Writing a Process paragraph 	Writing a Process paragraph
5	4-8 November	Chapter 3 Writing a Reason paragraph	A 10&20-minute video lecture (out of class) <ul style="list-style-type: none"> Writing a Reason paragraph 	Writing a Reason paragraph
6	11-15 November	Chapter 3 Writing a Reason paragraph	A 10&20-minute video lecture (out of class) <ul style="list-style-type: none"> Writing a Reason paragraph 	Writing a Reason paragraph
7	18-22 November	CATCH UP & REVIEW	Revision	Revision
8	25-29 November	Midterm Exam	Midterm Exam	Midterm Exam
9	2-6 December	Chapter 4 Writing an Effect paragraph	A 10&20-minute video lecture (out of class) <ul style="list-style-type: none"> Writing an Effect paragraph 	Writing an Effect paragraph
10	9-13 December	Chapter 4 Writing an Effect paragraph	A 10&20-minute video lecture (out of class) <ul style="list-style-type: none"> Writing an Effect paragraph 	Writing an Effect paragraph
11	16-20 December	Chapter 6 Writing an Opinion paragraph	A 10&20-minute video lecture (out of class) <ul style="list-style-type: none"> Writing an Opinion paragraph 	Writing an Opinion paragraph
12	23-27 December	Chapter 6 From Paragraph to Essay Writing an Opinion essay	A 10&20-minute video lecture (out of class) <ul style="list-style-type: none"> Writing an Opinion essay 	Writing an Opinion essay
13	30 December - 3 January	Chapter 6 From Paragraph to Essay Writing an Opinion essay	A 10&20-minute video lecture (out of class) <ul style="list-style-type: none"> Writing an Opinion essay 	Writing an Opinion essay
14	6-10 January	CATCH UP & REVIEW	Revision Writing Strategies for Self-Regulated Learning Questionnaire (Post-test)	Revision Writing Strategies for Self-Regulated Learning Questionnaire (Post-test)
	20-24 January	FINAL EXAM	Essay writing (Post-test)	Essay writing (Post-test)

Figure 4

Recordings of Video Lessons**Instruments**

In this study, two instruments were used to collect data. One of them is essay writing task; the other instrument is Writing Strategies for Self-Regulated Learning Questionnaire (WSSRLQ).

Instrument 1

In this study, two essay writing tasks were used as pre- and post-tests. The test items were written based on the topics given in the textbook of the course included in the curriculum and reviewed by two instructors for any ambiguities. One of them was in the testing unit of the state university where the study was conducted, and responsible for preparing the tests and curriculum of the course. The other instructor had been teaching writing courses for over 20 years. In order to provide the objectivity of scoring, an analytic

rubric was used consisting of dimensions such as organization, mechanics, idea generation, and levels of performance and levels of mastery like excellent, acceptable, needs improvement, and poor. Each writing task consisted of two parts as the subject and a set of instructions addressing the limitations on the content of writing, which would help to elicit the expected type of writing performance (Ruth & Murphy, 1988).

While writing the essay question, the aim was to create a clear writing task through which the students could display composing strategies with respect to genres, purpose, or styles. Moreover, it is important to develop a (test) question that is aligned with the learning objectives of the curriculum in order to monitor the learning progress. As Ruth and Murphy (1988) highlight, instructions may include some points such as time limit, word limit, or suggest some guidance regarding organization like giving examples, explanations for reasons in order to provide sufficient guidance. In the writing tasks, a similar approach was adopted in order to minimize the uncertainty for the students about the writing tasks by giving a detailed set of instructions announcing the genre, the length, time limit, the number of paragraphs, and organizational guidance.

Considering the fact that the wording and the topics had considerable effects upon the writing processes and performance (Powers et al., 1992), the topics of pre- and post-tests were selected among the opinion essay topics given in the list in the textbook of the course. As Marsden and Torgerson (2012) state, to avoid the presence of test effects, which can refer to the improvements caused by remembering the questions by the participants, two sets of the same content which was the opinion essay writing task in the present study were prepared. With appropriate wording for students' language level, topics were specified into prompts. Besides, the topics of the task were chosen according to the students' proficiency level of English and familiarity so that any special knowledge would not be required and false interpretations by the students could be avoided. Two raters, who had been teaching the academic writing courses and assessing writing for over 15 years in the same institution, assessed the students' responses by using the analytic

rubric. Their average ratings for each writing were the final score. In order to measure the rater inter-reliability for both pre- and post-tests in writing, alpha coefficient for two items was calculated, and the result for alpha coefficient for two items in the pre-test writing scores is .975, which suggests the items have acceptable and high internal consistency. The result for alpha coefficient for two items in the post-test writing scores is .985. The table 3 and table 4 below show the results of the inter-reliability between raters for the pre- and post-tests scores in writing.

Table 4***The Results of Rater Inter-Reliability for Pre-test Writing Scores***

	Intraclass Correlation ^b	95% Confidence Interval		F Test with True Value 0			
		Lower Bound	Upper Bound	Value	df1	df2	Sig
Single Measures	.952 ^a	.917	.972	40.677	50	50	.000
Average Measures	.975 ^c	.957	.986	40.677	50	50	.000

Table 5***The Results of Rater Inter-Reliability for Post-test Writing Scores***

	Intraclass Correlation ^b	95% Confidence Interval		F Test with True Value 0			
		Lower Bound	Upper Bound	Value	df1	df2	Sig
Single Measures	.970 ^a	.948	.983	65.794	50	50	.000
Average Measures	.985 ^c	.973	.991	65.794	50	50	.000

Instrument 2

In order to investigate the effect of the flipped learning on self-regulation in writing, a 7-Likert-type scale (1= not at all true of me; 7= very true of me) titled Writing Strategies for Self-Regulated Learning Questionnaire (WSSRLQ) developed by Teng and Zhang (2016) was used. WSSRLQ was selected as an instrument to gather the data since it embodied self-regulated learning strategies for L2 writing as a multifaceted construct counting cognitive, metacognitive, social behaviour, and motivational regulation (Zhou & Hiver, 2022). The scale is conceptualized within the framework of Zimmerman's (1989) self-regulated learning as a dynamic, multifaceted process in which learners are "metacognitively, motivationally, and behaviourally" active in self-regulating their learning (p.329).

Moreover, social environment is central to self-regulated learning as a person's behaviour is influenced by external social contexts, which Bandura sets forth in reciprocal determinism concept of socio-cognitive theory (1991). In this sense, WSSRLQ defines self-regulated learning as a high-order construct that incorporates 9 lower-order writing strategies under cognitive, metacognitive, social behaviour, and motivational regulation aspects.

In the original study by Teng and Zhang's study (2016), three hypothesized models were proposed to assess the dimensions of self-regulated learning strategies (SRL) in EFL writing. The first model is a 9-factor correlated model of EFL writing strategies for SRL. In this model, 40 items were classified into nine particular but correlated writing strategies under SRL theory. The second model, a 4-factor second order model of EFL writing strategies for SRL, proposed a hierarchical structure in which nine SRL writing strategies were hypothesized to be conceptualized into four second-order correlated factors, naming cognition, metacognition, social behaviour, and motivational regulation. In the third model, called as a one-factor second-order model of EFL writing strategies for

SRL, a single higher order factor which is self-regulation may adequately explain the relationships between nine writing strategies.

In Teng and Zhang's study (2016), Cronbach's alpha coefficient of the 9 strategies in self-regulated learning was found to be higher than .70, reported to be a strong internal reliability for each dimension of WSSRLQ. After obtaining permission from its developers, WSSRLQ was adapted into Turkish setting by taking necessary steps regarding reliability and validity processes.

In adapting the scale for the research setting, it was translated into Turkish language by three experts whose majors were translation and interpretation in English. Then back translation into English language by three native speakers of Turkish language whose majors were English language teaching, translation and interpretation in English, and linguistics was conducted. After comparison of the original and back-translated versions of the WSSRLQ scale, experts' opinions in English language teaching were obtained to make sure that there would be no vague language throughout the scale. At final stage, necessary changes were made to finalize the process.

Table 6

Data Collection Instruments

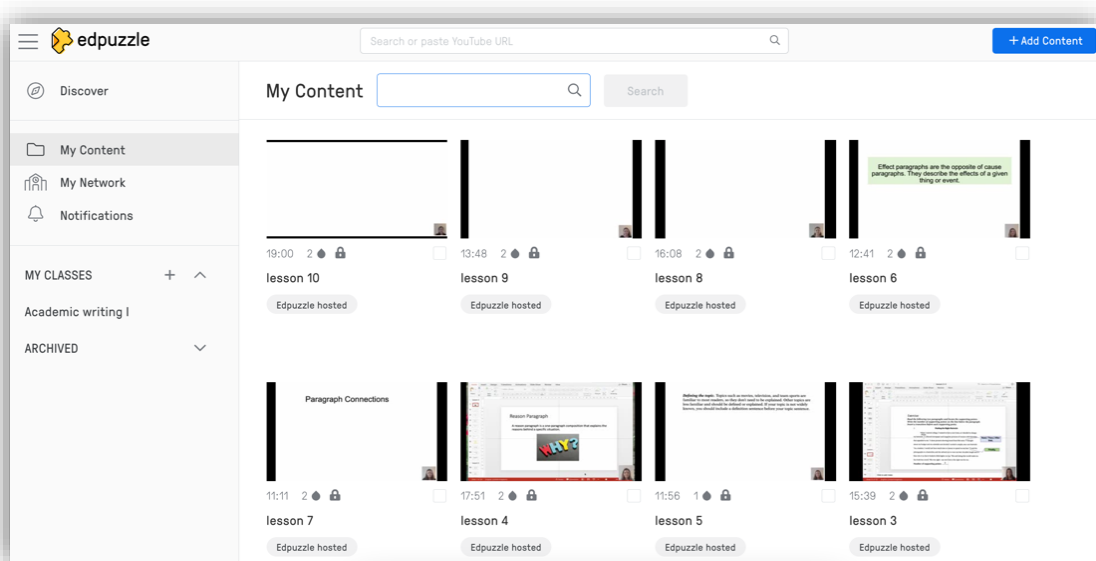
Research Questions	Data Collection Instrument
Question 1	Essay writing
Question 2	WSSRLQ
Question 3	Essay writing, WSSRLQ

Procedure

Simple definition of a flipped classroom is to reverse a traditional style of learning in which content is presented at school and practice is assigned to home into learning at home and practicing at school. While designing a flipped class of a course, some guidelines are to be followed. The first point is to decide what type of technology will be used. In this research, as a slightly-higher technology, Snagit was used because of the convenience and simplicity of screen capturing and editing. It allows users to narrate contents such as PowerPoint slides with a webcam and a microphone. All the content, slides, and video lesson recordings were prepared by the researcher. After the content for each week was designed, relevant visuals and links were added. Then they were recorded as video narration by means of PowerPoint application. The content was edited in terms of time, learning outcomes, and cognitive load for the students. Finally, the video recordings were delivered through a practical video sharing platform. Below are some sample screenshots taken from the video lesson recordings.

Figure 5

Video Lessons on Edpuzzle



Note. From "Edpuzzle", by Sabrià et al., (2012). *Edpuzzle*. Edpuzzle Inc., <https://edpuzzle.com>

Figure 6

A Sample Video Lesson

This is a paragraph that **explains something in step-by-step detail**, or shows how something occurred. The goal is to help the reader re-create or re-live the experience in the sequence in which it occurred.

A process paragraph has three main parts.

The topic sentence	states the process.
The body sentences	describe the steps.
The concluding sentence	wraps up the process.

The screenshot shows a video player interface with a progress bar at 03:20 and a total duration of 18:22. A small video thumbnail of the instructor is visible in the bottom right corner.

Note. From "TechSmith". (2019). *Snagit* (Version 2019.1.3) [Computer Software]. <https://www.techsmith.com/screen-capture.html>

Figure 7

A Sample Video Lesson

Parts of an Effect Paragraph

The topic sentence of an effect paragraph. The topic sentence of an effect paragraph will have a topic and a controlling idea. The topic will be anxiety while the controlling idea will name the effects of anxiety on your life in the following example.

topic	controlling idea
--------------	-------------------------

Anxiety has several effects on your life.

In the controlling idea of the topic sentence, you can use noun *effect* or verb *affect*.

Anxiety has several **effects** on your life.

Anxiety **affects** your life in several ways.

The screenshot shows a video player interface with a progress bar at 04:05 and a total duration of 12:41. A small video thumbnail of the instructor is visible in the bottom right corner.

Note. From "TechSmith". (2019). *Snagit* (Version 2019.1.3) [Computer Software]. <https://www.techsmith.com/screen-capture.html>

Figure 8

A Sample Video Lesson

The screenshot shows a video player interface with two columns of text. The left column is titled "Paragraph" and contains the text: "Second, if public transportation becomes free, life will be more convenient for people. Many people have difficulties in living in big cities. It is because people cannot afford the basics of the cost-of-living expenses such as housing, food, and medicine." The right column is titled "Essay" and contains the text: "Second, if public transportation becomes free, life will be more convenient for people. Many people have difficulties in living in big cities. It is because people cannot afford the basics of the cost-of-living expenses such as housing, food, and medicine. For example, a family of four people needs a minimum \$50,000/year to live modestly but in a comfortable way. Free transportation can help people keep money in their pockets and reduce their expenses to some extent." A central box contains the text: "THE SECOND SUPPORTING POINT IN THE PARAGRAPH BECOMES THE TOPIC SENTENCE OF THE SECOND BODY PARAGRAPH". A video player interface is visible at the bottom, showing a progress bar from 09:04 to 19:01.

Note. From "TechSmith". (2019). *Snagit* (Version 2019.1.3) [Computer Software]. <https://www.techsmith.com/screen-capture.html>

The sample screenshots taken from the video lesson recordings below show the embedded questions inserted into the video lessons in order to check students' viewing of the videos and comprehension.

Figure 9

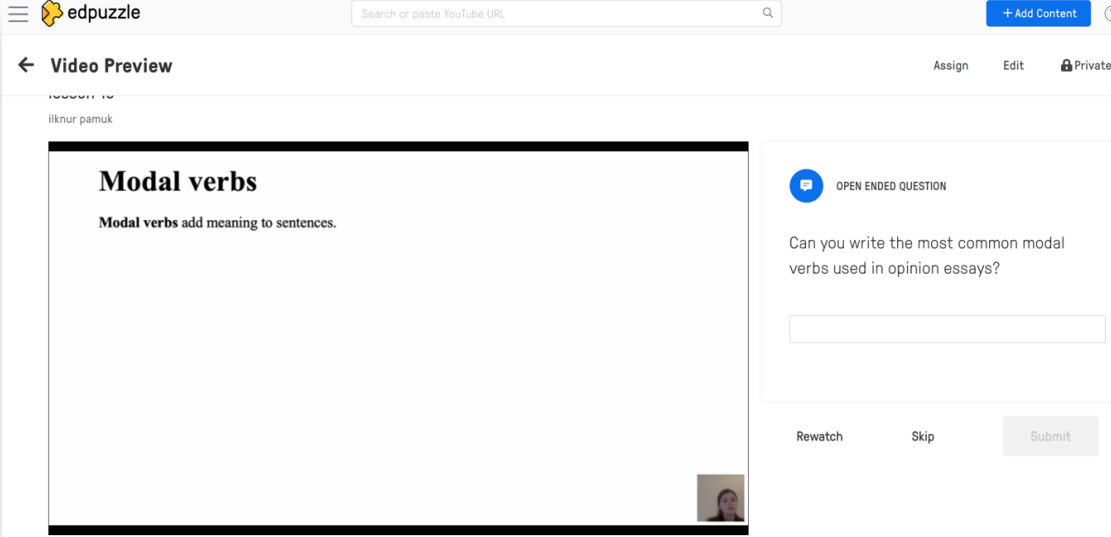
A Sample Embedded Question on Edpuzzle

The screenshot shows an Edpuzzle interface. On the left, a video player displays a text overlay titled "An example of the first draft" with the text: "Yoga Classes
¹ I enjoy taking yoga classes for three reasons. ² Yoga classes help to improve balance, strength and flexibility. ³ I started to move better and feel less tired with regular yoga practices. ⁴ Yoga classes are great to meet new people. ⁵ I met one of my close friends in yoga classes. ⁶ Doing yoga helps to reduce stress. ⁷ It has changed my perspective on my life." On the right, a multiple-choice question is displayed: "Which sentences are the main supporting points?" with two options: 2,3,6 and 2,4,6. Below the question are buttons for "Rewatch", "Skip", and "Submit".

Note. From "Edpuzzle", by Sabrià et al., (2012). *Edpuzzle*. Edpuzzle Inc., <https://edpuzzle.com>

Figure 10

A Sample Embedded Question on Edpuzzle

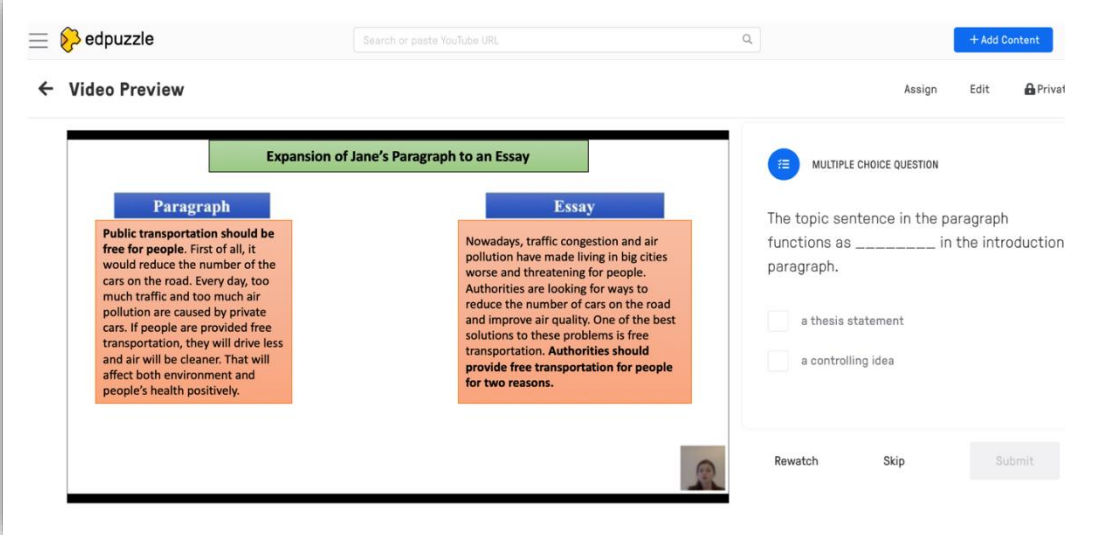


The screenshot shows the Edpuzzle interface. At the top, there is a search bar with the text "Search or paste YouTube URL" and a "+ Add Content" button. Below the search bar, the video player is titled "Video Preview". The video content displays the text: "Modal verbs" and "Modal verbs add meaning to sentences." To the right of the video player, there is an "OPEN ENDED QUESTION" section. The question asks: "Can you write the most common modal verbs used in opinion essays?" Below the question is a text input field. At the bottom of the question section, there are three buttons: "Rewatch", "Skip", and "Submit".

Note. From "Edpuzzle", by Sabrià et al., (2012). *Edpuzzle. Edpuzzle Inc.*, <https://edpuzzle.com>

Figure 11

A Sample Embedded Question on Edpuzzle



The screenshot shows the Edpuzzle interface. At the top, there is a search bar with the text "Search or paste YouTube URL" and a "+ Add Content" button. Below the search bar, the video player is titled "Video Preview". The video content displays the text: "Expansion of Jane's Paragraph to an Essay". Below this title, there are two columns of text. The left column is titled "Paragraph" and contains the text: "Public transportation should be free for people. First of all, it would reduce the number of the cars on the road. Every day, too much traffic and too much air pollution are caused by private cars. If people are provided free transportation, they will drive less and air will be cleaner. That will affect both environment and people's health positively." The right column is titled "Essay" and contains the text: "Nowadays, traffic congestion and air pollution have made living in big cities worse and threatening for people. Authorities are looking for ways to reduce the number of cars on the road and improve air quality. One of the best solutions to these problems is free transportation. **Authorities should provide free transportation for people for two reasons.**" To the right of the video player, there is a "MULTIPLE CHOICE QUESTION" section. The question asks: "The topic sentence in the paragraph functions as _____ in the introduction paragraph." Below the question are two radio button options: "a thesis statement" and "a controlling idea". At the bottom of the question section, there are three buttons: "Rewatch", "Skip", and "Submit".

Note. From "Edpuzzle", by Sabrià et al., (2012). *Edpuzzle. Edpuzzle Inc.*, <https://edpuzzle.com>

The next concern is related to the platform through which one can share video contents. In this research, a practical and free application called Edpuzzle was chosen because it is convenient for both teachers and students to be able to deliver and reach contents easily. The reason why only one platform was used in the research was not to confuse students' minds in terms of sign-in processes; and thus, being overwhelmed by the complexity of two or more platforms could have created some problems for students in terms of registration and rules to be followed. Instead, using one account helped students to be more motivated and participatory in video-viewing processes as it provided simplicity for them to follow the timeline.

Another point is how to make sure that students watch videos and obtain analytical data about it. In this regard, Edpuzzle is a helpful platform in which teachers can track students' progress and participation with the help of learning analytics. In addition, in terms of privacy, contents can be uploaded as publicly or privately, which enables teacher users to share them with other teachers who are interested in the same topic or course. Regarding format, the contents flipped were not pure lectures but various prompts were embedded into videos in order to keep students' attentive and focused during watching. Sample outline analysis was one of these prompts through which students could interactively get engaged in video lecturing.

Based on the constructivist theory, flipped classroom in the research was designed with an emphasis on the importance of social interaction and cooperative learning. Regarding a constructivist study, Brown (2000) suggests "individuals engaged in social practices ... on a collaborative group, [or] on a global community" (p. 24). In this sense, a constructivist classroom setting incorporates a productive and an interactive learning environment, discovery learning, and an active role of learners. Vygotsky's ZPD, in this aspect, proposes tasks which learners cannot do by themselves, but fulfil through more knowledgeable others like their peers or teachers as guides or facilitators (Wass, & Golding, 2014). In the research, class time was primarily spent for cooperative learning

that could facilitate engaging class with small groups and teacher guidance. This is the focal point which flipped learning approach highlights in the designation of class activities. Peer discussion, brainstorming, drafting in groups, giving and getting feedback entailed in class tasks and activities. In this sense, the video lessons mostly included rhetorical instruction which involved various rhetorical modes, patterns of organization, related theoretical information, and modelling that served as a sample paragraph or essay analysis marking basic components in writing. The aim was to have students get familiarized with the modes and patterns which would be used with different purposes before they came to class.

Throughout 10 weeks, both the control and experimental groups were taught the same content based on a textbook in the writing course. Each week, pre-recorded video content was instructed to the experimental group in online setting outside of the class. When they came to class, a 10-minute class discussion about the video content was carried out by the teacher to further clarify the basic points that might cause confusion or ambiguity in students' minds. In line with the textbook followed in the curriculum, after studying relevant or thematic vocabulary in each unit of the textbook, there was an assignment task wherein students started their first draft by choosing the topic from suggested alternatives. Before starting the writing assignment, in order to help them understand their assignment clearly, students were engaged in the tasks that would help them progressively build their writing skills by practising topic sentence writing, finding relevant supporting points, and organizing their ideas into a designed outline.

According to each rhetorical mode, these tasks varied since each required different purposes, styles and tools to convey ideas. For example, in studying reason paragraph, the focus was on finding relevant reasons to develop supporting points as second and third levels in an outline while an opinion paragraph teaching required students to identify the problems and suggest solutions to them in developmental part of the paragraph. Completing these practice tasks, back to assignment part, with small group discussions,

in pairs or groups of three in particular, students were asked to brainstorm in order to elicit ideas, phrases, words and associations with respect to the topic they chose.

The next step was to design an outline of the target mode by organizing the ideas after brainstorming process. With the outline they prepared, small groups proceeded with writing their first drafts. In this stage, they were able to apply the flipped instruction they obtained into practice by creating their topic sentences and supporting points with the consideration of coherence and cohesion. As stated before, the video lessons primarily involved a kind of instruction highlighting various rhetorical modes, related theoretical information and modelling in which students could explore a variety of paragraph or essay format and their structure.

Before they started to create their own drafts, they experienced recognition-focused exercises in finding too general topics sentences or irrelevant supporting points. After controlled practice exercises involving topic or supporting sentence writing for the models given, they were able to produce their own writing. As interactive practices, peer or small group feedback exchanges were performed by the students in order to reach the second draft of their pieces of writing.

In terms of the role of the teacher, during generating ideas including brainstorming and sharing ideas reciprocally, the teacher struggled to guide and facilitate learning process with respect to unknown vocabulary and structure, unity, coherence, and mechanics.

In the first week of the intervention, the topic was how to write a paragraph which targeted the introduction to paragraph writing. For the experimental group, a 20-minute video content including a step-by-step approach about the requirements of paragraph writing was delivered. Brief explanations of paragraph organization, topic sentence, supporting sentences and concluding sentence were taught. In addition, concepts such as unity, coherence, and transitions were introduced. Sample paragraph models were presented in order to highlight basic components of a paragraph and guide students with

the informative boxes including key points. In-class session, after a 10-minute class discussion to remind the key points and solve misunderstood concepts, extensive practices that involved recognition and controlled exercises were introduced to the students to perform collaboratively.

In the second and third weeks of the intervention, how to write a process paragraph was taught with both 18-minute and 15-minute video lessons. The recorded contents involved a brief explanation of a process, what purpose it served, process paragraph types, paragraph organization, and transitions. Furthermore, sample models with coloured-text boxes were introduced to students to get familiarised with the basic parts of a process paragraph. Text boxes were designed as effects highlighting what topic, supporting and concluding sentences looked like in the given samples. This way, students could explore the key features of a good model and learn to manipulate them by constructing their own pieces of writing. They came up with studying basic concepts and key features regarding what a process paragraph would be like prior to in-class meeting.

When they came to class, they briefly covered the video contents in class discussion. After reading a passage, they completed a vocabulary exercise related to process paragraph. Topic sentence writing, finding relevant supporting points, and outlining exercises were conducted by the students getting prepared to write their first draft. Forming small groups, they collaborated to create their first draft of process paragraph. Doing peer review, they were able to revise and edit their first draft and finalize their writings. As it took two weeks to study process paragraph writing, students produced a common process paragraph with their peers at the end of the lesson in the first week. In the second week, an individual writing was created by each student by following the same stages mentioned above.

In the fourth and fifth weeks of the intervention, the reason paragraph was the topic to be studied, and 17-minute and 12-minute video contents were shared with the students. The video lessons incorporated a short definition of a reason, an explanation of what

supporting reasons were, outlining, paragraph organization, transitional phrases. At the end of the 17-minute video content, a video link was shared with the students. This link presents some reasons why people fail at learning a foreign language, and students were asked to take some notes while watching the video and make an outline before coming to class. In the 12-minute video lesson involved sample models with coloured boxes showing basic components of a reason paragraph and transitions. Moreover, a comparison of a first and a final model draft was introduced to the students as such an analysis would help them to recognise the progress from the first into the second work with more mechanical and stylistic rearrangements.

In-class session, the teacher started a short class discussion shedding light on the vague points in the video content. Then students read an article and studied vocabulary building part which focused on -ing adjectives derived from verbs. They as pairs made a chart of listing similarities and differences about the topic of reading passage. Afterwards, narrowing down a general topic, giving definitions of given topics and writing examples, details to develop the body part of a paragraph were practiced by the students. As reason paragraph instruction was given during two weeks, students collaborated to write their first draft in the first week. They worked in small groups to exchange the feedback to revise and edit their work. In the second week, they created their solitary work, and finalized their writing through peer feedback.

In the sixth and seventh weeks, students were introduced the video contents of effect paragraph instruction consisting of 13-minute and 11-minute recordings. The contents covered cause-effect thinking, paragraph connections like repetitions, related words, tenses, and -ed ending adjectives. In the 13-minute video, parts of an effect paragraph were analysed by practising how to write a topic sentence and supporting points with the usage of related linkers. In the 11-minute video, students were introduced the importance of the connection in a paragraph or within paragraphs through transitions,

related words, and repeated words. In this sense, the functions of the repeated words such as key terms, transitions, and related words were emphasized with the examples.

In-class session, the teacher and the students reviewed the video contents by checking any missing or misunderstood points with a short question-answer discussion. Following the short review, students read a passage organized around a cause-effect relationship focus, and engaged in vocabulary study on -ed adjectives deriving from verbs. Topic sentence writing, supporting points exercises, and outlining practices were completed by the students. Working in pairs, they wrote their first drafts of an effect paragraph, and then rearranged their writing with revision and editing processes. As studying effect paragraph writing lasted two weeks, the students produced a shared writing of an effect paragraph in pairs at the end of the lesson. In the second week, each student wrote their own writing by taking the same steps introduced in the previous week, provided and received peer feedback for their partners.

In the eighth and ninth weeks, the topic of the lesson was how to write an opinion paragraph, being taught with 16-minute and 13-minute recordings. The contents included the definition of the term opinion, parts of an opinion paragraph, brainstorming for idea generation, strategies for the developing supporting points, and outlining examples. In the 16-minute video, what an opinion referred to was introduced with the expanded definition. Parts of an opinion paragraph were examined in detail with examples. Furthermore, third level supporting points were studied with an emphasis of examples, explanations, statistical information, and so on. In the 13-minute video lesson, a cause-effect relationship was highlighted as a strategy for the developing supporting points in opinion paragraphs.

When students came to class for face-to-face meeting, a brief discussion was held regarding the vague points and questions that students may have had in their minds. Afterwards, a reading passage was read and analysed based on the opinion that the passage gave to the reader and 'why' question-answer relationship that would lead the students to develop major supporting points. Following the reading activity, a vocabulary

building part was completed by the students who were able to recognize the relationship between the words through synonyms and related words. Topic sentence writing, supporting point exercises, and outlining practices with respect to opinion paragraph writing were conducted by the students. As in pair work, they created their first drafts of an opinion paragraph, and then revised their writing as in pairs with revision and editing processes. In the following week, they expanded their opinion paragraph writing into opinion essays.

In the tenth week, the topic was writing an opinion essay into which an opinion paragraph was transformed by applying what they had acquired about paragraph writing to essay writing. In the 19-minute video recording, the structure of an essay was covered within the framework of an introduction, a main body, and a conclusion. Each was examined in detail with examples. How a topic sentence turned into a thesis statement and each major supporting point changed into the topic sentence of each supporting paragraph in an essay were covered in the video contents. Similarly, it was highlighted that a concluding sentence in a paragraph became a part of a concluding paragraph in an essay with the additional closure such as suggestions, advice, or a warning.

With a sample of a divided essay into paragraphs and highlighted parts, it was targeted that students were supposed to focus on the structure of an essay by figuring out what an essay looked like. Besides, relevant grammatical structures were introduced into students who would need while designing an opinion essay. These included conditional sentences with the types and modal verbs that would signal the meanings of advice, necessity, possibility, or warning. With paragraph examples, conditional structures and modal verbs were practiced by emphasizing the meanings they added to the context. In-class meeting, a brief question-answer discussion was held in order to clear up any misunderstanding over the video contents. Following this, students expanded their opinion paragraphs into opinion essays with the help of the steps that they learnt in the video recordings. They gave feedback mutually as in pairs and asked their questions to the

teacher. Later, they were assigned to write an opinion essay individually in the classroom, which provided them with getting feedback from the teacher when they needed.

Data Analysis

This research is a pretest-posttest design in a quasi-experimental design. Before conducting the scale, Confirmatory Factor Analysis (CFA) was run to verify the factor structure of WSSRLQ scale. The data acquired through WSSRLQ scale was analysed with respect to means, standard deviations, and frequencies. Besides, Multivariate Analysis of Variance, MANOVA, Independent Samples T-Test, and Paired Samples T-Test were performed to explore the effect of flipped classroom on students' self-regulated learning strategies in writing and writing achievement. For the analysis of quantitative data, SPSS 22.0 was used and alpha level was determined as .05.

Confirmatory Factor Analysis

CFA is a type of structural equation modelling in which the casual relationship between observed measures or items and latent variables or factors is examined. In CFA, an empirically and theoretically robust basis is required to evaluate the factor model (Brown & Moore, 2012). CFA is conducted to test an underlying latent structure which has been set before as a theoretically-based model (Byrne, 1998; Hoyle & Panter, 1993; Kline, 2011). The aim with respect to the scale of Writing Strategies for Self-Regulated Learning Questionnaire is to examine the latent structure in a new setting with different populations (DiStefano & Hess, 2005).

Following the stages in Teng and Zhang's study (2016), CFA was performed using SPSS 23.0 Inc package and SPSS AMOS 23.0. A pilot study was conducted to assess the validity and reliability of the scale with 430 participants who took Academic Writing Skills in the academic term of 2019-2020. Teng and Zhang (2016) proposed three models for writing strategies for self-regulated learning, and CFA was performed for these three models in order: 9-factor, 4-factor second order, and one-factor second order models.

For the model fit index CFI, the acceptable values are .90 or above (Browne & Cudek, 1993) and for TLI, .85 or above indicates good fit (Carlback & Wong, 2018; Shadfar & Malekmohammadi, 2013). Values for NFI .80 or above are acceptable (Hooper et al., 2013). The acceptable values for RMSEA are between .05 and .08, and the values between .00 and .05 reflect a good model fit (Hair et al., 2014).

Table 7

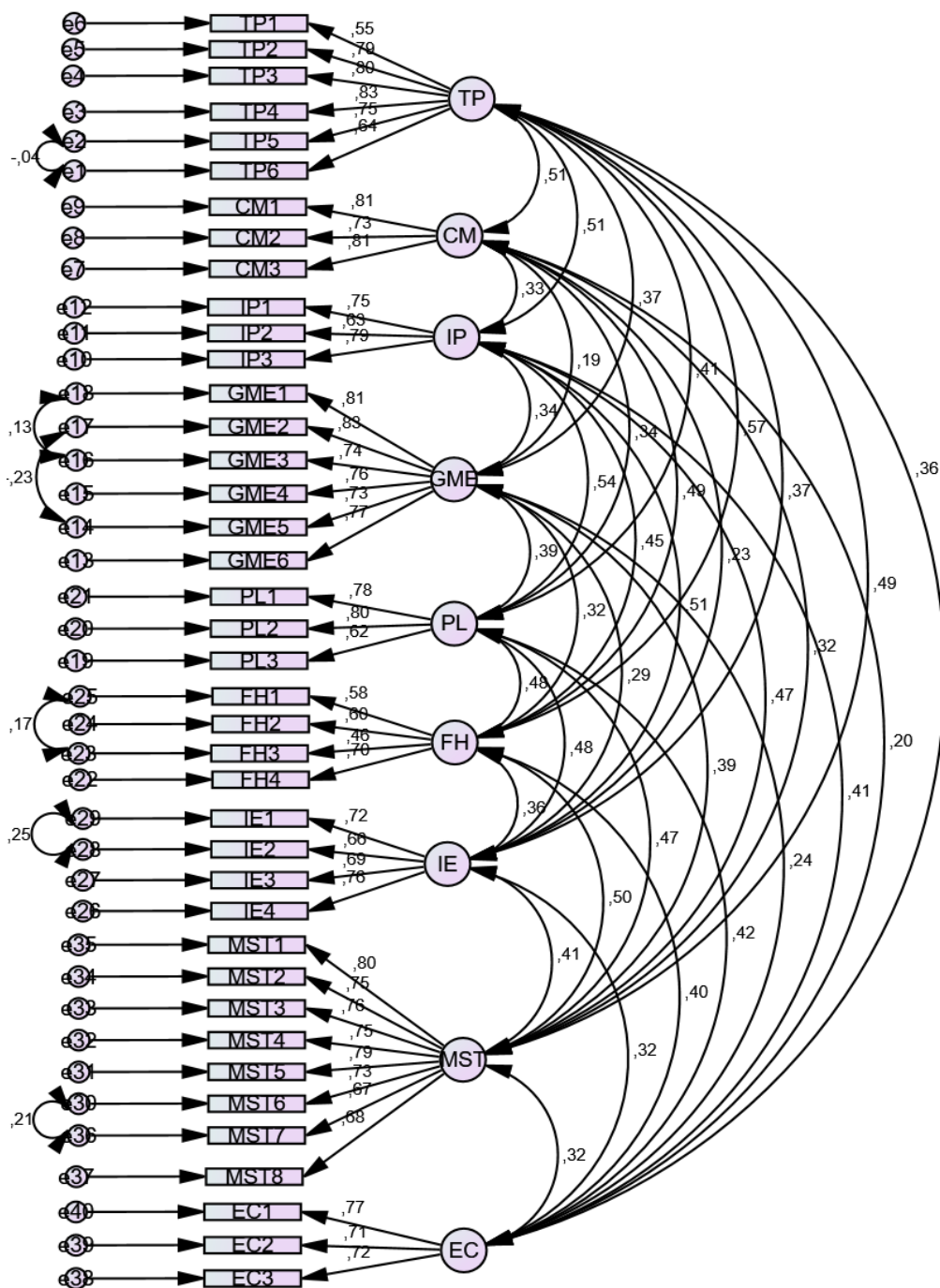
Results of Model Fit Indices

Criteria	Model 1	Model 2	Model 3	Suggested Value
Chi-square/sd	1.480	1.490	1.497	≤5.000
RMSEA	0.033	0.034	0.034	<0.080
GFI	0.90	0.89	0.89	>0.80
NFI	0.88	0.88	0.87	>0.80
CFI	0.96	0.96	0.95	>0.95
TLI	0.95	0.95	0.95	>0.95

As can be seen in Table 7, the results of CFA for model 1 showed a significant chi-square, $\chi^2 (699, n = 430) = 1035.53, p = .00$. Therefore, other indices were checked, and the results were as follows: NFI= .88, TLI = .95, CFI= .96, GFI = .90, RMSEA = .033. CFA for Model 2 revealed $\chi^2 (720, n = 430) = 1073.37, p = .00$. Goodness-of-fit indices were obtained as follows: NFI= .88, TLI = .95, CFI= .96, GFI = .89, RMSEA = .034. CFA for Model 3 resulted as follows: $\chi^2 (725, n = 430) = 1086.18, p = .00$. Goodness-of-fit indices were as follows: NFI= .87, TLI = .95, CFI= .95, GFI = .89, RMSEA = .034. After six pairs of item errors were covaried, three of models showed a good fit. The reliability coefficient of the scale was found to be .93, indicating internal consistency (Cortina, 1993).

Figure 12

Nine-Factor Correlated Model of EFL Writing Strategies for Self-Regulated Learning

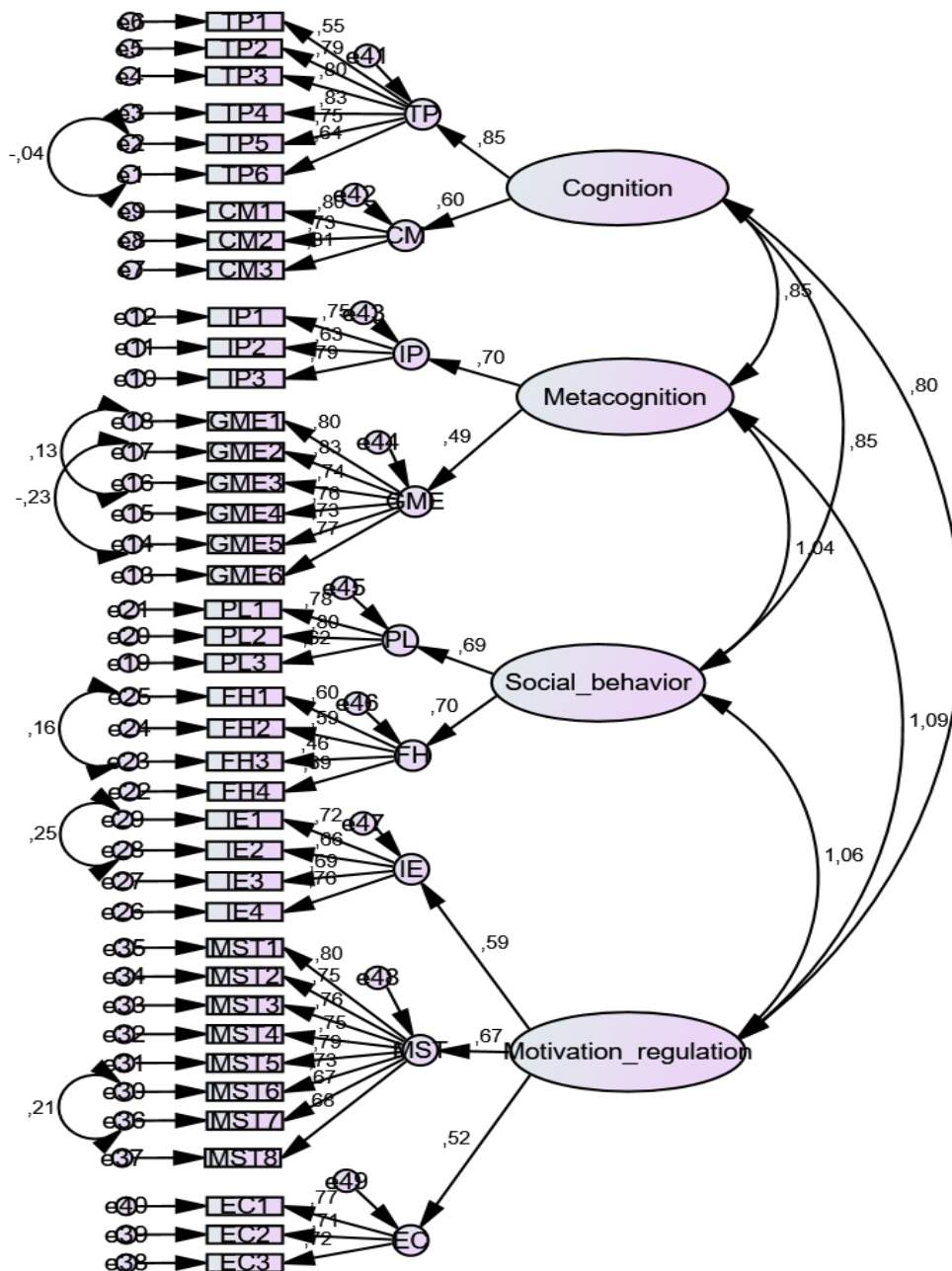


Note. n = 430

TP= Text Processing; CM= Course Memory; IP= Idea Planning; GME= Goal-Oriented Monitoring; PL= Peer Learning; FH= Feedback Handling; IE= Interest Enhancement; MST= Motivational Self-Talk; EC= Emotional Control

Figure 13

Four-Factor Second-Order Factor Model of EFL Writing Strategies for Self-Regulated Learning

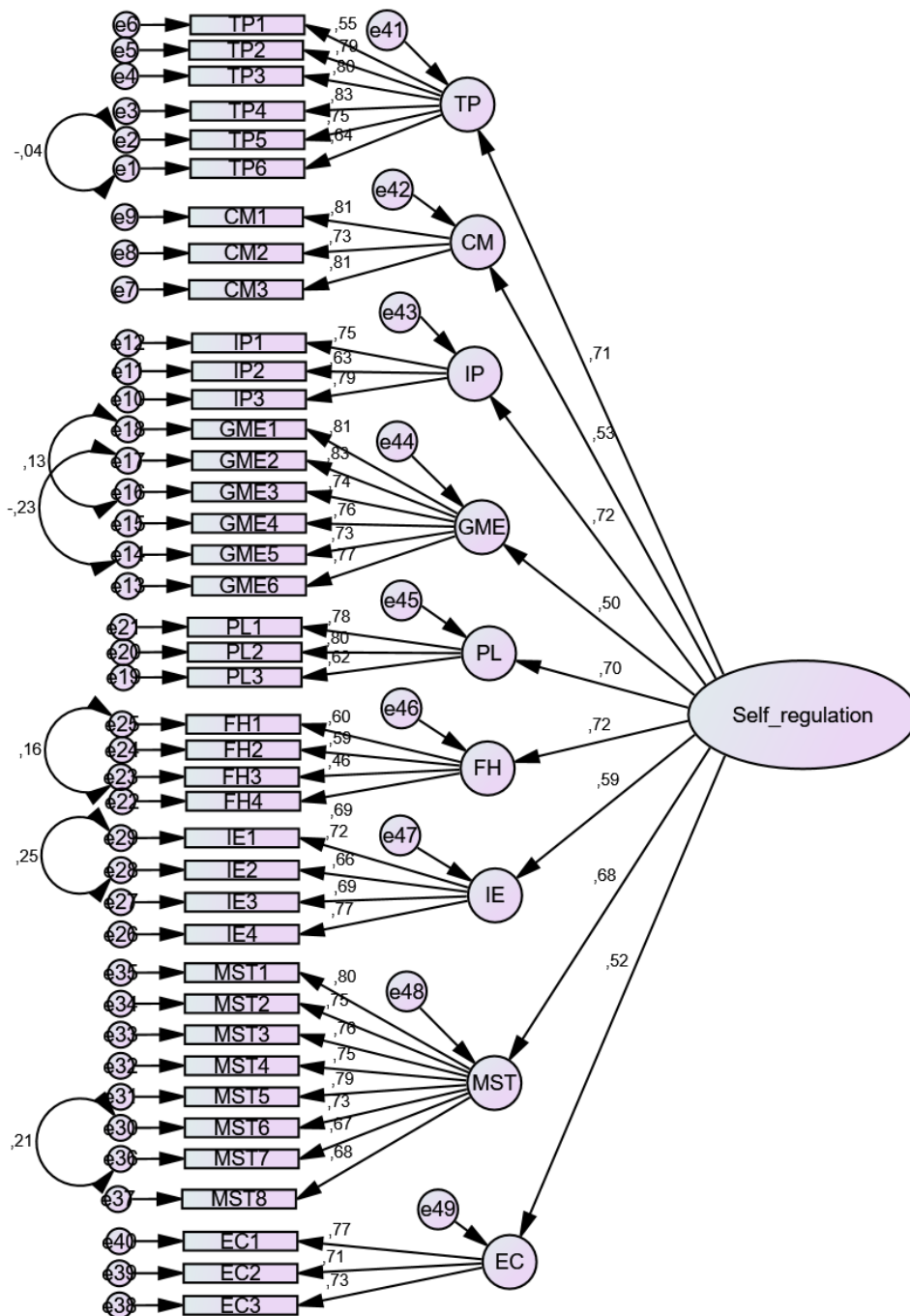


Note. n = 430

TP= Text Processing; CM= Course Memory; IP= Idea Planning; GME= Goal-Oriented Monitoring; PL= Peer Learning; FH= Feedback Handling; IE= Interest Enhancement; MST= Motivational Self-Talk; EC= Emotional Control

Figure 14

One-Factor Second-Order Factor Model of EFL Writing Strategies for Self-Regulated Learning



Note. n = 430

TP= Text Processing; CM= Course Memory; IP= Idea Planning; GME= Goal-Oriented Monitoring; PL= Peer Learning; FH= Feedback Handling; IE= Interest Enhancement; MST= Motivational Self-Talk; EC= Emotional Control

As shown in Table 8 below, the CFA results also proved the discriminant validity of the 9 writing strategies with ranging but somehow moderately robust correlations. Inter-correlation coefficients varied from $r = .19$ between Goal-Oriented Monitoring (GME) and Course Memory (CM) to $r = .56$ between Feedback Handling (FH) and Text Processing (TP). Additionally, Peer Learning (PL) was strongly correlated with Idea Planning (IP, $r = .54$) and Text Processing (TP, $r = .41$). Course Memory (CM) had a small correlation with Goal-Oriented Monitoring (GME, $r = .19$) and Emotional Control (EC, $r = .19$).

Table 8

The Correlations among Dimensions of WSSRLQ Scale

Dimensions	Strategies	TP	CM	IP	GME	PL	FH	IE	MST	EC
Cognition	TP	1								
	CM	.505	1							
Metacognition	IP	.514	.328	1						
	GME	.365	.190	.342	1					
Social. Beh.	PL	.410	.336	.541	.392	1				
	FH	.569	.492	.446	.324	.482	1			
Mot. Reg.	IE	.371	.235	.513	.289	.477	.357	1		
	MST	.487	.325	.469	.388	.470	.500	.412	1	
	EC	.360	.197	.407	.240	.420	.397	.321	.323	1

Note. $n = 430$

TP= Text Processing; CM= Course Memory; IP= Idea Planning; GME= Goal-Oriented Monitoring; PL= Peer Learning; FH= Feedback Handling; IE= Interest Enhancement; MST= Motivational Self-Talk; EC= Emotional Control

Chapter 4

Findings, Comments, and Discussion

This study aims at exploring the effect of flipped learning approach on EFL learners' writing achievement and self-regulation in writing. Specifically, it examines whether there is a significant difference between the flipped classroom group and the traditional classroom group with regard to writing achievement; there is a significant difference between the flipped classroom group and the traditional classroom group in terms of self-regulation in writing; and there is a correlation between self-regulation in writing and writing achievement in the flipped classroom group. This part presents the descriptive and inferential statistics, and reports the main results of the data collection and analysis that were conducted along with the research questions mentioned above. Then it includes a discussion of major findings including comments on the effect of flipped learning intervention on learners' writing achievement and self-regulation in writing.

Findings

The findings on the Effect of Flipped Learning Approach upon Writing Achievement

Skewness-Kurtosis values, histograms, Q-Q plots and Kolmogorov-Smirnov and Shapiro-Wilk's tests were investigated to test univariate normality assumption (Field, 2009). For pre- and post-tests, the results of Kolmogorov-Smirnov and Shapiro-Wilk's tests were not significant ($p > .05$). In addition, skewness-kurtosis values were between -1 and +1 for pre- and post-tests. As a result, it can be stated that the data had a normal distribution.

In order to make sure there would be no significant difference between the flipped classroom group and the traditional classroom group in terms of their writing proficiency level, essay writing task was performed among the groups before the intervention. Independent samples t-test results presented in Table 9 below indicated that the flipped

classroom group (M= 69.4, SD = 8.9) and the traditional classroom group (M = 67 SD = 7.1) did not significantly differ from each other in the scores of essay writing, $t(49) = 1.06$, $p = 0.29$. As a result, it can be assumed that both groups were equal at the beginning of the intervention with respect to writing achievement.

Table 9

The Results of the Independent Samples T-Test for Determining Equivalency of Groups

Group	n	Results		p
		Mean	SD	
Flipped Class	25	69.4	8.9	0.29
Traditional Class	26	67.0	7.1	

A Paired Samples T-test was conducted to determine whether there was a significant difference between the pre-test and post-test writing scores of the flipped and traditional classroom groups. As shown in Table 10, both groups increased their writing scores at the end of the course significantly. Despite the significant increase in writing scores of both groups, the flipped classroom group had higher scores in writing than the traditional classroom group did.

Table 10

The Results of the Paired Samples T-Test for Writing Achievement of the Groups

Group	Pre-test		Post-test		p
	Mean	SD	Mean	SD	
Flipped Class	69.4	8.9	77.2	9.1	0.000
Traditional Class	67.0	7.1	71.9	7.2	0.000

The results of Independent Samples T-test in Table 11 below showed that the flipped classroom group (M= 77.2, SD = 9.1) and the traditional classroom group (M = 71.9 SD = 7.2) significantly differed from each other in post-test writing scores after the flipped intervention, $t(49) = 2.28, p = 0.02$. This statistical result concludes that the flipped class implementation positively affected the writing achievement of the intervention group.

Table 11

The Results of the Independent Samples T-test for Writing Achievement between the Groups

Group	Results			<i>p</i>
	n	Mean	SD	
Flipped Class	25	77.2	9.1	0.027
Traditional Class	26	71.9	7.2	

The findings on the Effect of Flipped Learning Approach upon Self-Regulation in Writing

Basic analysis of the data indicated the mean values of the 40 items ranged from 3.85 to 5.30, and standard deviations varied from .65 to 1.2. The skewness was between -.57 and .14, and the values for kurtosis were -1.3 and .03. Shapiro-Wilk's test was performed, and the results demonstrated that one variable was significant; it might have been affected by sample size, however (Field, 2009). The fact that the values for skewness and kurtosis are between -1.5 and +1.5 indicates normally distributed data (Tabachnick & Fidell, 2013).

Independent Samples T-test was performed to reveal whether there was a significant difference between both groups before the flipped intervention. Table 12 displays that there is no significant difference between the flipped and traditional classroom groups before the intervention in overall scores of WSSRLQ.

Table 12

Independent Samples T-Test Results of Overall WSSRLQ Scale Before Intervention

	Pre-test	p
Flipped Class	4.28 ± .81	.732
Traditional Class	4.22 ± .33	

Multivariate Analysis of Variance (MANOVA) was conducted to explore whether two groups were significantly different regarding subfactors of WSSRLQ before the flipped intervention. As Tabachnick and Fidell (2007) assert, before MANOVA was performed, the assumptions of homogeneity of variance and homogeneity of covariance were checked. Levene's test was conducted for homogeneity of variance. The test results demonstrated that error variance of the dependent variables were equal across the groups ($p > .05$). In terms of homogeneity of covariance, the result of Box's M test indicates that covariance matrices are equal (Box's $M = 74.54$, $p = .07$).

Subfactors of WSSRLQ Scale were examined by means of MANOVA, displaying that no significance with low effect size between the groups occurred before the intervention, $F(9,41) = .488$, $p = .874$; Wilk's $\Lambda = 0.903$, $\text{partial}\eta^2 = .097$, as shown in Table 13 below.

Table 13

Multivariate Analysis of Variance for the Results of WSSRLQ Scale Before Intervention

	Effect	Value		Hypothesis df	Error df	Sig.	Partial Eta Squared
Flipped Class Traditional Class	Pillai's Trace	.097	.488b	9.000	41.000	.874	.097
	Wilks' Lambda	.903	.488b	9.000	41.000	.874	.097
	Hotelling's Trace	.107	.488b	9.000	41.000	.874	.097
	Roy's Largest Root	.107	.488b	9.000	41.000	.874	.097

As it is seen in Table 14 below, there is no significant difference between the flipped and the traditional classroom groups with regard to cognition referring to text processing, course memory, metacognition including idea planning, goal monitoring and evaluation, social behaviour as peer learning, and feedback handling, and motivational regulation referring to interest enhancement, motivational self-talk, and emotional control before the flipped intervention. As a result, it can be assumed that the students in both the flipped and traditional classroom groups have equal levels of self-regulation in writing before the flipped learning intervention is implemented.

Table 14***Multivariate Analysis of Variance for the Results of Subfactors of WSSRLQ Scale before Intervention***

	Group	N	Mean	SD	p
TP	Flipped Class	25	4.86	.93	.887
	Traditional Class	26	4.90	.86	
CM	Flipped Class	25	4.19	.83	.912
	Traditional Class	26	4.16	.87	
IP	Flipped Class	25	4.27	.86	.830
	Traditional Class	26	4.32	.81	
GME	Flipped Class	25	4.32	.99	.785
	Traditional Class	26	4.25	.82	
PL	Flipped Class	25	3.91	1.06	.344
	Traditional Class	26	3.67	.88	
FH	Flipped Class	25	4.01	1.10	.720
	Traditional Class	26	4.10	.76	
IE	Flipped Class	25	4.10	1.11	.112
	Traditional Class	26	3.64	.91	
MST	Flipped Class	25	4.45	.89	.969
	Traditional Class	26	4.44	.91	
EC	Flipped Class	25	4.46	.96	.925
	Traditional Class	26	4.48	.89	

Note. n = 430

TP= Text Processing; CM= Course Memory; IP= Idea Planning; GME= Goal-Oriented Monitoring; PL= Peer Learning; FH= Feedback Handling; IE= Interest Enhancement; MST= Motivational Self-Talk; EC= Emotional Control

Independent Samples T-Test was carried out to find out whether the flipped and the traditional classroom groups significantly differed from each other after the flipped intervention was conducted. Table 15 displays that the flipped and the traditional classroom groups had a significant difference regarding the overall scores of WSSRLQ scale after the flipped intervention. Namely, the flipped group and the traditional classroom group differed in their overall self-regulation levels after conducting the flipped intervention.

Table 15

Independent Samples T-Test Results of Overall WSSRLQ Scale after Intervention

	Post-test	p
Flipped Class	4.79 ± .36	.000
Traditional Class	4.29 ± .23	

MANOVA was run to examine if both groups were significantly different from each other in term of the subfactors of WSSRLQ after the flipped intervention was implemented. For homogeneity of variance, Levene's test displayed error variances of the dependent variable were equal in both groups ($p > .05$). With respect to homogeneity of covariance, the result of Box's M test illustrates that covariance matrices are equal (Box's M= 76.63, $p=.052$).

The results of MANOVA showed that after the intervention, there was a significant difference between the groups with robust effect size, $F(9,41) = 4.242$, $p=.001$; Wilk's $\Lambda=0.518$, $\text{partial}\eta^2=.48$. Table 16 shows the relevant results below.

Table 16

Multivariate Analysis of Variance for the Results of WSSRLQ Scale after Intervention

	Effect	Value	F	Hypothesis df	Error df	Sig.	Partial Eta Squared
Flipped Class Traditional Class	Pillai's Trace	.482	4.242b	9.000	41.000	.001	.482
	Wilks' Lambda	.518	4.242b	9.000	41.000	.001	.482
	Hotelling's Trace	.931	4.242b	9.000	41.000	.001	.482
	Roy's Largest Root	.931	4.242b	9.000	41.000	.001	.482

As it is shown in Table 17 below, the flipped classroom group had significantly higher post-scores in cognition referring to text processing, course memory, metacognition including idea planning, goal monitoring and evaluation, and social behaviour as peer learning, and feedback handling. On the other hand, there was no significant difference between the flipped and the traditional classroom groups in terms of motivational regulation referring to interest enhancement, motivational self-talk, and emotional control. It can be concluded that the flipped class implementation did not significantly affect the motivational regulation.

Table 17

Multivariate Analysis of Variance for the Results of WSSRLQ Scale after Intervention

	Group	N	Mean	SD	p
TP	Flipped Class	25	5.30	.77	.024
	Traditional Class	26	4.84	.62	
CM	Flipped Class	25	4.74	.68	.027
	Traditional Class	26	4.25	.87	
IP	Flipped Class	25	4.96	.66	.000
	Traditional Class	26	4.23	.81	
GME	Flipped Class	25	5.00	.70	.002
	Traditional Class	26	4.25	.73	
PL	Flipped Class	25	4.54	.75	.002
	Traditional Class	26	3.91	.85	
FH	Flipped Class	25	4.59	.84	.022
	Traditional Class	26	4.00	.92	
IE	Flipped Class	25	4.28	.59	.085
	Traditional Class	26	3.94	.74	
MST	Flipped Class	25	4.82	.71	.469
	Traditional Class	26	4.67	.72	
EC	Flipped Class	25	4.71	.79	.567
	Traditional Class	26	4.59	.67	

Note. n = 430

TP= Text Processing; CM= Course Memory; IP= Idea Planning; GME= Goal-Oriented Monitoring; PL= Peer Learning; FH= Feedback Handling; IE= Interest Enhancement; MST= Motivational Self-Talk; EC= Emotional Control

Paired Samples T-Test was performed within groups in order to look into whether the pre-test and post-test scores of overall and subfactors of WSSRLQ scale significantly positively changed. The results displayed that the flipped classroom group had significantly higher scores of overall and cognition (text processing, memory strategies), metacognition (idea planning, goal-oriented monitoring and evaluation strategies), and

social behaviour (feedback handling, peer learning), except motivational regulation (motivational self-talk, interest enhancement, emotional control). On the other hand, as can be seen below, the post-test scores of the flipped group in interest enhancement, motivational self-talk and emotional control increased when compared to the pre-test scores of the motivational regulation subfactors. However, the traditional classroom group's pre- and post-overall and subfactors scores did not differ significantly as shown in Table 18.

Table 18

Paired Samples T-Test Results of WSSRLQ Scale between the Groups

	Flipped Class			Traditional Class		
	Pre	Post	p	Pre	Post	p
TP	4.86 ± .93	5.30 ± .77	.000	4.90 ± .86	4.84 ± .62	.794
CM	4.19 ± .83	4.74 ± .68	.000	4.16 ± .87	4.25 ± .85	.712
IP	4.27 ± .86	4.96 ± .66	.000	4.32 ± .81	4.23 ± .67	.517
GME	4.32 ± .99	5.00 ± .70	.000	4.25 ± .82	4.35 ± .73	.421
PL	3.91 ± 1.06	4.54 ± .75	.000	3.65 ± .88	3.81 ± .85	.284
FH	4.01 ± 1.10	4.59 ± .84	.000	4.10 ± .76	4.00 ± .92	.339
IE	4.10 ± 1.11	4.28 ± .59	.373	3.64 ± .91	3.94 ± .74	.080
MST	4.45 ± .89	4.82 ± .71	.084	4.44 ± .91	4.67 ± .72	.095
EC	4.46 ± .96	4.71 ± .79	.111	4.48 ± .89	4.59 ± .67	.583
Overall	4.28 ± .81	4.79 ± .36	.000	4.22 ± .33	4.29 ± .23	.287

Note. n = 430

TP= Text Processing; CM= Course Memory; IP= Idea Planning; GME= Goal-Oriented Monitoring; PL= Peer Learning; FH= Feedback Handling; IE= Interest Enhancement; MST= Motivational Self-Talk; EC= Emotional Control

The Findings on the Correlation between Self-Regulation in Writing and Writing Achievement in the Flipped Classroom Group

In order to evaluate whether there was a relationship between the post-test writing score and self-regulation levels of the students in the flipped classroom group, a Pearson correlation coefficient was conducted. Correlational analysis displayed there was a positively significant correlation between the writing scores and self-regulation levels in writing of the flipped group as follows: $r(23) = .40, p = .046$.

The table 19 below shows the Pearson correlation coefficients between the post-test writing scores and self-regulation levels in writing of the flipped group.

Table 19

Pearson Correlation Coefficient

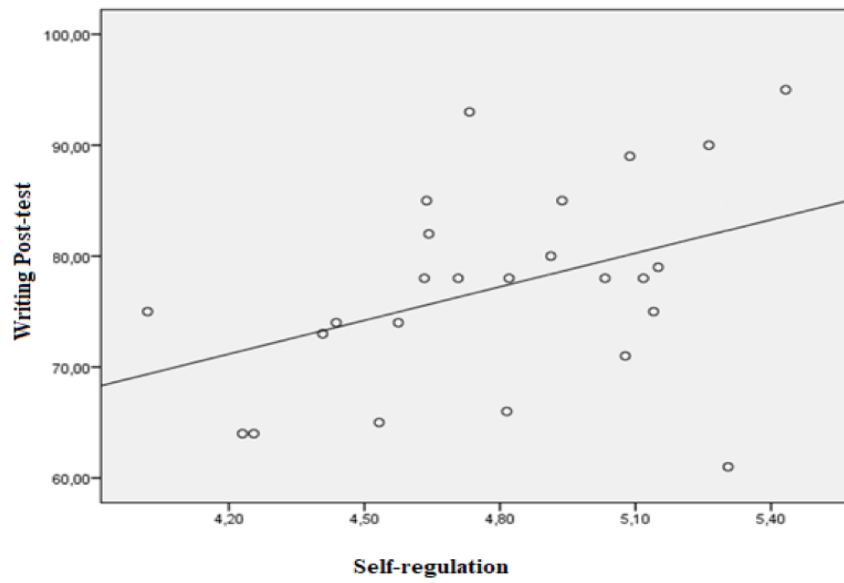
		Writing Post-test	Self-regulation Post-test
Writing Post-test	Pearson Correlation	1	.403*
	Sig.(2-tailed)		.046
	N	25	25
Self-regulation Post-test	Pearson Correlation	.403*	1
	Sig.(2-tailed)	.046	
	N	25	25

*Correlation is significant at the 0.05 level (2-tailed).

The scatterplot in Figure 15 below shows a positively significant correlation between the writing scores and self-regulation levels in writing of the flipped group.

Figure 15

The Relationship between Writing Post-Score and Self-Regulation Post-Score in Writing



Discussion

The Effect of Flipped Learning Approach on EFL Learners' Writing Achievement and Self-Regulation in Writing

With regard to the main research question, the findings showed a positive effect of the flipped classroom upon writing achievement and writing self-regulation. The findings showed that the means of post-test scores were higher than the means of pre-test scores of the students in the flipped classroom group in both writing performance and self-regulation of writing. Overall, these findings of the study are in accordance with the findings reported by many studies in the literature in a way that flipped classroom model positively affected the achievement in writing (Boucheфра, 2017; Ekmekci, 2017; Florence & Kolski, 2021; Kansizoglu & Comert, 2021; Moussaoui & Moubtassime, 2022; Muluk et al., 2022; Shafiee et al., 2022; Tabassum, 2020). Among them, for instance, a relevant study carried out by Ozturk and Cakiroglu (2021) investigated the effect of a flipped model with self-regulated learning strategies on the achievement scores in an EFL setting. They revealed that the students in the flipped class through self-regulated learning strategies had higher scores in reading, writing, speaking, and grammar than the traditionally instructed group did.

However, few studies have reported the effect of flipped class model on self-regulation in language learning (Altas & Mede, 2020; Cakiroglu & Ozturk, 2017; Ozturk & Cakiroglu, 2021; Robbins et al., 2020). Only one study (Altas & Mede, 2020) among them examined the impact of flipped class model on self-regulated learning in writing classes. Contrary to the present study, Altas and Mede (2020) found no significant effect of the flipped class on self-regulated learning in writing. Cakiroglu and Ozturk (2017) in their study aimed to explore the development of self-regulation in a flipped class based on problem-based learning activities. They revealed that different dimensions of self-regulation were high or moderate across the online and face-to face settings.

Robbins et al. (2020) found out that flipped learning across multiple disciplines caused a decrease in motivation and learning strategies under the framework of self-regulation.

There are few studies which focus on one dimension of overall self-regulation. To evidence, Er et al. (2015) in their study aimed to explore online college students' help-seeking behaviour in a flipped science classroom. Likewise, Kustandi et al. (2020) investigated the effect of flipped science class of pre-service teachers on self-confidence, achieving goals, independent learning, and others as self-regulation dimensions. They found a positive effect of the flipped class on the constructs related to self-regulated learning.

The Effect of Flipped Learning Approach on Writing Achievement of the Flipped Classroom Group

The first sub-research question aimed to explore whether there was a significant difference between the flipped classroom and traditional classroom groups with regard to writing achievement. The findings revealed that the final exam scores of the flipped class group were significantly higher than those of the traditional class group. Before the flipped intervention, both groups did not differ from each other significantly. As a consequence, this study showed that the flipped classroom instruction significantly and positively affected students' writing achievement.

This study presents similar results with the literature in terms of positive effect of the flipped instruction on students' achievement in writing. For instance, Hidayat and Praseno (2021) conducted a study and reported that flipped classroom model and Edpuzzle improved students' participation in learning activities and achievement in the writing course. Through the videos shared by Edpuzzle, which was utilized in the present study as well, students accomplished the course with 78 average score out of 100. A similar conclusion was reached by Altas and Mede (2020) revealing that flipped classroom implementation led to better achievement in writing. In their study, Fathi and Rahimi (2020)

reported that flipped classroom significantly improved students' writing performance and writing fluency. They stated that the development was on students' overall performance in writing; but there was no effect of flipped classroom on the complexity and accuracy in writing.

In their study, Mubarak et al. (2019) demonstrated that flipped class model had a positive effect on students' writing achievement. They also found out that the flipped model affected students' achievement across the cognitive styles significantly. The study conducted by Altas and Mede (2020) showed a similar result in a way that the flipped class model improved students' writing skills, but there was no significant effect on reading achievement.

A similar conclusion was reached by Nguyen et al. (2019) in the way that flipped classroom instruction increased students' final exam scores in writing compared to the control group that was instructed based on the traditional approach. Ozkurkudis and Bumen (2019) have shown in their study that the flipped classroom improves students' writing achievement with flipped grammar videos taught in writing classes. In the seven-week lasted process, the experimental group significantly outperformed the control group in academic performance of writing.

The result regarding the first sub-research question may be attributed to some reasons. In this study, the major reason why the flipped class group outperformed the traditional class group in the final exam scores in the academic writing course may be related to the state of preparedness. As a type of priming, students in the flipped writing class already became aware of what would be covered in the coming class, and the state of readiness might have made students improve their self-confidence and get engaged in. Knowing the content in advance and being aware of what has been comprehended and has not been fully understood, students might have been in the feeling of security about their learning process. In addition, they could find support from the content outside the class to fulfil the classwork (Ash, 2012). Focused on the questions that they will ask when

coming back to in-class session more, they can be less loaded cognitively in terms of the information they have dealt with (Karaca & Ocak, 2017). Similarly, Turan and Goktas (2016) conducted a study in which they investigated the efficiency of the flipped classroom method and its effects on students' achievement and cognitive load levels. They reported that the students who were instructed by flipped classroom model had higher academic achievement and less cognitive loads when compared to the control group with traditional method of instruction.

Another attribution related to the effect of flipped class on writing achievement may be the flexibility which allows students to handle most of their own learning in terms of timing and pacing. In the present study, the students could have a chance to pause the video to take notes, rewind the parts that they did not understand. Along the given time before the face-to face classes, students were able to exploit the video lecture materials as much as they could.

Similarly, Pavanelli (2018) highlights the importance of flexible schedule that flipped class model proposes for students. The students who were instructed with the flipped class in the study attributed their improvement of writing skills to the flexible program in flipped learning. To improve writing skills needs a great number of loads on the mental processes. In this sense, students need to make effort in terms of both semantic and syntactic processing in writing unlike other language skills (Ulusan, 2018). As shown in Bloom's Taxonomy hierarchy, through the flipped classroom, basic steps are taken outside of the class so that high levels of learning can occur in the class smoothly.

A further reason for the increase in the achievement in the flipped writing class may be resulted from the collaboration in learning settings. The present study had in-class sessions of the intervention that took place in the class wherein students formed pair groups or groups of three while making an outline, creating their first drafts, and giving feedback to each other as a group or individually. In the traditional classroom group, the time for such group or pair activities was limited, and the tasks were assigned as

homework to the students rather than being dealt with as classwork. In the flipped class students could come together very often in order to fulfil the assigned tasks in class sessions, which was one of the focal points to be considered when planning a flipped class. The aim of a flipped class is to free up the instructional class time for practice and hands-on activities. Regarding the connection between the flipped class and collaboration, a flipped class is conceptualized within interrelated theoretical frameworks such as peer-assisted, collaborative, and cooperative learning (Bishop & Verleger, 2013, June). Peer-assisted learning is defined as “the acquisition of knowledge and skill through, active helping and supporting among status equals or matched companions” (Topping & Ehly, 1998, p. 1).

In similar to the findings of the present study, Pavanelli (2018) in her study, highlighted the themes of collaboration and interaction based on the students' comments on the implementation of a flipped class. She stated that her students were glad to be interacting with their professor and classmates during the class. They also expressed that they had more collaboration which enabled them to ask any questions to both the professor and their pairs and clarify any ambiguous points related to the content.

In the present study, the flipped class generated sufficient in-class time for the students to work together and reach a goal by sharing the responsibility. With reference to cooperative learning, consisting of three main components, students were able to work together toward a goal; each member of the team took responsibility for each subgoal; and, individual contributions were collected to reach that goal. Suwito and Hamdani (2019) reported that the flipped class promoted collaborative learning as the sense of cooperation, comfort, and openness was improved and the flipped class created a motivating setting for students to work with others. Having students work in groups does not mean to cooperative learning every time. It is more related to sitting around a table to do a task with a sense of individual accountability (Roger & Johnson, 1994). In the current study, it was aimed to have students interact with each other around different tasks in the

face-to-face class time. As stated in the section of procedure, a goal for each week was set for students to reach such as learning how to write a process paragraph and an opinion paragraph. They did their best in order to complete the assigned task during in-class session with the mutual assistance. As Roger and Johnson point up (1994, p.2), positive interdependence occurs when they “work together in small groups to maximize the learning of all members by sharing their resources to provide mutual support and encouragement and to celebrate their joint success”.

As a continuation of the reasons for the achievement in the flipped writing class in the current study, from the constructivist point of view, scaffolding may relate to the case. In the present study, one of the affordances of the flipped writing class model was to promote a learning environment in which students could be aided by supportive activities, and then achieve the tasks independently. Two weeks were assigned for each type of paragraph to study, and the students worked in pairs or small groups with the guidance of the teacher in order to write the first draft. They asked for feedback from their peers and the teacher whenever they needed.

In the second week after the first draft was produced, they created their solitary work. Making an outline in pairs and small groups for each type of writing activity was critical for group work to practice brainstorming, mind mapping, and classifying ideas or concepts into supporting points. These were the techniques that students found quite challenging in writing to learn when they were left alone after being taught the theoretical content in the class. Thanks to the flipped model, quite enough room was made for an interactive process between the students and their classmates and between the students and the teacher. The fact that the students were able to internalize the steps of academic writing deeply and found enough opportunity for practicing was meaningful to improve their writing skills. On the other hand, in the traditional method by which the control group was instructed, the scaffolding process was limited due to overwhelmingly heavy curricular content, and it was done toward the end of the lesson briefly.

The flipped writing class in the study may have helped to improve the students' achievement as it promoted using interaction as a learning scaffold by providing lecture part prior to class and freeing face-to-face class time for structured interactive tasks (Hsieh, 2017). It provided opportunities for students to learn best when they got engaged in learning experiences actively rather than passively receiving the information. These experiences occur in social settings with others as Vygotsky states that linguistic development starts with the external and socialised interaction (Nordlof, 2014). According to social-constructivist theory, language learning as a developmental process requires an internalization of the content with the assistance of social communication. In the flipped writing class, while moving through the zone of proximal development, students needed scaffolding to do the tasks successfully and were supported by their pairs and teacher. In similar vein, Bodrova and Leong (1998) state that when students are assisted by more knowledgeable others, who are their mates and teachers, they can have a chance to observe and practice the target skills. Considering all the points highlighted above, the current study contributes to the literature as flipped classes make an alternative for L2 writing instruction based on sociocultural theoretical perspective.

The Effect of Flipped Learning Approach on Self-Regulation in Writing of the Flipped Classroom Group

The second sub-research question the study addressed aimed to explore whether there was a significant difference between the flipped classroom group and the traditional classroom group in terms of self-regulation in writing.

The results of the study showed that the flipped classroom group and the traditional classroom group significantly differed from each other with respect to their pre-test and post-test scores of overall self-regulation in writing. The scale consists of four dimensions involving nine subdimensions as cognitive (text processing, memory strategies), metacognitive (idea planning, goal-oriented monitoring and evaluation strategies), social

behaviour (feedback handling, peer learning), and motivational regulation (motivational self-talk, interest enhancement, emotional control).

With regard to subdimensions of the WSSRLQ, the findings pointed out that there was a significant difference between the flipped and traditional class groups in three dimensions including cognition, meta-cognition, and social behavioural of the WSSRLQ except motivational regulation despite an increase in the post-test scores of motivational regulation. Before the flipped intervention, both groups did not have any difference in terms of self-regulation levels of writing.

The results obtained in this study are in accordance with the several studies documenting the fact that flipped classroom positively affected self-regulation in various settings. To evidence, Lai and Hwang (2016) conducted a study examining the effect of the flipped class model on self-regulation and self-efficacy levels of the students in Mathematics course, and found out that flipped Mathematic course improved students' self-regulation and self-efficacy levels. Jdaitawi (2019) examined the effects of the flipped classroom to preparatory year instruction on students' self-regulation levels, and the findings revealed that the self-regulation levels of the experimental group were significantly higher compared to those of the control group. Similarly, in their study, Zarouk et al. (2020) reported that the flipped activities based on project-based learning approach to Economics, Science of Information, Tourism, and Translation courses led to improvement in cognitive and metacognitive strategies both in individual and group work.

In a study by Al-Abdullatif (2020), similar conclusions were drawn in a way that the flipped classroom model led to improvement in metacognitive learning strategies high school students had.

As the studies point out above, there is empirical evidence regarding the effect of the flipped class model on self-regulation levels of the students. However, most of them have been conducted in different disciplines and settings apart from language learning. There is one study conducted by Altas and Mede (2020) in which the effectiveness of the

flipped writing class for self-regulation was investigated. Contrary to the current study, they suggested that the flipped classroom model had no significant effect on students' self-regulated learning levels in writing.

In the literature, there is almost no comprehensive research that has focused on four dimensions with nine sub-dimensions of self-regulation in writing in a flipped class model. Nevertheless, considering a detailed examination of each dimension under writing self-regulation, the current study confirmed the findings of the previous studies on cognitive dimension of writing self-regulation in flipped class models. The findings of the study revealed that the flipped class group had higher memory and text processing strategy use. This result is compatible with the results of other studies (Kerr, 2015; Mithun & Evans, 2018; Shatto et al., 2017). They stated that flipped learning could enhance students' learning retention and long-term memory.

Kim et al. (2017) suggested that the flipped class supported the students' development of cognitive skills more compared to the traditional class in terms of the time allocated for the content learning. Prior knowledge which is provided by the flipped class outside the classroom helps students to deal with less cognitive load when they come to class with a higher level of preparedness. In addition, the fact that their prior knowledge is activated regarding the relevant content promotes cognitive processes in-depth information processing. In this study, the flipped class group had higher levels of course memory strategy use in order to actively remember the previously learnt content in writing classes. In this sense, accessing their schema with the help of the flipped materials or content may facilitate learning better (Kim et al., 2017).

In the current study, the traditional class as a control group was exposed to the traditional instruction in which all the content was introduced in the class on the same day, and no sufficient time was provided to activate schema for deep learning. However, the flipped writing model created a learning environment in which the students continued their schema activation with the ten-minute discussion session to clarify vague points and

schema construction with the composing and feedback processes. Similarly, Yu and Zhu (2019) have reported that the flipped classes promoted associating learning content with the previous knowledge whereas non-flipped ones did not include pre-class learning process into their curriculum.

As students were able to watch videos at their own pace, pause, and rewind, this study demonstrated that the flipped classroom could help students to regulate their learning cognitively. In the same way, In Battaglia and Kaya's study (2015), it was found that students mostly favoured seeing videos over reading materials outside the class.

In the present study, the students could deal with the content via the flipped class model outside the class as many times as they wished. When they came to class, their retrieval of the prior content became faster as they studied it before. This situation promoted spaced practice for the students, which helped to forget irrelevant points by interacting with the content again in the class and assist schema to develop faster. This is a key characteristic related to the flipped class model as it means initial interaction with the content and repeated one with in-class meeting (Arner et al., 2017).

Regarding metacognitive strategies, in the present study, the flipped class group was able to plan their pre-class work with the help of the flipped content like searching resources or extra materials for idea generation, brainstorming, and mind mapping. Furthermore, to self-evaluate their comprehension, they utilized the embedded questions into the video content. Furthermore, they could check their understanding of the content with the short discussions when they came to class.

Metacognitive strategies can be used both inside and outside of the classroom as the students' learning processes are going on during both settings (Shih & Huang, 2020). In-class sessions, with the clarifying period, they self-monitored and self-evaluated their progress in writing. When creating their first draft, the students worked in pairs or small groups, in which they had chance to check their understanding and assess their improvement based on the feedback provided by their peers and teacher.

This study presents similar findings with previous studies, suggesting that learners' control over their learning in terms of time, pace, and space might have increased metacognitive strategy use in the flipped classroom implementations (Enfield, 2013; Kim et al., 2014; Shih & Huang; 2020; Van Vliet et al., 2015). Within the frame of WSSRLQ, in the present study, metacognitive strategies refer to idea planning, and goal monitoring and evaluating including setting goals. In the flipped class, each strategy could promote within the framework of a flipped learning setting. In the course of idea planning, students could set their schedules to watch video lessons for the purpose of access to the relevant content. Besides, they needed to search for more resources in relation to the video content provided with the flipped model. Considering goal monitoring and evaluating, video watching enabled the students to self-monitor their comprehension of the video content. Likewise, Enfield (2013) reported that the flipped class provided the students with independent learning and improvement of their self-efficacy by studying at their own pace and engaging instructional videos. In a study conducted by Kim et al. (2014) the students in the flipped instruction had better skills in critical thinking and problem-solving processes compared to the traditionally-tutored group.

A suggestion by Van Vliet et al. (2015) emphasizes that the repeated use of flipped classes may positively affect metacognitive processes in higher education settings. Shih and Huang (2020) stated that by pausing or rewinding, students asked questions themselves, or thought over what they learnt or they understood. They added that after self-monitoring, students self-evaluated when they completed watching the flipped content by assessing whether the content was sufficient for them to learn the target topic.

Kansizoglu and Comert (2021) reported that the flipped learning model promoted meta-cognitive awareness in the writing of the students at the seventh grade of a secondary school in terms of planning, monitoring, evaluating, and debugging. Limueco and Prudente in their study (2019) stated that flipped classroom facilitated an educational setting where the assistance of video lessons with the embedded questions supported the

development of metacognitive strategies as students were able to study at their own pace and track their own progress. As can be seen from the prior studies, immediate feedback obtained from peers and teachers as more knowledgeable ones can promote students to observe and assess their learning regarding how much they understand, and, a recognition of any misconception or confusion.

In the current study, one dimension of WSSRLQ is social behavioural regulation involving peer learning and feedback handling. The findings revealed that the post-test scores of the social behavioural regulation of the flipped class group were greater than those of the traditional class group. Similarly, previous studies have shown that the flipped class implementation increased the students' social behavioural regulation levels in various settings. Roehl et al. (2013) claimed that the flipped class mode resulted in better communication among the students with interactive learning environments.

As social behavioural regulation incorporated social behavioural strategies to control students' learning in relation to contextual or environmental factors (Zimmerman, 1989), the flipped class group in the study sought feedback from their peers and teacher whenever they needed. They were able to receive constructive feedback regarding their first draft and final writings. Based on the triadic forms of self-regulation as personal, behavioural, and environmental states from the socio-cognitive perspective of self-regulation (Zimmerman & Risemberg, 1997), students could self-regulate themselves at an optimal level. In this triadic form of interaction, the feedback from social sources such as peers and teacher made a behavioural change in such a way that they could construct knowledge together by negotiating unknown and ambiguous parts of the tasks. In addition, when self-monitoring the effectiveness of self-regulatory strategies, and self-reacting to their learning processes, students asked for teacher assistance or peer feedback on their first drafts, which may be viewed as social sources of writing knowledge and skill (Zimmerman & Risemberg, 1997).

Nederveld and Berge (2015) stated the flipped classroom promoted the active learning which included peer-assisted, cooperative, and collaborative learning processes. In this sense, with regard to social behavioural regulation strategy use, flipped classes create appropriate in-class contexts for students to work with their peers. In terms of in-class engagement and application processes, students join pair work through problem solving or project completion. In a similar way, Foldnes (2016) asserted that a flipped class was a robust medium for peer learning in a way that students dealt with questions with their peers and received instant feedback from each other. In similar vein, Jdaitawi (2019) in his study stated that flipped class group had higher social connectedness levels under the concept of self-regulation compared to the traditional instructed group. Robbins et al. (2020) reported that the flipped implementation based on reflective writing tasks across various disciplines significantly increased peer learning and extensive peer interaction through active learning group work in-class sessions.

In the current study, the flipped group benefited from question-answer technique between the peers in making outlines, creating their first drafts, and receiving and providing feedback for each other. In the same way, Jung et al. (2022) reported that the flipped class contributed to co-regulation processes in which question-answer technique between peers led to explanation of the content knowledge for clarifying. They added that responding to the questions promoted knowledge building and deep level content engagement. In addition, Du et al. (2014) assert that in addition to peer learning and collaborative work, flipped classrooms feature the role of teachers as a facilitator scaffolding them, monitoring their development, and motivating them to join group work interactively. On the other hand, in a study conducted by Sun et al. (2017) where flipped model and distance learning were compared in a physics course, it was found that there was no significant difference between the groups in terms of overall self-regulation. However, the experimental group had higher scores in help-seeking as a means of self-regulation compared to the control group.

Regarding motivational regulation, the present study aimed to measure the motivational self-regulation dimension with the following constructs: Motivational self-talk, interest enhancement, and emotional control. The findings demonstrated that there was no significant difference between the pre-test and post-test scores of the flipped class group with regard to motivational regulation; however, an increase in the post-test scores of the flipped class group regarding motivational regulation after the flipped intervention has been found. This outcome is contrary to those of several prior studies that have shown that the flipped classroom model increased motivation; for instance, Chen Hsieh et al. (2017) reported that theory-based flipped instruction improved the students' motivation when learning English idioms. Similarly, Shih and Tsai (2017) found out that a flipped class approach to online project-based learning may have increased students' learning motivation and learning interest in marketing research courses. Likewise, the study conducted by Zainuddin and Perera (2019) revealed that EFL students in the flipped classroom had higher intrinsic and extrinsic motivation towards the flipped class model. Aydin and Demirer (2022) reported that the students had lower stress towards to the assignments done in the class thanks to the inverted curriculum. However, Yough et al. (2019) found no evidence that preservice teachers had higher levels of motivation in an educational flipped course compared to those in traditional instruction, which was consistent with the results of the current study in terms of motivational regulation dimension. Another study conducted by Tse et al. (2019) revealed that secondary school students in the video-based flipped class had lower motivation in reading despite higher academic satisfaction. Similarly, Robbins et al. (2020) reported that the use of flipped model across multiple disciplines led to a decrease in motivation within the frame of self-regulation. However, the results of the previous studies do not seem to fully relate to the present study as they have been conducted across different areas apart from L2 writing teaching and learning.

Motivational regulation strategies along with the other dimensions of self-regulation are markedly associated with student engagement and academic achievement (Pintrich, 2004; Wolters et al., 2011). Regarding this outcome, there may be several possible explanations for insignificant effect of the flipped class on motivational regulation levels. The first attribution in terms of emotional control may be related to writing anxiety, which may be described as writing apprehension in some contexts proposed by Daly and Miller (1975), a distinct sort of anxiety students experience when they face writing tasks.

In order to overcome such an anxiety, peer assessment and reviewing in interactive learning environments can work (Jahin, 2012; Rauf & Khan, 2022). In the present study, the flipped class model aimed to create a learning setting in which students' interaction with each other would increase and scaffolding among them would be enhanced. Despite an increase in the post-test scores of motivation regulation, one term-intervention of the flipped writing class may not provide satisfactory results to reach evidence that a flipped writing class increases students' levels of motivation. More and diverse measurement tools such as think-alouds, diaries and interviews for motivational regulation or alternative approaches can be possible explanations to reach robust outcomes with respect to motivational dimension of self-regulated learning strategies in writing.

Dornyei and Muir (2019) point out that in L2 learning as continuing and sustained process, a learning environment needs to supply enthusiasm and pleasant emotional state for students to stay motivated besides instructional content in terms of cognitive support.

Dornyei (2005) highlights that motivational regulation strategies aim "to generate and enhance student motivation, as well as maintain ongoing motivated behaviour and protect it from distracting and/or competing action tendencies" (p. 117). As can be understood from the definition above, motivation is a dynamic process that is contingent on fluctuation. In this sense, it may be unlikely to observe a significantly-evidenced behavioural change in students in terms of motivation at the end of 14 weeks. Repeated

use of the flipped class in teaching writing skills may reveal long-term implications that help researchers and teachers to gain insights into writing skills.

Additionally, some previous studies have revealed that both external factors including sociocultural and contextual background of the learners and internal factors such as attitude towards the tasks, intrinsic motivation, and task value influenced the L2 motivation of the learners (Dornyei & Ushioda, 2013). A detailed investigation focusing on these areas mentioned above related to motivation can be dealt with as further research.

Based on the construct of interest enhancement under motivational regulation, task difficulty can be another element that may lead to the fact that students are unable to manage their motivation in the course of learning. The tasks in the coursebook may not relate to students' real lives or they do not know how to deal with them owing to the lack of meta-motivational knowledge that helps them to identify the reason why students do not regulate their own learning when they are faced with an irrelevant task.

As Teng (2021) underlines, the research area regarding motivational regulation strategies has still remained untouched despite its interactive structure with other domains of self-regulation in L2 learning. In fact, motivational regulation strategy use can have an impact on the use of other self-regulated learning strategies such as cognitive and meta-cognitive dimensions (Manchón et al. 2007; Teng & Zhang, 2016). In this way, a research gap may be pointed out that motivation in L2 writing setting has a crucial role in academic achievement and learning outcomes.

The Correlation between Self-Regulation in Writing and Writing Achievement in the Flipped Classroom Group

The last sub-question the present study addressed aimed at exploring whether there was a relationship between the writing achievement and writing self-regulation levels of the flipped classroom group. The findings indicated a positive correlation between the students' post-test scores in writing and self-regulation levels of writing.

Based on the analysed data results, it can be interpreted in a way that if the levels of writing self-regulation increase, writing achievement scores are expected to increase as well. Many studies which have focused on the flipped classroom approach have investigated the impact of the flipped implementation on academic achievement in various contexts (Alamri, 2019; Alsancak Sirakaya & Ozdemir, 2018; Cabi, 2018; Polat & Karabatak, 2021; Saglam & Arslan, 2018; Saunders, 2014; Smallhorn, 2017; Tatal & Yazar, 2021). However, the literature has limited empirical evidence documenting the correlation between achievement and self-regulation in flipped learning environments.

Sletten (2017) found out that students' perception of the flipped model in a biology course was positively correlated with the use of self-regulated learning strategies; however, there was no significant effect of the perceived flipped model through self-regulated learning strategies on the achievement. Park and Kim (2021) performed a study in a higher education setting, and revealed that the more students became self-regulated, the more they could co-regulate. In addition, they reported that self-regulation positively affected the students' performance.

A significant contribution of this study to the existing literature can be summarized as the fact that the use of self-regulated learning strategies and writing achievement are positively correlated in the flipped class implementation settings in EFL writing courses. The literature presents an amount of research which is relevant to the positive relationship between the self-regulation and achievement in various settings. However, there is almost no specific research targeting the relationship between self-regulation and academic achievement in writing within flipped models.

In terms of the last research question that the present study addresses, this study has taken a step towards a more profound understanding of the relation between the writing achievement and self-regulation in writing in the flipped class models. Especially, pre-class learning practices in the flipped classes require more autonomous learners who take responsibility and monitor their own progress. In fact, the results of the study reveal

that there is a need for further research which will focus on the correlation between the use of self-regulated learning strategies and achievement in writing skills.

With regard to this gap, this study highlights the significance of self-regulation training that can be integrated into the writing courses by making students aware of the cognition, metacognition, social aspect of self-regulation, and motivation. Through self-regulated learning strategies, students can set specific goals and monitor their progress in reaching these goals related to writing practices. Making outlines, generating supporting points, producing evidence to support their ideas in terms of planning and organization are also parts of self-regulated learning strategy use in writing. Monitoring and evaluating their own writing processes alone and with their peers incorporate reviewing and revising the writing processes, and making sure that intended specific goals and task requirements are met. Students can also self-react to the process in which they can evaluate their own strong and weak points by reassessing necessary strategies that they need to overcome the challenges. When they become more conscious and learn how to use the relevant strategies, their motivation and interest in the course, activities, and tasks would somehow increase.

Chapter 5

Conclusion and Suggestions

This chapter presents a conclusion and draws implications for practice and further research in terms of the effectiveness of the flipped classroom approach on L2 academic writing classes.

Conclusion

In recent years, technology has become prevalent in the field of language learning and teaching. Although there are many studies on flipped class implementations, the research in the effectiveness of flipped classes in improving writing self-regulation levels remains limited. As the results have indicated, the present study conveys comprehensive and conclusive results as it builds on the previous studies to contribute to the effectiveness of the flipped class on the improvement of self-regulation in writing. The interrelated nature of the dimensions of self-regulation including cognition, meta-cognition, social behavioural, and motivational regulation has come evident in a way that all have impacts on the academic achievement, performance, and motivation in writing classes. Flipped classes promote a flexible setting for self-regulation instruction for the students. This study also indicates a positive correlation between self-regulated learning strategy use and academic achievement in writing. Thus, a focus on developing flipped classes can change students' perceived beliefs and attitudes toward learning to write academically.

The power of video in flipped writing classes is another focal point the study that has revealed. Making students get prepared as a priming effect before the class and activating their schemata in relation to their prior knowledge, their deep learning can be facilitated during in-class teaching. As a learning aid, flipped classes facilitate both audio and visual learning; and thus, students' interest and engagement may become higher for the in-class meetings.

Goal setting and monitoring their progress during both pre-class and in-class processes help students to become more autonomous and self-regulated learners in their own learning process. Students become individuals who are in charge of their own learning in terms of deciding when to study, where to study, and set their schedule to complete outside work before coming to classes.

The role of teachers is redefined in the flipped writing classes as a mediator, a facilitator, and a guide rather than being sage on the stage. This is vital in student-centred learning settings as more interaction among students with less teacher talking time is targeted, which is promoted by the design of flipped class models. More collaboration, cooperative learning, and peer learning exist in the in-class time in order for practicing and creating drafts, making outlines, providing and receiving feedback, and constructing knowledge and making meaning during the in-class period.

Designing a flipped instruction with a comprehensive focus on motivational learning strategies in writing classes can be a basis for future research. With respect to the motivational regulation, previous studies have mostly focused on how to enhance motivation of the learners in learning and teaching process; however, as the present study highlights, motivational control that students deal with in order to achieve academic success has not been interested by the researchers and teachers sufficiently (Teng, 2022). Similarly, most studies have centred on the role of cognitive and meta-cognitive strategies in L2 writing; and previous studies seem to be limited in terms of the role of motivation in students' performance while they are struggling to regulate other skills such as cognition and metacognition.

The impact of motivational regulation on learning and achievement has been clear in teaching writing settings. Keeping in mind the intricated nature of writing as a skill to acquire, learners have to compose their writing which requires lower and higher-order thinking processes that are located within a motivational base. Furthermore, as Zimmerman and Schunk (2008) highlight, the motivational regulation plays an important

role in the devotion of oneself with respect to initiating, sustaining, and enhancing the willingness to fulfil a task across various disciplines. However, these findings have not caught enough attention in L2 writing. Therefore, this study addresses the need for a deep investigation of the motivational regulation along with the development of other self-regulatory skills.

The changing world in the 21st century expects teachers, students, families and authorities to acquire different abilities and skills. Today, teachers who have the essential role in education should be both quite quick-minded and innovative in order for their students to keep up with this change. They ponder over how students will transfer the skills and achievements that they will need in the near future and how they as teachers will prepare themselves in this process. Among the skills that are necessary in modern times, creativity, problem-solving, different thinking skills, decision making, interactive and collaborative learning are the key capabilities that people need to develop. The teaching and learning techniques, methods, and approaches based on the student-centered theoretical orientations are becoming priorities of teachers, researchers, and other educational professions.

As the reviewed literature indicates, learning theories are born with the understanding of how learning occurs and the ways of explaining, analyzing, predicting human learning. Especially in L2 writing, a transition from cognitive composing approach to learning to write as a social act gives a plenty of details why flipped learning models should be taken place in learning settings. Regardless of viewing writing as action of literacy, a course design that meets the needs of the students, faculties, and other stakeholders like employers would be a large step forward technology-enhanced learning environments in the future.

Since education models including digital technologies have become inevitable in the modern age, future course designs need to become innovative models in which students are actively involved and interested. In this sense, the study is a call for action to direct the attention of curriculum designers, teachers, and researchers onto the fact that the traditional has already lost its functionality.

Taking into consideration the importance of writing skills in higher education and self-regulated learning strategies on achievement, innovative designs for writing courses have become an urgent need for students, teachers, researchers, and various disciplines and departments. Flipped models, in this sense, can be a solution to the current class designs with heavy curriculum, in which both teachers and students feel overwhelming to catch up the content in time, without internalizing the knowledge and expanding it into subsequent contexts. Flipped models can promote more interaction, space for hands-on activities and tasks, and cooperative and peer learning with effective feedback process.

Suggestions and Implications for Further Research

In line with the previous studies mentioned above, the results of the present study may offer a wider perspective on pedagogical implications to be implemented in EFL writing classes. After obtaining results favouring the experimental group instructed with flipped class model, the process highlights some key points. In this sense, finding a way to engage students in videos is vital to the flipped classroom model. Assuming that students listen to the lectures just by watching the videos would be to ignore the true purpose of the flipped class implementation. In this study, rather than describing the role of students in the lecture videos as passive listeners, it was ensured that they answered the questions embedded in the videos. They could not continue watching the video if they did not respond to the questions, though. At the beginning of the class, the 10-minute discussion in the classroom was held every week of the intervention, and an effort was

made to clarify the incomplete and incomprehensible contents in the form of questions and answers (Ash, 2012).

Another implication is related to the decision on what to be flipped which requires well-designed curriculum. In order to make a logical decision on it, thinking skills should be taken into consideration. While designing the flipped class, different levels of thinking should be focused on in terms of remembering and recalling the content outside the class; and analyzing, synthesizing, and evaluating in class. Video contents should include materials enhancing remembering and recall so that students can do this work by themselves. On the other hand, idea generation, outlining, drafts, and individual writing require high-order thinking skills. Thus, they need support and scaffolding from teachers, and peer learning that promotes shared understanding, clarifying together when challenges occur. They negotiate the tasks together and solve the conflict collaboratively. Some activities require problem-solving skills. For coping with such tasks, a team-based work can be more beneficial, in a way that responsibilities can be shared and each member of the team can self-regulate their own learning even if they work in teams or groups.

As Leki et al. (2006) state, studies on how teachers design the class interaction in writing classes show the existence of a composite frame including explicit instruction on text types, composing processes, and individualized feedback to writings. However, it is unfortunate that in real practices of teaching writing, sufficient time is not allocated for all parts forming that composite frame. Thus, in a flipped classroom model, explicit instruction is assigned to the outside the class so as to best make use of class time for whole actions of creating written texts and responding students' writings. Furthermore, for the purpose of increasing verbal communication between students and teachers on their writing practices, interrelated methods like peer-assisted learning, collaborative, and cooperative learning are vital to lay the foundations for a flipped classroom model. This helps to plan

a learning setting for students wherein they internalize the concepts in groups or pairs as a socialized interaction.

Another significant point is efficient time management. The main aim of flipping classes is to create time for practice regardless of the disciplines. While designing the flipped class, even if this is a well-designed curriculum, teachers should consider the fact that certain time is needed to be allocated to revise or re-explain the key terms or concepts introduced outside the class. The allocation of the time for in-class discussions should be arranged attentively. If it takes more time when it is planned, the flipped class will not be much more different than the traditional instruction. Thus, students should be trained in how they will study and take responsibility of their own learning outside the class. In order to train students in this sense, introductory short videos, like in the current study, can be introduced at the beginning of the term. From time to time, students can be informed about the importance of their homework to benefit from the flipped class model at optimal level.

A sincere suggestion for the teachers who wish to implement a flipped class model in their classes may be about the design of the video lectures. Planning and creating video lectures were arduous tasks for the researcher who directed the process for both groups as the experimental and the control. Instead of creating all the video contents by themselves, teachers may blend the teacher-made video content with the ready-made educational materials that are already available on the Web such as YouTube and Khan Academy. However, it would be wise to do deep and comprehensive research for well-designated content for a flipped course. In this sense, a group of teachers who teaching the same course can work collaboratively. For the students, different teachers can increase students' interest and motivation in terms of seeing the videos and following the outside-the-class activities.

Despite teacher's heavy workload in designing flipped classes, teachers can be provided with some training programs so that they can be aware of technological facilities and how they will use them effectively. In the present study, I, as a researcher, prepared

all the video contents and in-class materials by keeping the balance of flipped and non-flipped content. I tried to search for the best ways and tools to flip the writing class on the Internet in advance; however, if this process is conducted by experts and professional people, teachers can focus on the implementation only and evaluate the process in terms of weaknesses and strengths. In this way, teachers' willingness and motivation can increase to flip their classes.

The last but not least, the students' unwillingness and disengagement in the process was a matter of concern. In order to overcome this challenge, various social media tools, learning management systems, and mobile devices can be integrated into the implementation. In this study, one digital tool was used in order not to confuse students' mind by different logging-in processes and requirements like password or codes to enter the system. Edpuzzle as a simple tool was preferred to deliver the materials and track their views of videos; otherwise, the students would have been overwhelming about using various tools, applications, and systems. However, the design of a flipped class has multi-faceted components in a way that pre-class activities and tests, interactive blogging or discussion boards on the feedback for the outside-the-class activities, in-class quizzes, Kahoot, a classroom response system to have interactive face-to-face learning environment for both teachers and students can moderate the effect of flipped class on learning, performance, and achievement. Some of the meta-analysis studies (Strelan et al., 2020) assert that giving quizzes before starting the face-to-face lesson in order to check their understanding can have an important impact on the effect size.

As a researcher, I have realized that different mode of learning such as flipping the content unlike the usual and traditional class has made students become more eager and interactive. Based on the theoretical aspect, flipped classes assist students to internalize the knowledge as they trigger co-regulation processes during which the question-answer technique among the peers helps to clarify the ambiguous and missing parts of the knowledge. Deeper learning starts to occur when the peers have more chance to come

together and work collaboratively on tasks. The state of preparedness the students felt in-class process helped them to get engaged in activities fast and willingly.

As learning to write academically requires more cognitive and meta-cognitive functioning, assigning some parts of the content as outside work could ease mental and information processing. The flipped class design made it possible to create a flexible setting for students to work independently and interdependently. Not only self-regulated learning processes but also co-regulation practices were experienced by the students. This helped them to go through the stages of peer learning and cooperative learning as a team.

In the present study, the question-answer technique between peers in the flipped class design led to the mutual explanation of the content knowledge for clarifying. The way of responding to the questions promoted knowledge building and deep level content engagement for the students. In addition, Du et al. (2014) assert that in addition to peer learning and collaborative work, flipped classrooms feature the role of teachers as a facilitator scaffolding them, monitoring their development, and motivating them to join group work interactively. Shared learning can support the decrease in cognitive load, which was what I had observed during the in-class sessions.

As mentioned in the procedure part, each week students were able to write texts as a draft in groups or individually. When compared to the traditional instruction, the students in the flipped class appeared to be more self-confident and safer thanks to the prior knowledge and the state of preparedness. Students are likely to go through deeper learning after activating their scheme through the flipped content. Their effort to clarify the missing information through the short discussion parts in the class was worth seeing.

For further research, more studies on the relationship between flipped class designs and self-regulated strategy use can be performed. Self-regulation is a crucial construct that can have a broad scope of applications in various areas of life, and researchers keep exploring new ways wherein it can be implemented to help people

achieve their goals. In terms of academic studying, self-regulation includes setting goals, managing time effectively, and using learning strategies that are customized to one's individual needs and learning style.

Having confirmed the major role of self-regulated learning strategies, a number of studies have reported the effectiveness of self-regulated learning strategies on academic achievement (Kirmizi, 2015; Oxford, 2013; Teng & Zhang, 2018). A range of studies have stated that text processing, organization, and rehearsal play a significant role in academic outcomes in L1 and L2 contexts (Oxford, 2013; Pintrich & De Groot, 1990; Zhang, 2008).

This study has shown that the facilities and conditions a flipped class presents can promote self-regulated strategy use in writing. This is a relevant point to writing skills as writing is a complex skill to be acquired, and being a competent writer takes long time. Concerns about the quality of student writings have become an impetus for researchers to act in offering suggestions and interventions. This study offers a sort of flipped classroom intervention; ultimately, its results have indicated the need for self-regulated learning strategy teaching in L2 writing classes. In addition, the present study has shown that in addition to cognitive and metacognitive skills, social behavioural and motivational regulation capabilities play an important role in regulating learning of writing skills. The effectiveness of feedback and peer learning in the flipped classroom model has highlighted that writing is a social act rather than an individual activity. Thus, in a flipped writing class, students can be taught in terms of strategy use for self-regulation in order to gain satisfactory learning outcomes.

Lastly, moderator effects such as pre-class activities and tests, and in-class tests, immediate feedback for posts during the pre-class process can be the focal points of investigation to find out whether they have a considerable effect on the students' performance, achievement, and learning outcomes. Several meta-analysis research that has been conducted so far in the literature such as Strelan et al. (2020) and Shahnama et al. (2021) shows that the heterogeneity between the conducted studies may be resulted

from the moderator effects mentioned above. As a result, such studies can reveal the effectiveness of different methods, tools, or techniques used by the teachers in the flipped class implementations. In this study, the results have shown that the effectiveness of embedded questions in the flipped video materials as multiple-choice or open-ended types was considerable. In addition to this, short discussions before starting face-to-face class teaching made students overcome challenges that they might have had during the video viewing sessions.

One suggestion can be made in relation to the analytics that applications provide for users as a teacher. These analytics can be included in the statistical analysis in order to observe whether students who see videos longer or in many times can have higher achievement in writing when compared to those who study video content for shorter time. After instructing and guiding students in terms of these analytics that they can obtain when seeing the video content, the integration of these statistical data into their post-test scores of writing can be evaluated together. In this sense, in order for all the students' participation and engagement in the video viewing process, a pilot study with small groups can be planned and applied before the research.

As highlighted in this study before, the guidance and encouragement for viewing video content and responding embedded questions attentively were one of the limitations of this study. In order to overcome this limitation, teacher awareness and regular monitoring the track of student engagement in the digital tool application would work considerably. Otherwise, students can get lost without becoming aware of the importance of pre-class activities and tasks which are assigned them as homework. When they come to the classes without doing homework as video viewing and responding to the relevant questions, teachers cannot make time management effectively as they wish to cover the flipped content for longer time than as planned. Thus, encouragement and control of the track gain importance.

According to another meta-analysis study of flipped classroom implementations conducted by O' Flaherty and Phillips (2015), resource development effort has been found as a notable challenge across the studies on flipped classroom models. They report that many use pre-existing video materials from the Khan Academy or those coming from social media platforms. In this sense, while planning a flipped class, to analyse the learning material or content gains considerable importance. The parts that require more interactive activities and practice in groups should be assigned into in-class sessions. The duration that the outside-of-the-class materials that students are responsible for studying should be logical for them in order not to be overwhelmed by the process. Lastly, the content that students can learn on their own should be decided according to the level of difficulty along with the consideration of zone of proximal development. Poorly developed pre-class content may hinder learning process; thus, the duration and cognitive load of video lessons should be planned carefully. In conclusion, flipped learning approach provides many benefits for teachers and students despite the fact that it is not without challenges.

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APPENDIX-A: Normality Tests of the Data

	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
Pre_test	25	49.0%	26	5.0%	51	10.0%
Post_test	25	49.0%	26	5.0%	51	10.0%
pre_TP	25	49.0%	26	5.0%	51	10.0%
post_TP	25	49.0%	26	5.0%	51	10.0%
pre_CM	25	49.0%	26	5.0%	51	10.0%
post_CM	25	49.0%	26	5.0%	51	10.0%
pre_COG	25	49.0%	26	5.0%	51	10.0%
post_COG	25	49.0%	26	5.0%	51	10.0%
pre_IP	25	49.0%	26	5.0%	51	10.0%
post_IP	25	49.0%	26	5.0%	51	10.0%
pre_GME	25	49.0%	26	5.0%	51	10.0%
post_GME	25	49.0%	26	5.0%	51	10.0%

	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
pre_MC	25	49.0%	26	5.0%	51	10.0%
post_MC	25	49.0%	26	5.0%	51	10.0%
pre_PL	25	49.0%	26	5.0%	51	10.0%
post_PL	25	49.0%	26	5.0%	51	10.0%
pre_FH	25	49.0%	26	5.0%	51	10.0%
post_FH	25	49.0%	26	5.0%	51	10.0%
pre_SB	25	49.0%	26	5.0%	51	10.0%
post_SB	25	49.0%	26	5.0%	51	10.0%
pre_IE	25	49.0%	26	5.0%	51	10.0%
post_IE	25	49.0%	26	5.0%	51	10.0%
pre_MST	25	49.0%	26	5.0%	51	10.0%
post_MST	25	49.0%	26	5.0%	51	10.0%

	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
pre_EC	25	49.0%	26	5.0%	51	10.0%
post_EC	25	49.0%	26	5.0%	51	10.0%
pre_MR	25	49.0%	26	5.0%	51	10.0%
post_MR	25	49.0%	26	5.0%	51	10.0%
pre_self_regulation	25	49.0%	26	5.0%	51	10.0%
post_self_regulation	25	49.0%	26	5.0%	51	10.0%

Descriptives

		Statistic	Std. Error	
Pre_test	Mean	69.4000	1.77858	
	95% Confidence Interval for Mean	Lower Bound	65.7292	
		Upper Bound	73.0708	
	5% Trimmed Mean	69.4889		
	Median	69.0000		
	Variance	79.083		
	Std. Deviation	8.89288		
	Minimum	53.00		
	Maximum	84.00		
	Range	31.00		
	Interquartile Range	14.00		
	Skewness	.079	.464	
	Kurtosis	-.805	.902	

		Statistic	Std. Error
Post_test	Mean	77.2000	1.82574
	95% Confidence Interval for Mean		
	Lower Bound	73.4319	
	Upper Bound	80.9681	
	5% Trimmed Mean	77.1000	
	Median	78.0000	
	Variance	83.333	
	Std. Deviation	9.12871	
	Minimum	61.00	
	Maximum	95.00	
	Range	34.00	
	Interquartile Range	11.50	
	Skewness	.116	.464
	Kurtosis	-.436	.902

		Statistic	Std. Error	
pre_TP	Mean	4.9120	.19768	
	95% Confidence Interval for Mean	Lower Bound	4.5040	
		Upper Bound	5.3200	
	5% Trimmed Mean	4.9044		
	Median	5.2000		
	Variance	.977		
	Std. Deviation	.98840		
	Minimum	3.40		
	Maximum	6.60		
	Range	3.20		
	Interquartile Range	1.70		
	Skewness	-.109	.464	
	Kurtosis	-1.161	.902	

		Statistic	Std. Error	
post_TP	Mean	5.3040	.15540	
	95% Confidence Interval for Mean	Lower Bound	4.9833	
		Upper Bound	5.6247	
	5% Trimmed Mean	5.3244		
	Median	5.4000		
	Variance	.604		
	Std. Deviation	.77700		
	Minimum	3.80		
	Maximum	6.40		
	Range	2.60		
	Interquartile Range	1.60		
	Skewness	-.244	.464	
	Kurtosis	-1.147	.902	

		Statistic	Std. Error
pre_CM	Mean	4.1640	.19078
	95% Confidence Interval for Mean		
	Lower Bound	3.7703	
	Upper Bound	4.5577	
	5% Trimmed Mean	4.1467	
	Median	4.3000	
	Variance	.910	
	Std. Deviation	.95389	
	Minimum	2.70	
	Maximum	6.00	
	Range	3.30	
	Interquartile Range	1.55	
	Skewness	.124	.464
	Kurtosis	-1.031	.902

		Statistic	Std. Error	
post_CM	Mean	4.7320	.14349	
	95% Confidence Interval for Mean	Lower Bound	4.4358	
		Upper Bound	5.0282	
	5% Trimmed Mean	4.7444		
	Median	4.7000		
	Variance	.515		
	Std. Deviation	.71747		
	Minimum	3.30		
	Maximum	6.00		
	Range	2.70		
	Interquartile Range	1.00		
	Skewness	-.476	.464	
	Kurtosis	-.212	.902	

		Statistic	Std. Error	
pre_COG	Mean	4.5500	.18819	
	95% Confidence Interval for Mean	Lower Bound	4.1616	
		Upper Bound	4.9384	
	5% Trimmed Mean	4.5444		
	Median	4.7500		
	Variance	.885		
	Std. Deviation	.94097		
	Minimum	3.00		
	Maximum	6.25		
	Range	3.25		
	Interquartile Range	1.38		
	Skewness	-.047	.464	
	Kurtosis	-.857	.902	

		Statistic	Std. Error	
post_COG	Mean	4.6800	.18000	
	95% Confidence Interval for Mean	Lower Bound	4.3085	
		Upper Bound	5.0515	
	5% Trimmed Mean	4.6972		
	Median	4.7500		
	Variance	.810		
	Std. Deviation	.90000		
	Minimum	3.00		
	Maximum	6.00		
	Range	3.00		
	Interquartile Range	1.50		
	Skewness	-.189	.464	
	Kurtosis	-1.080	.902	

		Statistic	Std. Error	
pre_IP	Mean	4.2480	.18286	
	95% Confidence Interval for Mean	Lower Bound	3.8706	
		Upper Bound	4.6254	
	5% Trimmed Mean	4.2756		
	Median	4.3000		
	Variance	.836		
	Std. Deviation	.91429		
	Minimum	2.30		
	Maximum	5.70		
	Range	3.40		
	Interquartile Range	1.30		
	Skewness	-.466	.464	
	Kurtosis	-.492	.902	

		Statistic	Std. Error	
post_IP	Mean	4.9440	.13989	
	95% Confidence Interval for Mean	Lower Bound	4.6553	
		Upper Bound	5.2327	
	5% Trimmed Mean	4.9689		
	Median	5.0000		
	Variance	.489		
	Std. Deviation	.69945		
	Minimum	3.30		
	Maximum	6.00		
	Range	2.70		
	Interquartile Range	.90		
	Skewness	-.321	.464	
	Kurtosis	-.133	.902	

		Statistic	Std. Error	
pre_GME	Mean	4.3280	.19971	
	95% Confidence Interval for Mean	Lower Bound	3.9158	
		Upper Bound	4.7402	
	5% Trimmed Mean	4.3133		
	Median	4.2000		
	Variance	.997		
	Std. Deviation	.99855		
	Minimum	2.80		
	Maximum	6.20		
	Range	3.40		
	Interquartile Range	1.90		
	Skewness	-.039	.464	
	Kurtosis	-1.095	.902	

		Statistic	Std. Error
post_GME	Mean	5.0080	.14118
	95% Confidence Interval for Mean		
	Lower Bound	4.7166	
	Upper Bound	5.2994	
	5% Trimmed Mean	5.0200	
	Median	5.0000	
	Variance	.498	
	Std. Deviation	.70588	
	Minimum	3.80	
	Maximum	6.00	
	Range	2.20	
	Interquartile Range	1.00	
	Skewness	-.322	.464
	Kurtosis	-.815	.902

		Statistic	Std. Error	
pre_MC	Mean	4.3700	.19449	
	95% Confidence Interval for Mean	Lower Bound	3.9686	
		Upper Bound	4.7714	
	5% Trimmed Mean	4.4056		
	Median	4.2500		
	Variance	.946		
	Std. Deviation	.97243		
	Minimum	1.90		
	Maximum	6.10		
	Range	4.20		
	Interquartile Range	1.28		
	Skewness	-.472	.464	
	Kurtosis	.301	.902	

		Statistic	Std. Error	
post_MC	Mean	4.6050	.16309	
	95% Confidence Interval for Mean	Lower Bound	4.2684	
		Upper Bound	4.9416	
	5% Trimmed Mean	4.6347		
	Median	4.6250		
	Variance	.665		
	Std. Deviation	.81544		
	Minimum	2.63		
	Maximum	5.88		
	Range	3.25		
	Interquartile Range	1.06		
	Skewness	-.299	.464	
	Kurtosis	.038	.902	

		Statistic	Std. Error	
pre_PL	Mean	3.9160	.21320	
	95% Confidence Interval for Mean	Lower Bound	3.4760	
		Upper Bound	4.3560	
	5% Trimmed Mean	3.9111		
	Median	4.0000		
	Variance	1.136		
	Std. Deviation	1.06602		
	Minimum	2.30		
	Maximum	5.70		
	Range	3.40		
	Interquartile Range	2.15		
	Skewness	-.107	.464	
	Kurtosis	-1.262	.902	

		Statistic	Std. Error	
post_PL	Mean	4.5440	.15178	
	95% Confidence Interval for Mean	Lower Bound	4.2307	
		Upper Bound	4.8573	
	5% Trimmed Mean	4.5489		
	Median	4.7000		
	Variance	.576		
	Std. Deviation	.75888		
	Minimum	3.30		
	Maximum	5.70		
	Range	2.40		
	Interquartile Range	1.30		
	Skewness	-.068	.464	
	Kurtosis	-1.011	.902	

		Statistic	Std. Error	
pre_FH	Mean	3.9800	.22909	
	95% Confidence Interval for Mean	Lower Bound	3.5072	
		Upper Bound	4.4528	
	5% Trimmed Mean	3.9778		
	Median	4.0000		
	Variance	1.312		
	Std. Deviation	1.14546		
	Minimum	2.25		
	Maximum	5.75		
	Range	3.50		
	Interquartile Range	2.25		
	Skewness	.087	.464	
	Kurtosis	-1.194	.902	

		Statistic	Std. Error	
post_FH	Mean	4.5900	.16887	
	95% Confidence Interval for Mean	Lower Bound	4.2415	
		Upper Bound	4.9385	
	5% Trimmed Mean	4.5833		
	Median	4.5000		
	Variance	.713		
	Std. Deviation	.84434		
	Minimum	3.25		
	Maximum	6.00		
	Range	2.75		
	Interquartile Range	1.50		
	Skewness	.148	.464	
	Kurtosis	-1.198	.902	

		Statistic	Std. Error	
pre_SB	Mean	3.8500	.25000	
	95% Confidence Interval for Mean	Lower Bound	3.3340	
		Upper Bound	4.3660	
	5% Trimmed Mean	3.8583		
	Median	4.0000		
	Variance	1.563		
	Std. Deviation	1.25000		
	Minimum	1.75		
	Maximum	5.75		
	Range	4.00		
	Interquartile Range	2.25		
	Skewness	.001	.464	
	Kurtosis	-1.172	.902	

		Statistic	Std. Error	
post_SB	Mean	4.3800	.17685	
	95% Confidence Interval for Mean	Lower Bound	4.0150	
		Upper Bound	4.7450	
	5% Trimmed Mean	4.3917		
	Median	4.5000		
	Variance	.782		
	Std. Deviation	.88424		
	Minimum	2.75		
	Maximum	5.75		
	Range	3.00		
	Interquartile Range	1.38		
	Skewness	-.175	.464	
	Kurtosis	-.901	.902	

		Statistic	Std. Error	
pre_IE	Mean	4.1080	.22368	
	95% Confidence Interval for Mean	Lower Bound	3.6464	
		Upper Bound	4.5696	
	5% Trimmed Mean	4.1289		
	Median	3.7000		
	Variance	1.251		
	Std. Deviation	1.11838		
	Minimum	2.00		
	Maximum	5.70		
	Range	3.70		
	Interquartile Range	1.85		
	Skewness	.144	.464	
	Kurtosis	-1.159	.902	

		Statistic	Std. Error	
post_IE	Mean	4.2800	.11902	
	95% Confidence Interval for Mean	Lower Bound	4.0343	
		Upper Bound	4.5257	
	5% Trimmed Mean	4.2944		
	Median	4.3000		
	Variance	.354		
	Std. Deviation	.59512		
	Minimum	3.00		
	Maximum	5.30		
	Range	2.30		
	Interquartile Range	1.00		
	Skewness	-.167	.464	
	Kurtosis	-.595	.902	

		Statistic	Std. Error	
pre_MST	Mean	4.4560	.17945	
	95% Confidence Interval for Mean	Lower Bound	4.0856	
		Upper Bound	4.8264	
	5% Trimmed Mean	4.4533		
	Median	4.8000		
	Variance	.805		
	Std. Deviation	.89726		
	Minimum	3.00		
	Maximum	6.00		
	Range	3.00		
	Interquartile Range	1.40		
	Skewness	-.188	.464	
	Kurtosis	-.995	.902	

		Statistic	Std. Error
post_MST	Mean	4.8240	.14204
95% Confidence Interval for Mean			
	Lower Bound	4.5308	
	Upper Bound	5.1172	
	5% Trimmed Mean	4.8467	
	Median	4.8000	
	Variance	.504	
	Std. Deviation	.71021	
	Minimum	3.20	
	Maximum	6.00	
	Range	2.80	
	Interquartile Range	1.00	
	Skewness	-.574	.464
	Kurtosis	-.075	.902

		Statistic	Std. Error	
pre_EC	Mean	4.4360	.19982	
	95% Confidence Interval for Mean	Lower Bound	4.0236	
		Upper Bound	4.8484	
	5% Trimmed Mean	4.4489		
	Median	4.3000		
	Variance	.998		
	Std. Deviation	.99912		
	Minimum	2.70		
	Maximum	6.00		
	Range	3.30		
	Interquartile Range	1.80		
	Skewness	-.251	.464	
	Kurtosis	-1.059	.902	

		Statistic	Std. Error
post_EC	Mean	4.7120	.15993
	95% Confidence Interval for Mean		
	Lower Bound	4.3819	
	Upper Bound	5.0421	
	5% Trimmed Mean	4.7356	
	Median	4.7000	
	Variance	.639	
	Std. Deviation	.79965	
	Minimum	3.00	
	Maximum	6.00	
	Range	3.00	
	Interquartile Range	1.15	
	Skewness	-.369	.464
	Kurtosis	-.508	.902

		Statistic	Std. Error
pre_MR	Mean	4.3740	.18921
	95% Confidence Interval for Mean		
	Lower Bound	3.9835	
	Upper Bound	4.7645	
	5% Trimmed Mean	4.3589	
	Median	4.6000	
	Variance	.895	
	Std. Deviation	.94606	
	Minimum	2.90	
	Maximum	6.20	
	Range	3.30	
	Interquartile Range	1.83	
	Skewness	-.013	.464
	Kurtosis	-1.033	.902

		Statistic	Std. Error
post_MR	Mean	4.5573	.14633
	95% Confidence Interval for Mean		
	Lower Bound	4.2553	
	Upper Bound	4.8593	
	5% Trimmed Mean	4.5585	
	Median	4.6000	
	Variance	.535	
	Std. Deviation	.73166	
	Minimum	3.23	
	Maximum	5.83	
	Range	2.60	
	Interquartile Range	1.02	
	Skewness	-.163	.464
	Kurtosis	-.707	.902

		Statistic	Std. Error	
pre_self_regulation	Mean	4.2860	.16265	
	95% Confidence Interval for Mean	Lower Bound	3.9503	
		Upper Bound	4.6217	
	5% Trimmed Mean	4.3006		
	Median	4.1750		
	Variance	.661		
	Std. Deviation	.81325		
	Minimum	2.85		
	Maximum	5.43		
	Range	2.57		
	Interquartile Range	1.47		
	Skewness	-.093	.464	
	Kurtosis	-1.339	.902	

		Statistic	Std. Error
post_self_regulation	Mean	4.5563	.13171
	95% Confidence Interval for Mean		
	Lower Bound	4.2845	
	Upper Bound	4.8281	
	5% Trimmed Mean	4.5638	
	Median	4.5775	
	Variance	.434	
	Std. Deviation	.65854	
	Minimum	3.19	
	Maximum	5.78	
	Range	2.59	
	Interquartile Range	.86	
	Skewness	-.200	.464
	Kurtosis	-.373	.902

Tests of Normality

	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
Pre_test	.100	25	.200*	.965	25	.515
Post_test	.105	25	.200*	.966	25	.535
pre_TP	.135	25	.200*	.945	25	.191
post_TP	.156	25	.121	.932	25	.097
pre_CM	.153	25	.135	.952	25	.278
post_CM	.202	25	.010	.947	25	.209
pre_COG	.104	25	.200*	.967	25	.562
post_COG	.099	25	.200*	.954	25	.301
pre_IP	.123	25	.200*	.953	25	.286
post_IP	.124	25	.200*	.956	25	.334
pre_GME	.162	25	.090	.942	25	.162
post_GME	.144	25	.192	.923	25	.060
pre_MC	.114	25	.200*	.970	25	.642
post_MC	.078	25	.200*	.971	25	.680
pre_PL	.125	25	.200*	.935	25	.113
post_PL	.123	25	.200*	.939	25	.138

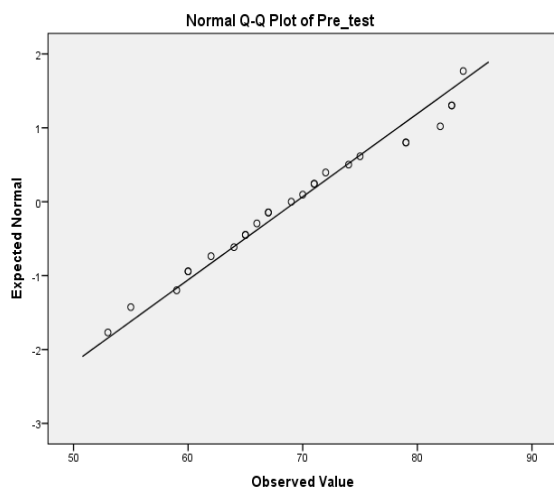
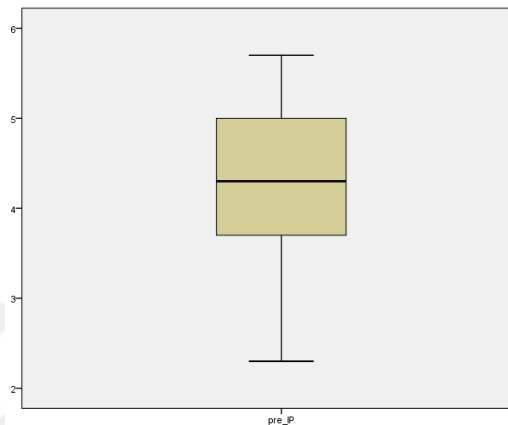
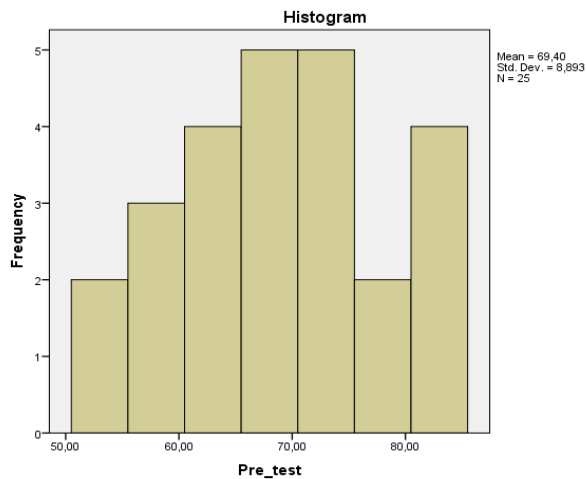
	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
pre_FH	.146	25	.177	.931	25	.094
post_FH	.118	25	.200*	.946	25	.209
pre_SB	.101	25	.200*	.950	25	.253
post_SB	.082	25	.200*	.963	25	.471
pre_IE	.165	25	.077	.917	25	.043
post_IE	.127	25	.200*	.952	25	.274
pre_MST	.169	25	.063	.951	25	.262
post_MST	.207	25	.007	.951	25	.259
pre_EC	.126	25	.200*	.945	25	.195
post_EC	.134	25	.200*	.962	25	.461
pre_MR	.128	25	.200*	.953	25	.286
post_MR	.105	25	.200*	.967	25	.560
pre_self_regulation	.166	25	.075	.927	25	.075
post_self_regulation	.081	25	.200*	.985	25	.966

*. This is a lower bound of the true significance.

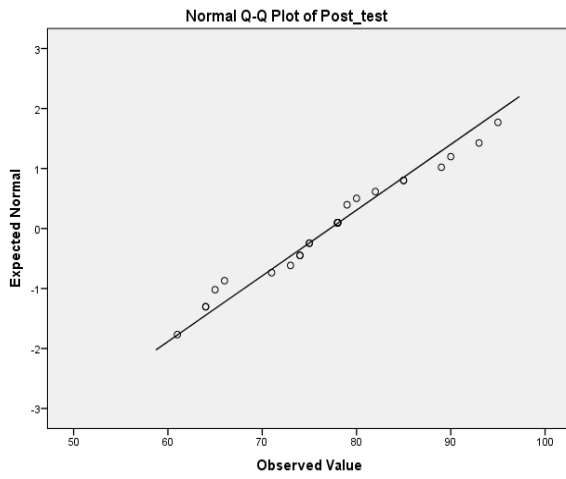
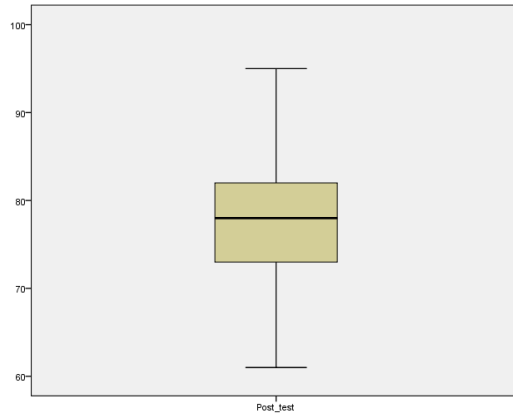
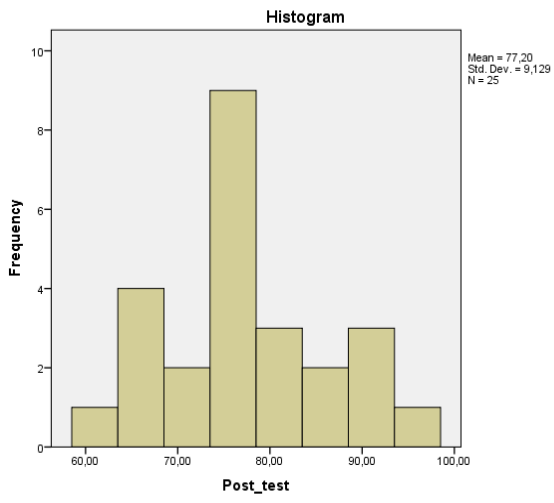
a. Lilliefors Significance Correction

APPENDIX-B: Residuals, Histograms, and Scatterplots

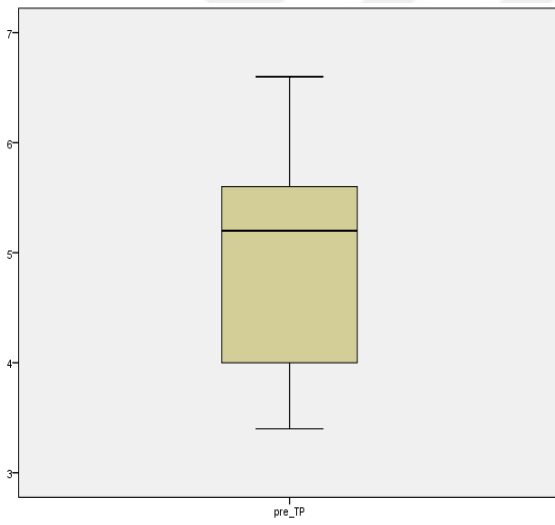
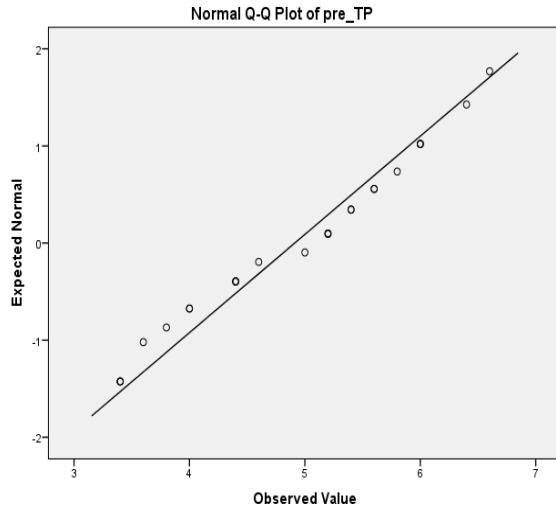
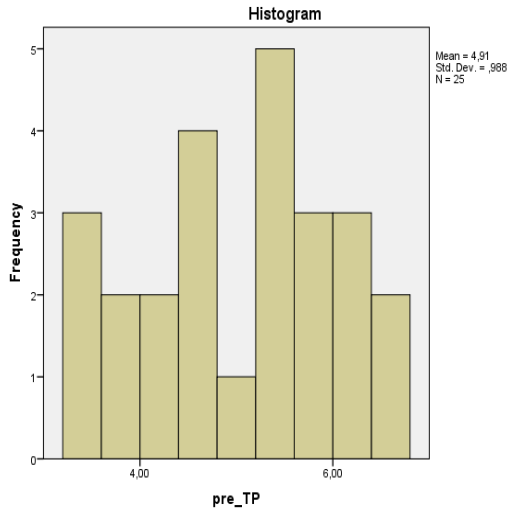
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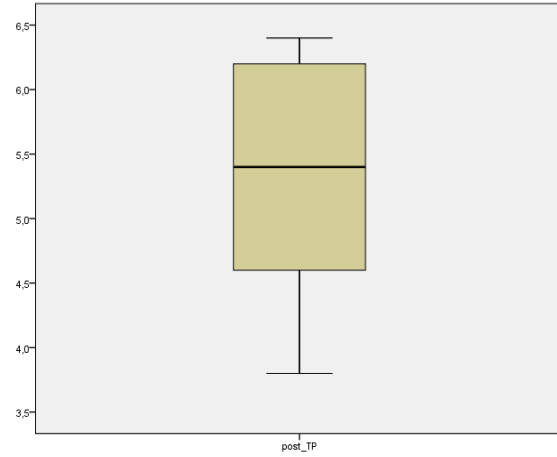
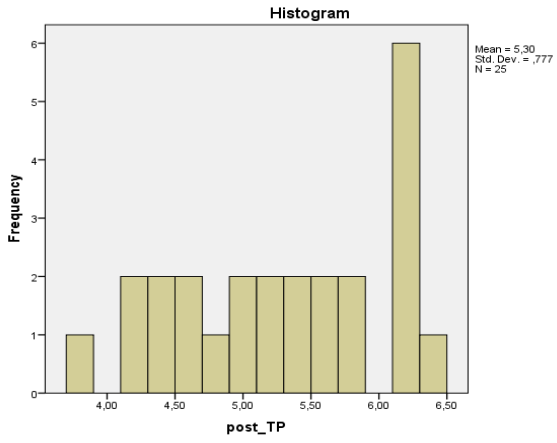
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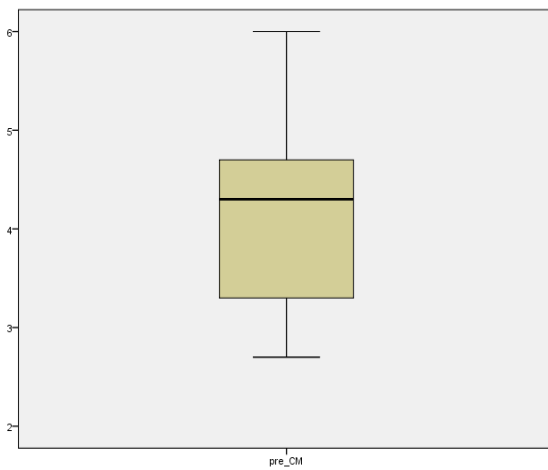
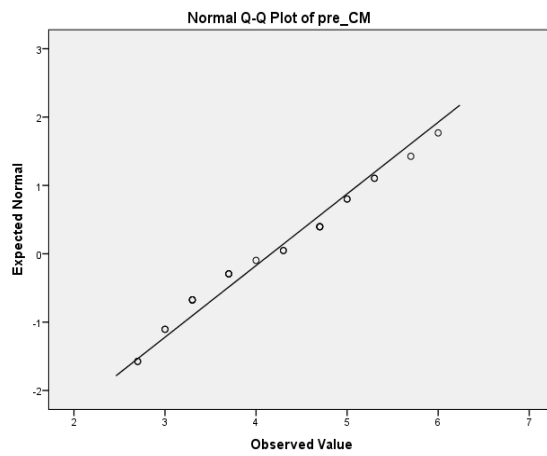
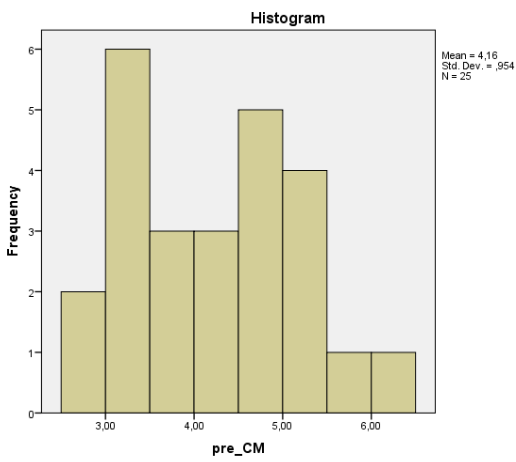
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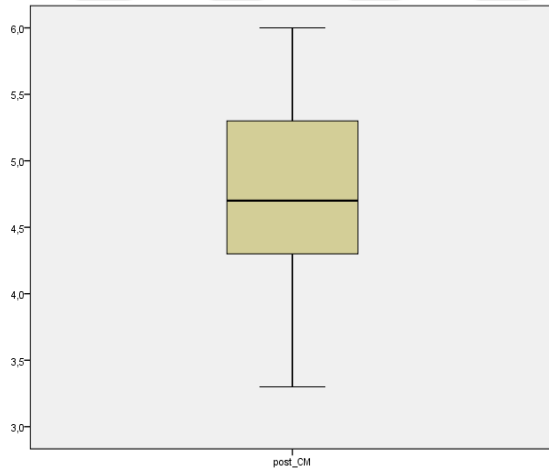
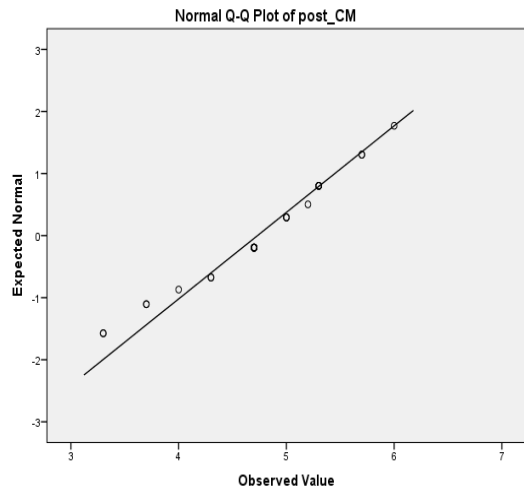
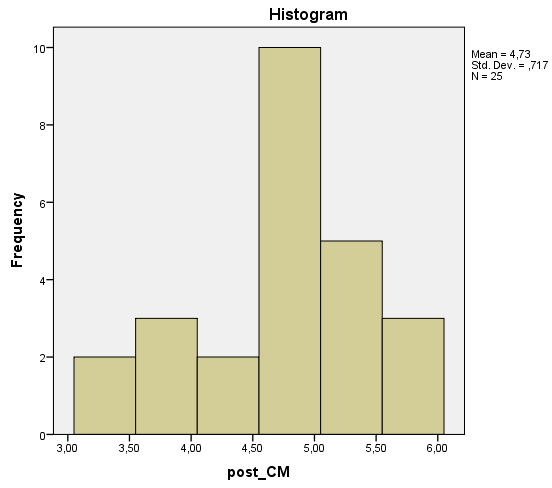
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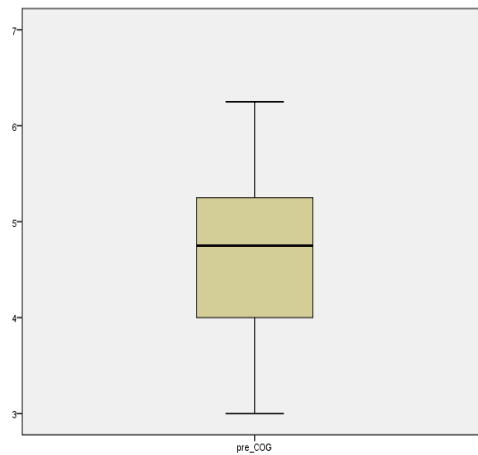
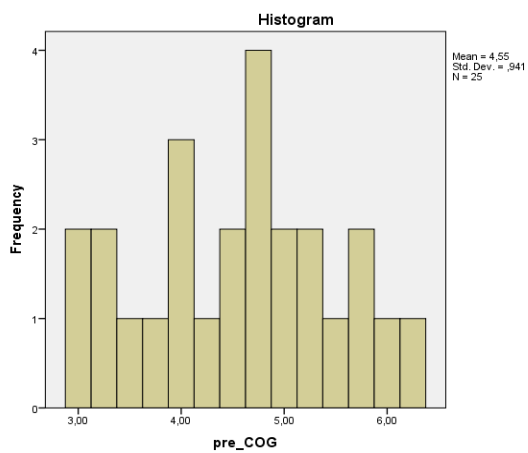
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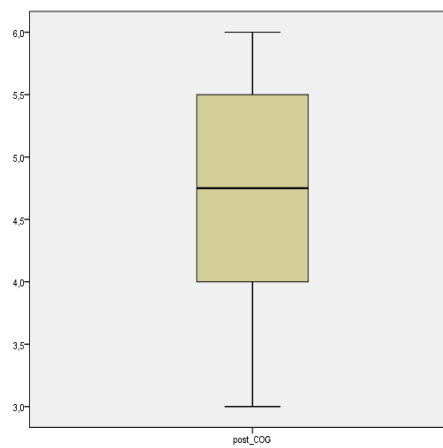
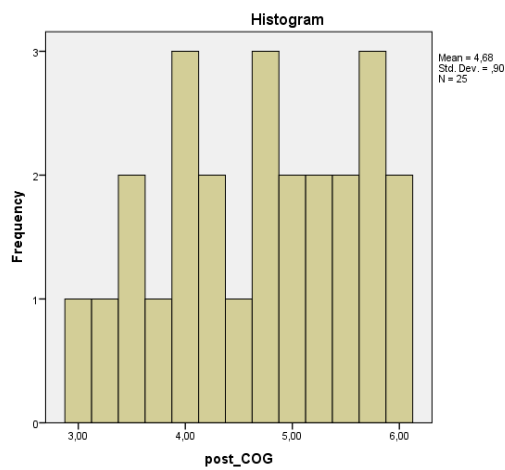
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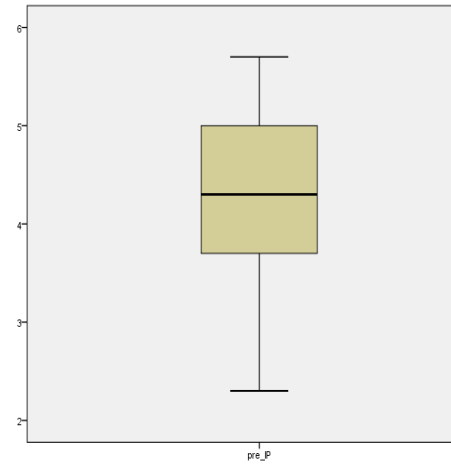
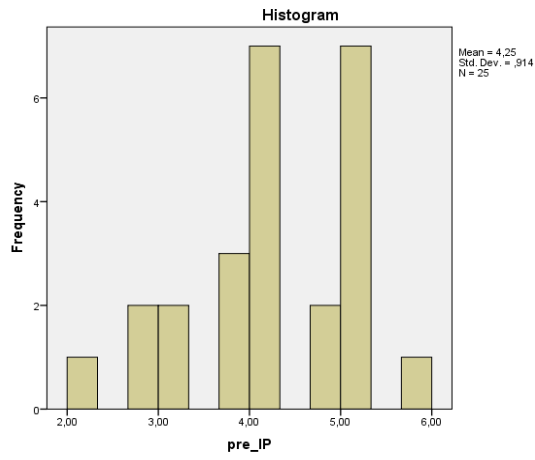
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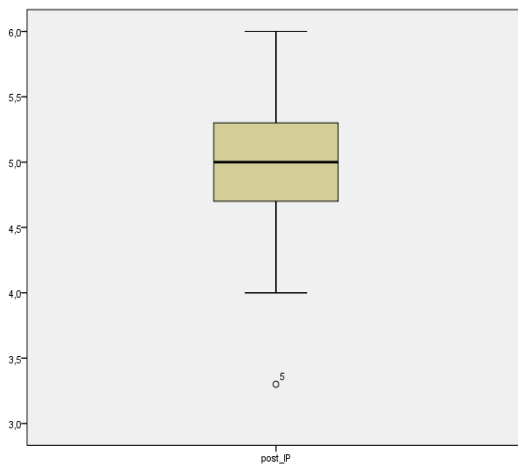
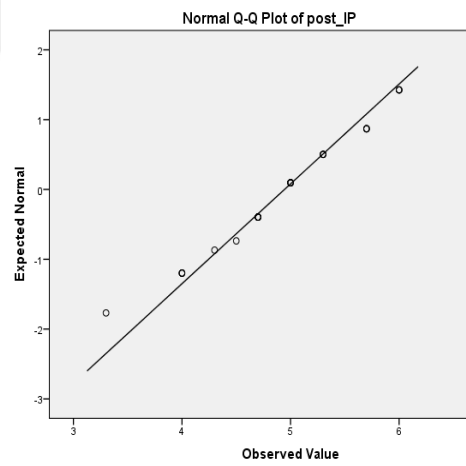
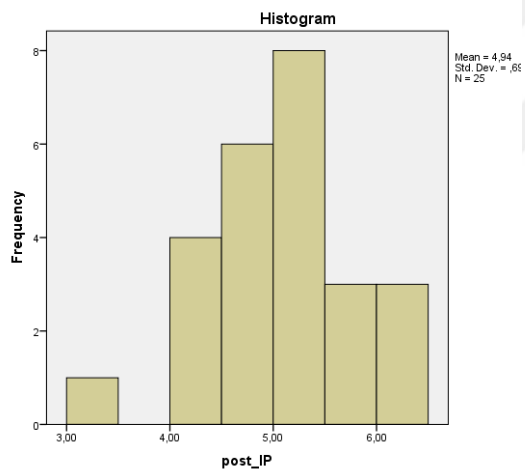
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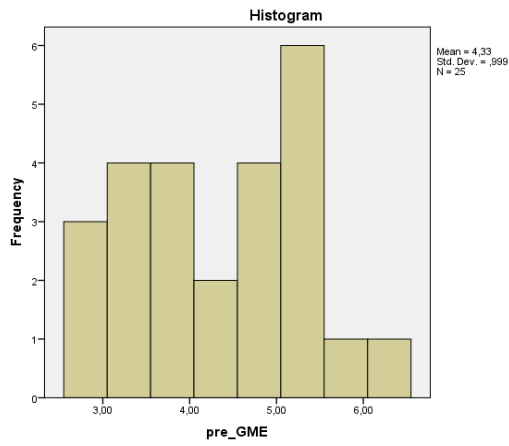
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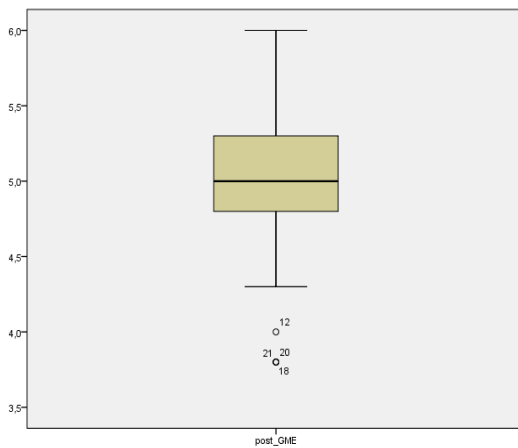
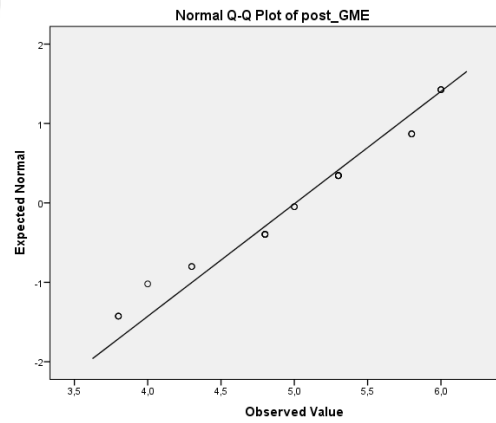
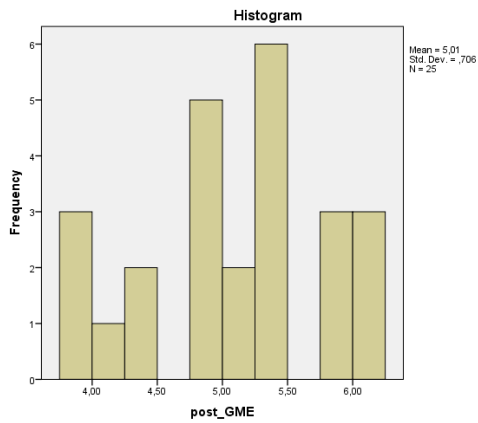
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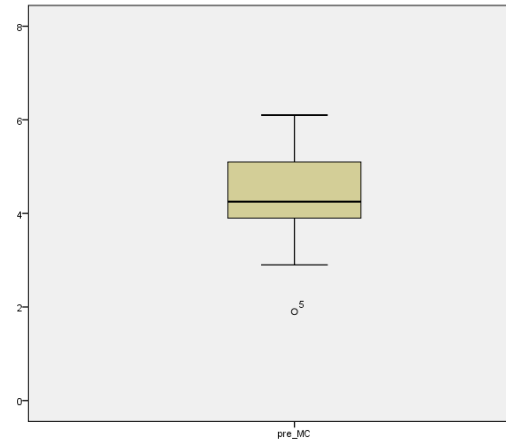
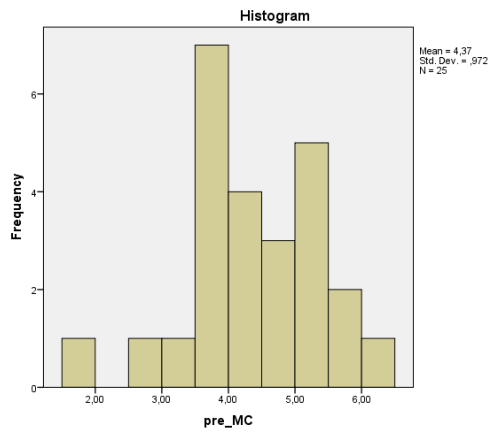
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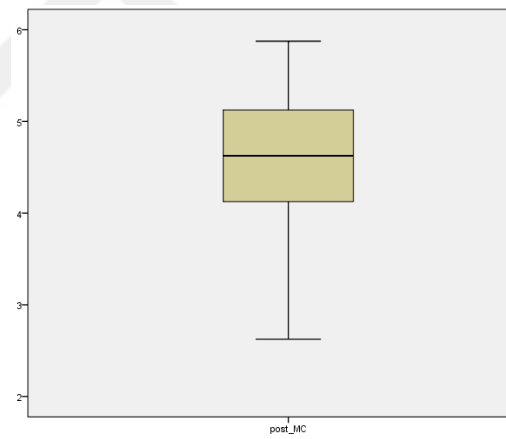
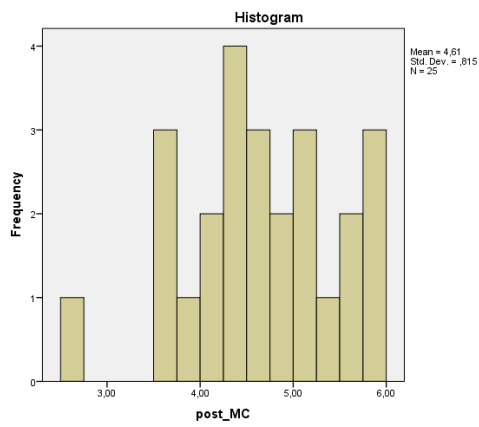
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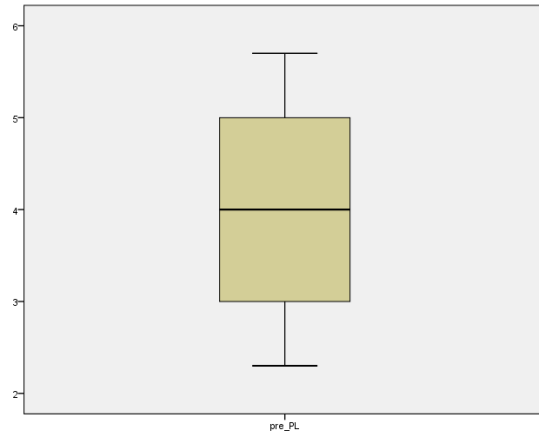
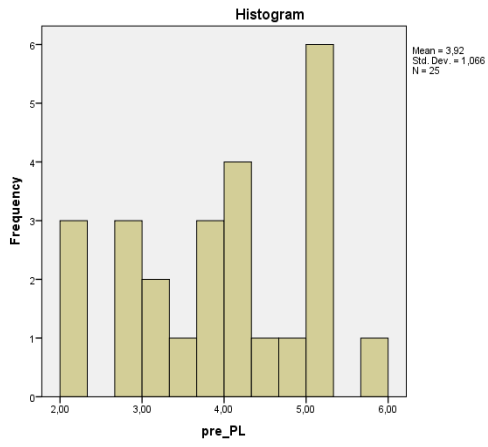
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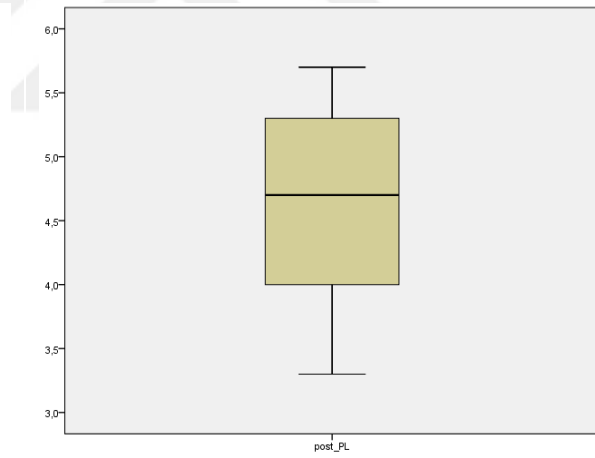
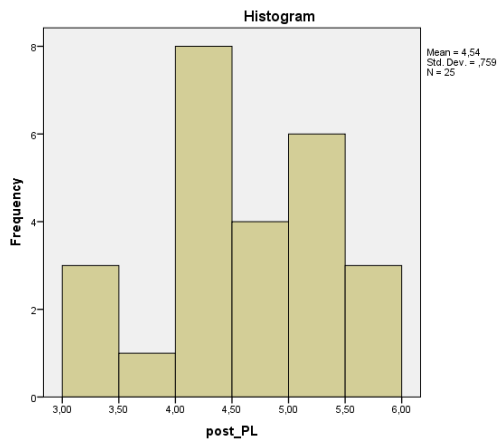
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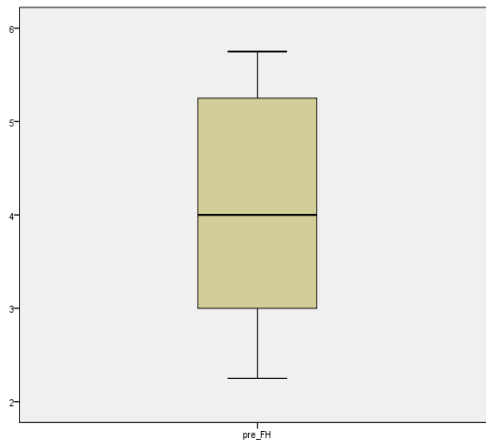
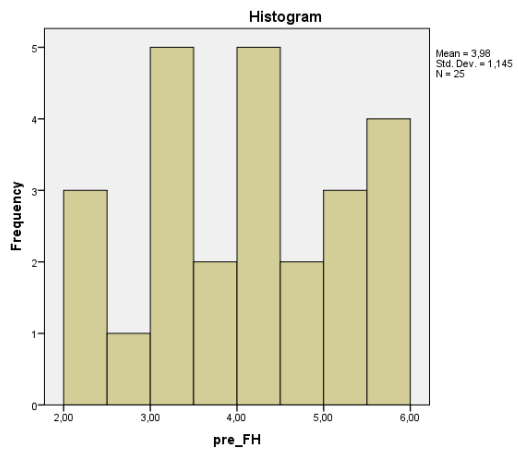
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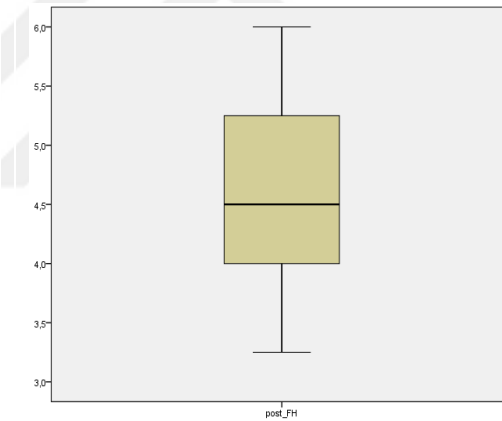
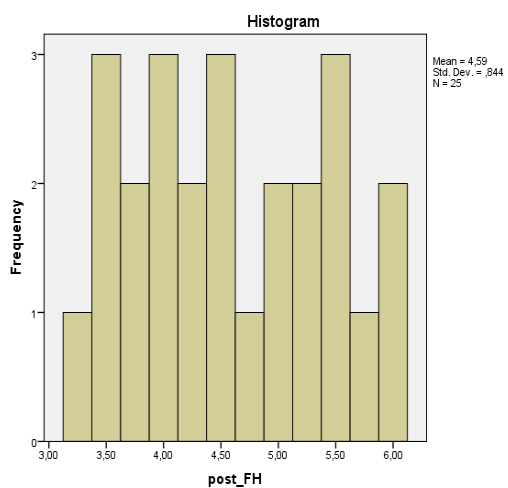
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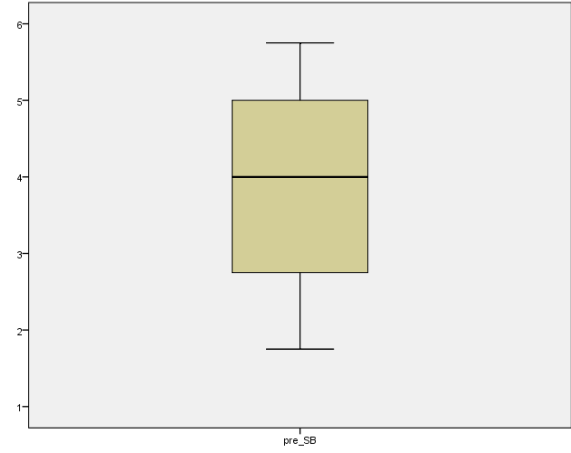
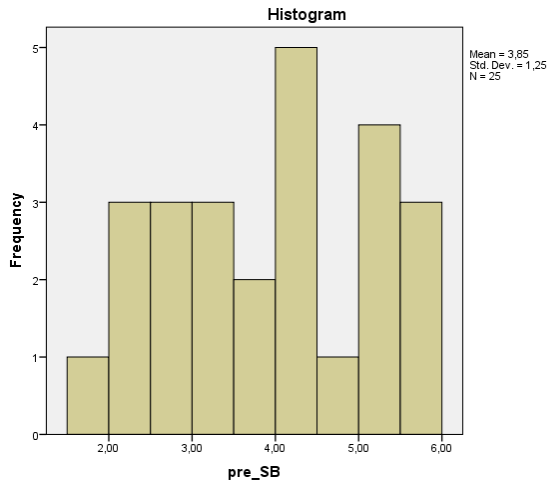
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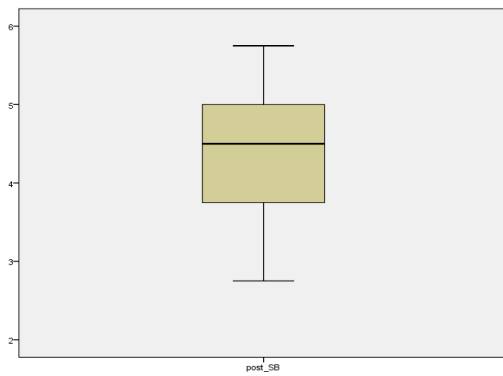
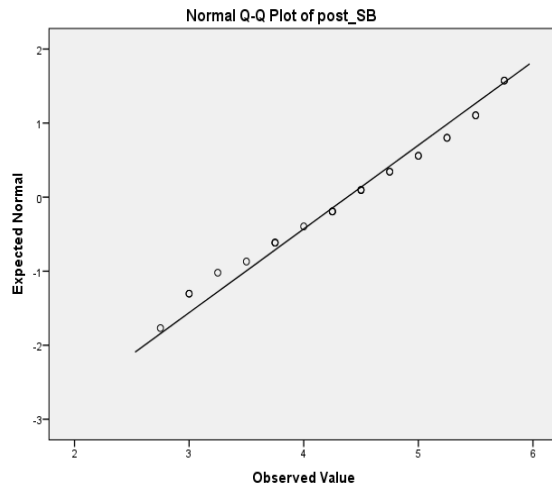
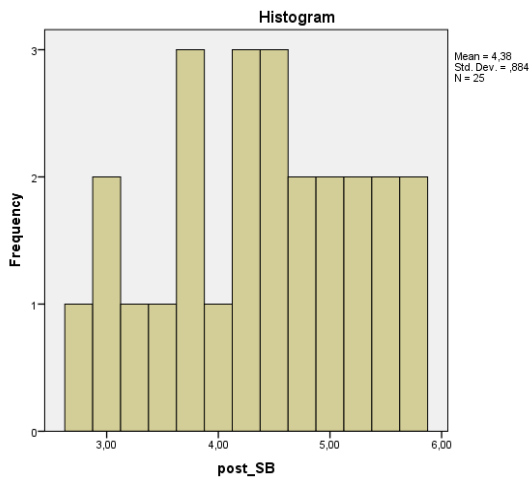
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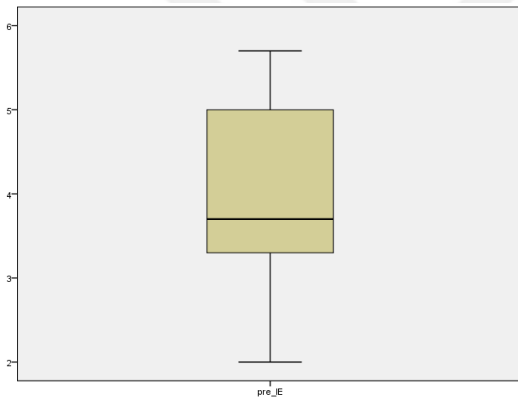
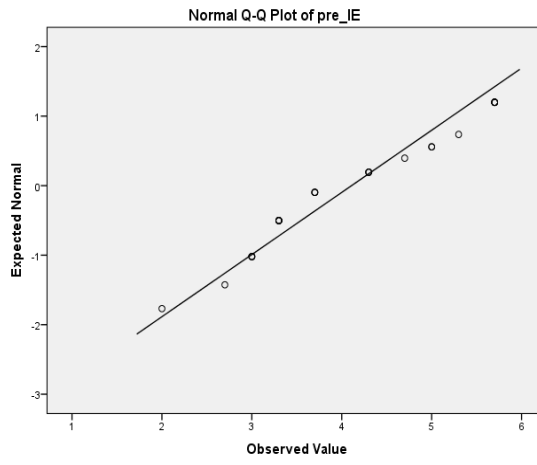
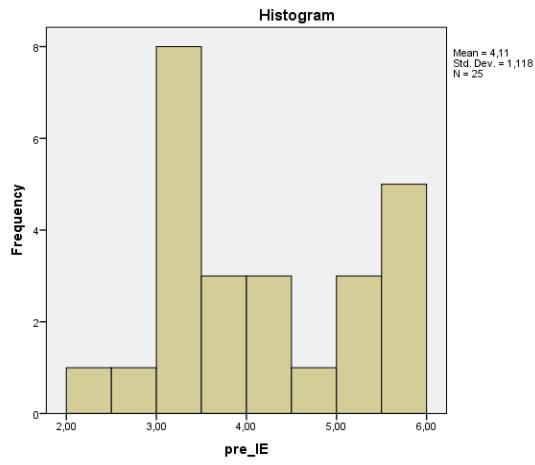
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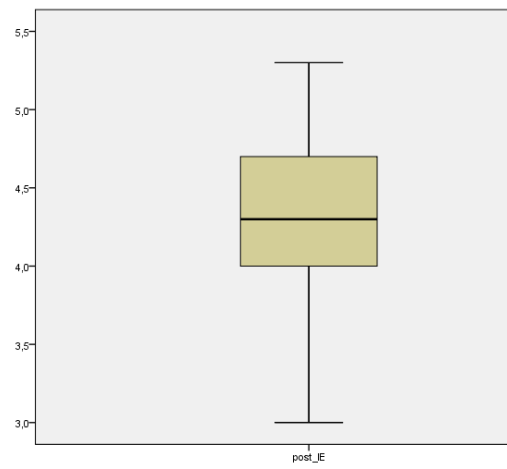
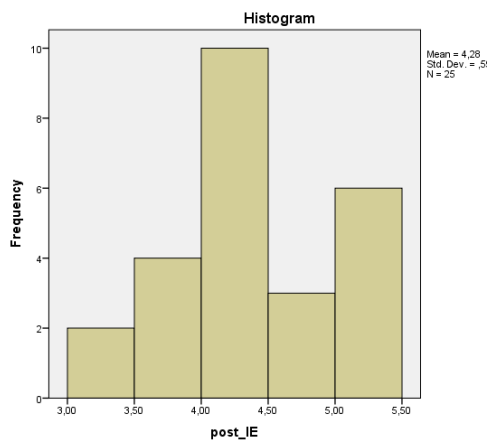
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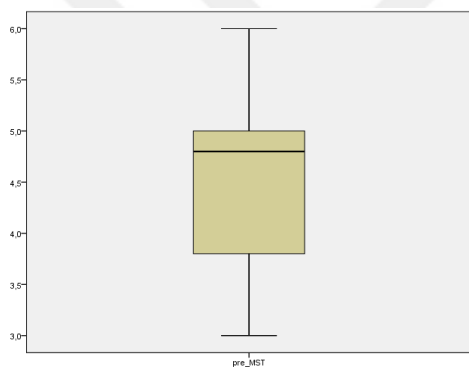
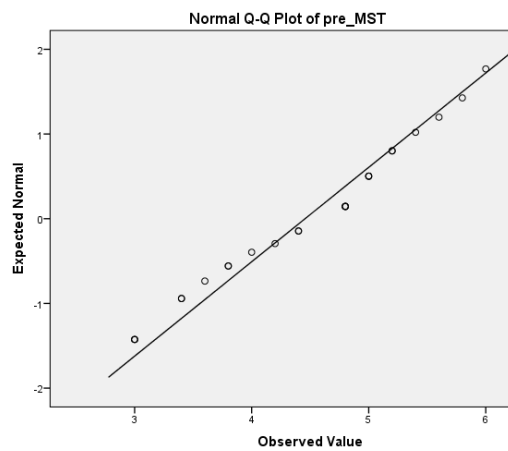
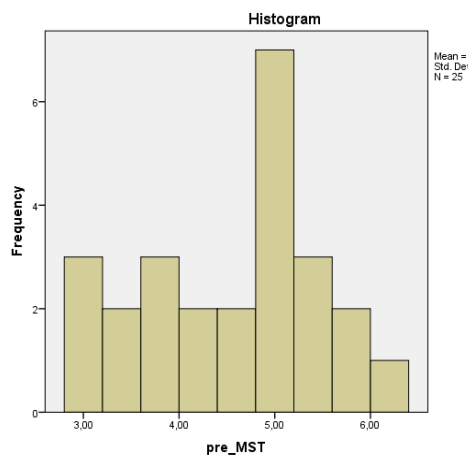
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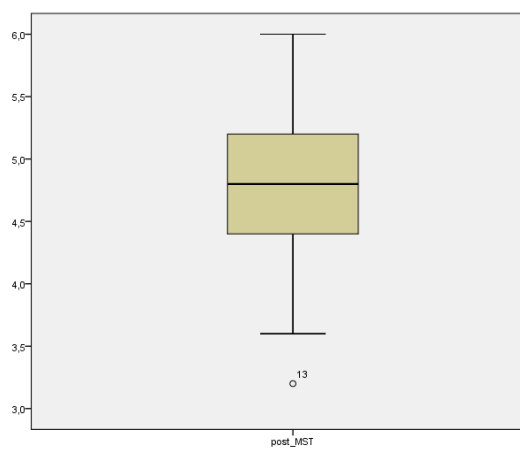
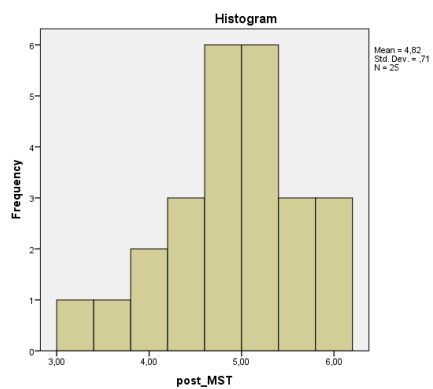
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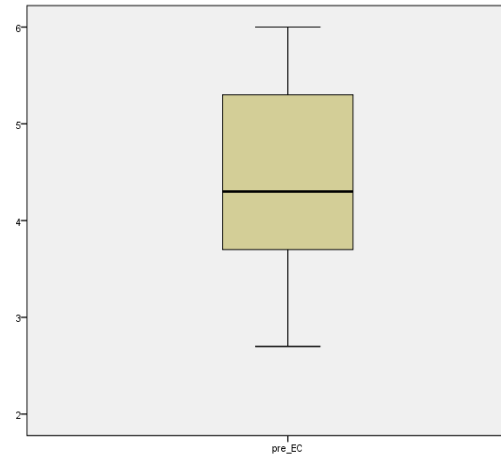
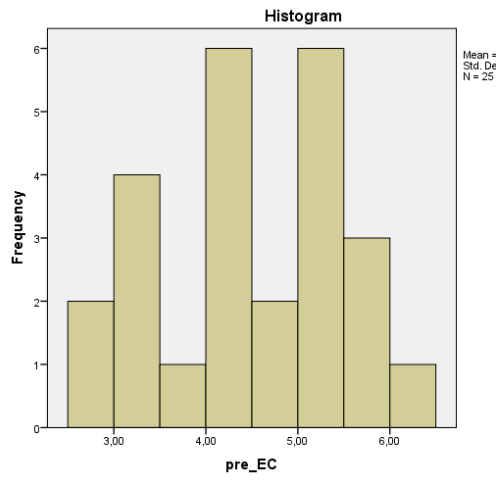
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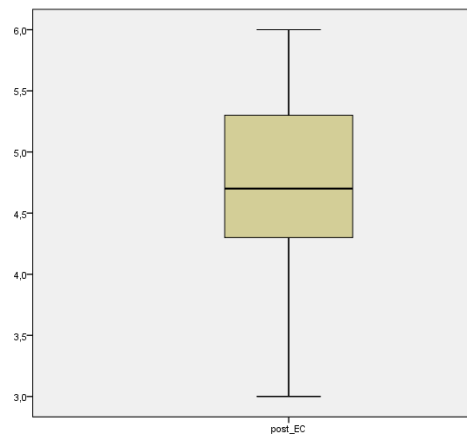
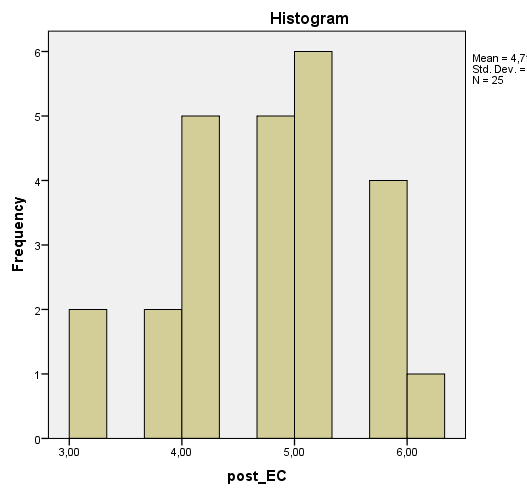
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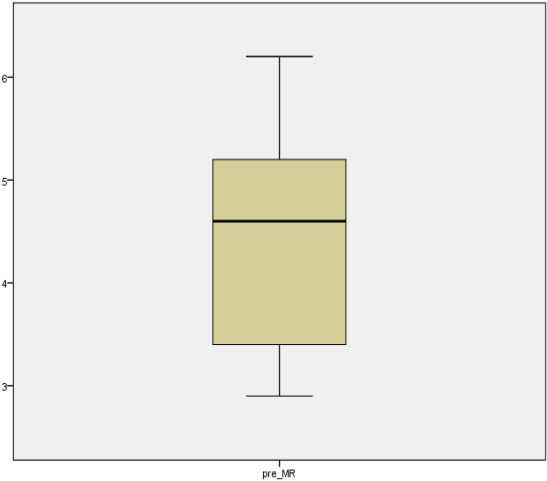
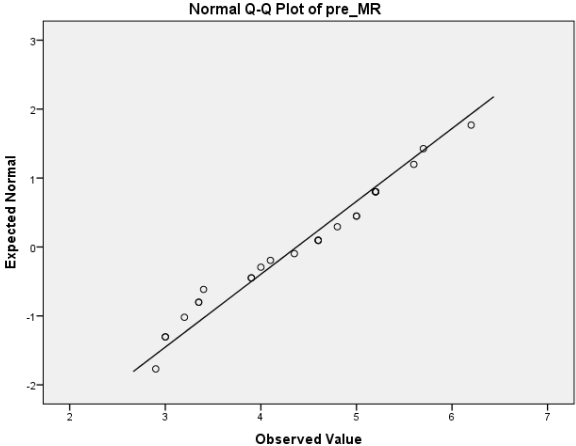
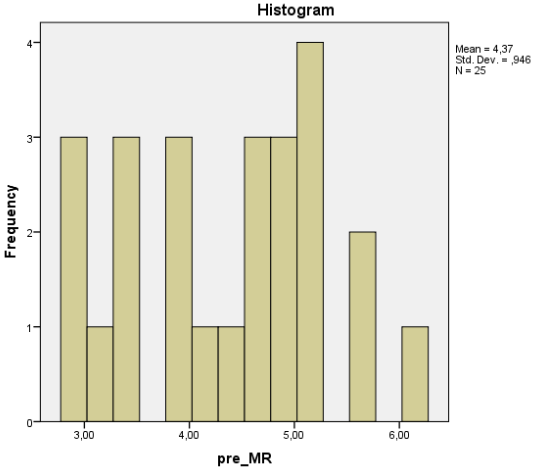
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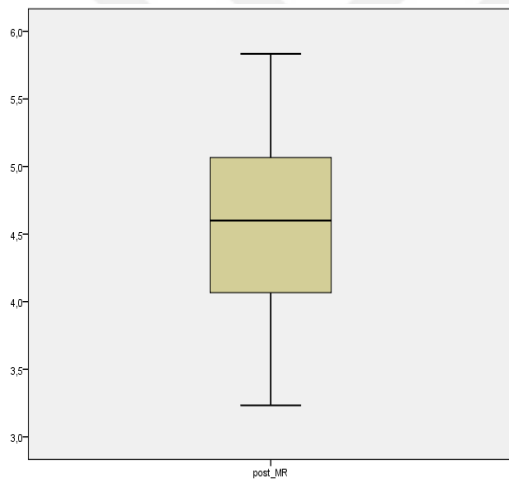
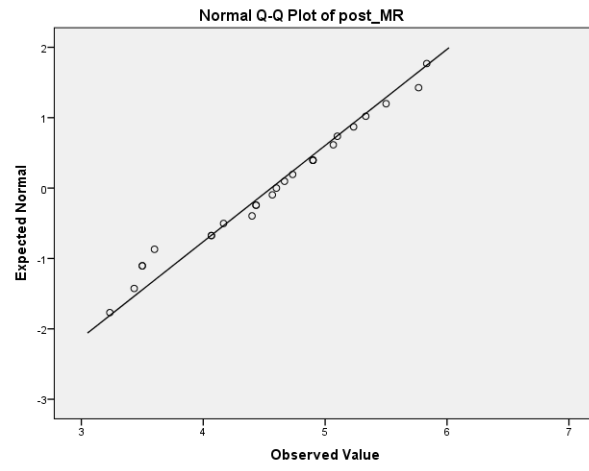
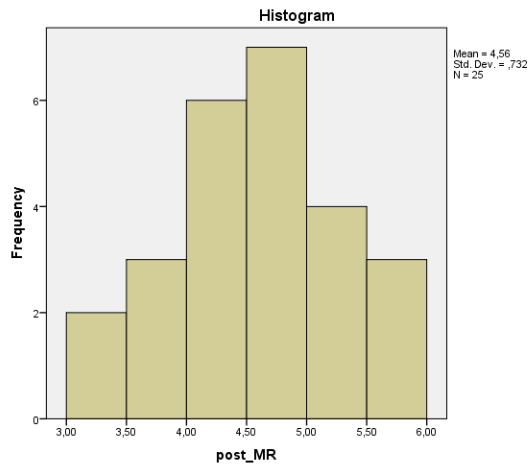
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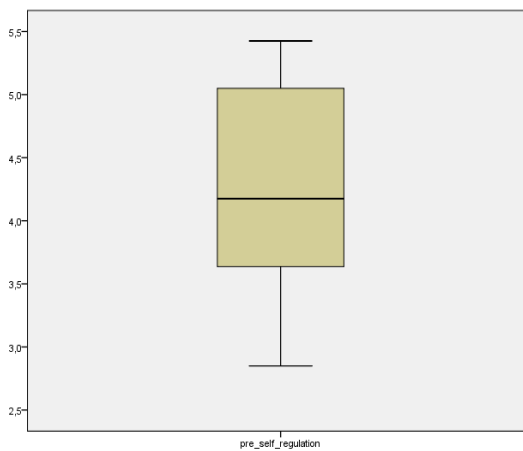
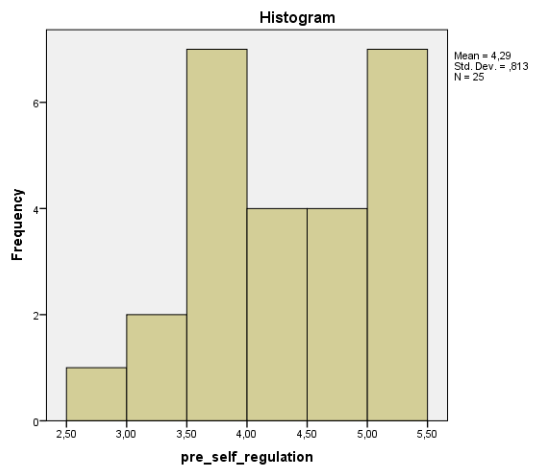
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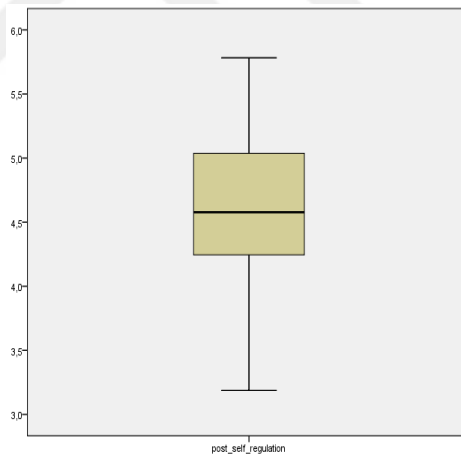
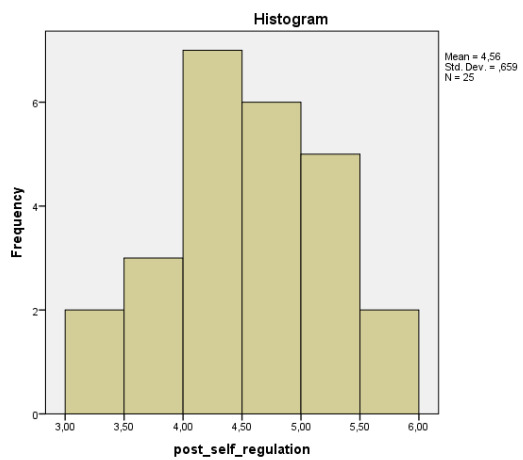
post_MR



pre_self_regulation



post_self_regulation



APPENDIX-C: Instruments (Writing Tasks)

WRITING

Read the statement below. Write a well-organized opinion essay. Use specific examples and reasons to support your opinion.

Your essay must include

- an introductory paragraph
- at least two supporting paragraphs
- a concluding paragraph

Word Limit: (-50) 350 (+50) words.

- *Do you think people should be judged by their physical appearances?*

WRITING

Read the statement below. Write a well-organized opinion essay. Use specific examples and reasons to support your opinion.

Your essay must include

- an introductory paragraph
- at least two supporting paragraphs
- a concluding paragraph

Word Limit: (-50) 350 (+50) words.

- *Do you think migration from villages to cities should be banned in Turkey?*

The Writing Strategies for Self-regulated Learning Questionnaire (WSSRLQ)

The Writing Strategies for Self-regulated Learning Questionnaire (Participant Ver. 2016)

Copyright© Lin Sophie Teng & Lawrence Jun Zhang 2016

Reference: Teng, L. S., & Zhang, L. J. (2016). A questionnaire-based validation of multidimensional models of self-regulated learning strategies. *Modern Language Journal*, 100(3), 674-701.

Name: _____ Gender: _____ Age: _____ Institution: _____

We would like you to tell us how much you think the following statements reflect your behaviour *when you are in the learning-to-write process or completing a writing task* by simply ticking (✓) a number from 1 (not at all true of me) to 7 (very true of me).

Not at all true of me	Not true of me	Slightly not true of me	Neutral	Slightly true of me	True of me	Very true of me
1	2	3	4	5	6	7

3. When revising, I check spelling and punctuation.	1	2	3	4	5	6	7
18. I set up a learning goal to improve my writing.	1	2	3	4	5	6	7
29. I try to connect the writing task with my personal interest.	1	2	3	4	5	6	7
25. I try to improve my English writing based on teachers' feedback.	1	2	3	4	5	6	7

Adapted Version of WSSRLQ

Öz-Düzenlemeli Öğrenme için Yazma Stratejileri Anketi

Cinsiyeti: _____ Yaşı: _____

Yazma becerilerini öğrenme sürecinde veya bir yazma ödevini yaparken aşağıdaki ifadelerin sizin davranışlarınızı ne ölçüde yansıttığını 1'den (Bana hiç uygun değil) 7'ye (Bana çok uygun) kadar numaralandırılmış ölçekte sizi en çok yansıtan kutucuğa tik (✓) atarak belirtiniz.

Bana hiç uygun değil	Bana uygun değil	Bana pek de uygun değil	Kararsızım	Bana biraz uygun	Bana uygun	Bana çok uygun
1	2	3	4	5	6	7

9.	Ders notlarımı ve ders malzemelerini unutmamak için tekrar tekrar okurum.	1	2	3	4	5	6	7
13.	İngilizce' de yazma becerisini öğrenirken kendime çalışmalarımı yönlendirecek hedefler belirlerim.	1	2	3	4	5	6	7
15.	Yazma becerisi derslerinde içerik konusundaki yeterliliğimi değerlendiririm.	1	2	3	4	5	6	7
16.	Yazma becerileri derslerindeki öğrenme sürecimi gözlemlerim.	1	2	3	4	5	6	7
22.	Sınıf arkadaşlarımla yazdığım metne ilişkin geribildirimlerine açığım.	1	2	3	4	5	6	7
23.	Öğretmenimin yazdığım metne ilişkin geribildirimlerine açığım.	1	2	3	4	5	6	7
38.	Yazma becerileri sınavı olurken kendime kaygılanmamayı öğütlerim.	1	2	3	4	5	6	7
39.	Yazmayı bırakmak istediğimde kendime devam etmeyi öğütlerim.	1	2	3	4	5	6	7

APPENDIX-D: Writing Criteria

- WRITING CRITERIA FOR AN OPINION ESSAY-

Excellent (20-17)	The essay is exceptional in every way.
	The text fully answers the prompt.
	The essay is well-organised and all claims are supported with examples or evidence. It begins with a solid introduction that contains a clear and relevant thesis statement. is followed by body paragraphs-each including a relevant topic sentence and supporting details. and ends with an effective conclusion paragraph.
	There are no or few errors in grammar. use of vocabulary. tone and mechanics (spelling and punctuation).
Good (16-13)	The essay is above adequate in most areas and exceptional in some. In the areas where it is not above adequate. it is still entirely acceptable.
	The text sufficiently addresses the prompt.
	The majority of the essay is clear. focused and well-detailed. but there may be a few areas requiring further development.
	While it may contain a few errors with grammar. use of vocabulary. tone and mechanics (spelling and punctuation). these errors are not drastic enough to detract from the overall point being made.
Acceptable (12-9)	The essay is adequate in most areas. but exceptional in none.
	The text partially addresses the prompt.
	The essay is clear although probably lacking in both control and command. Organisation may be a slight problem but errors don't make it difficult to understand. Body paragraphs provide details but are generally underdeveloped.
	There may be multiple errors in grammar. use of vocabulary. tone and mechanics (spelling and punctuation). but these errors do not. for the most part. detract from the overall writing.
Needs Improvement (8-5)	The essay is lacking in a majority of areas.
	The text doesn't adequately address any part of the prompt.
	The essay is not clear and is mostly underdeveloped. It is generally unorganised and unfocused.
	There are frequent errors in grammar. use of vocabulary. tone and mechanics (spelling and punctuation) that distract from the content being provided.
Poor (4-1)	There are significant problems throughout the essay.
	The essay is often lacking and the argument. if there is one. wanders and is unorganised. It shows no understanding of essay organisation.
	There are significant errors in grammar. use of vocabulary. tone and mechanics (spelling and punctuation).

____/20

ADDITIONAL CONSIDERATIONS

	Maximum grade
no response	0
totally irrelevant response	4
controlling idea/s given in the prompt not mentioned	12
personal opinion not stated	14
paragraph format	15
below/above word limit	15

APPENDIX-E: Permission for the Scale

1/16/23, 2:37 AM

Gmail - Permission for Your Survey



Permission for Your Survey

5 illd

23 Kasım 2018 15:12

Name: Ilknur Pamuk
 Institution: Hacettepe University / Turkey
 Department: English Language Teaching

Dear Sir/Madam,

I am a doctoral student from Hacettepe University in Turkey writing my dissertation about flipped learning class in teaching writing. One of my research questions in my study is to explore the effect of flipped learning on learners' self-regulation in writing. At this point, I would like your permission to use the scale instrument called "Writing Strategies for Self-Regulated Learning Questionnaires (WSSRLQ)" constructed by you and your colleague in the article *A Questionnaire-Based Validation of Multidimensional Models of Self-Regulated Learning Strategies* in my research study. I would like to use and print your survey under the following conditions:

- I will use the survey only for my research study.
- I will include full references to you on all copies of the instrument.
- I will send a copy of my completed research study to your attention upon completion of the study.

If these are acceptable terms and conditions, please indicate so by replying to me through e-mail:

Sincerely,

Hacettepe University
 School of Foreign Languages
 Department of Modern Languages

24 Kasım 2018 02:24

Dear Ilknur Pamuk,

Thanks for your email and your interest in using the self-regulation questionnaire.

1/16/23, 2:37 AM

Gmail - Permission for Your Survey

I attached the complete version of the the questionnaire for researchers and participants in case you may need them.

If you have any questions, please contact me.

Wish you all the best for your PhD study.

Warm regards,
 Lin Sophie Teng

APPENDIX-F: Consent Form

Araştırmaya Gönüllü Katılım Formu

Bu araştırma Hacettepe İngiliz Dili Öğretimi doktora programı dahilinde, Prof. Dr. Nuray Alagözlü danışmanlığında yürütülen bir doktora tezi çalışması kapsamında yapılacaktır. Bu araştırma için Hacettepe Üniversitesi'nden etik kurul izni alınmıştır. Söz konusu araştırma, Hacettepe Üniversitesi Yabancı Diller Yüksekokulu tarafından İktisadi ve İdari Bilimler Fakültesi öğrencilerine verilen Akademik Yazma Becerileri dersinde tersyüz sınıf modelinin uygulanması üzerinedir.

Araştırmada anket uygulaması yapılacaktır. Anket, sizin yabancı dilde yazma beceriniz ile ilgili öz-düzenleme stratejilerinizi kullanıp kullanmadığınızı belirlemek amacıyla taşımaktadır. Anket 40 sorudan oluşmaktadır. Anket maddeleriyle ilgili olarak herhangi bir doğru veya yanlış cevap yoktur. Anket maddelerine vereceğiniz cevaplar yazma becerileri dersinin daha etkin yürütülmesi açısından önem taşımaktadır. Ankete katılım da gönüllülük esastır. Anketi doldururken sorular nedeniyle ya da başka bir nedenle herhangi bir rahatsızlık hissetmeniz durumunda istediğiniz an cevaplama işlemini sonlandırmaya hakkına sahipsiniz. Bu size herhangi bir sorumluluk getirmeyecektir. Böyle bir durumda araştırmacıya ankete devam etmek istemediğinizi söylemeniz yeterli olacaktır.

Anketten elde edilecek veriler yazma dersinde kullandığınız stratejileri belirlemek için kullanılacaktır. Hiçbir data bilginiz dışında paylaşılmayacaktır. Araştırmacının kullanması için saklanacaktır.

Ankette size sorulan sorulara verdiğiniz yanıtlar yalnızca doktora tezi kapsamındaki araştırmada kullanılacak, anket verileri şifreli bir bilgisayarda saklanacak ve katılımcının kimliği gizlenecektir.

Bu çalışma ile ilgili daha ayrıntılı bilgi almak için araştırmacı İknur Pamuk [redacted] tel: [redacted] veya Prof. Dr. Nuray Alagözlü [redacted] ile iletişime geçebilirsiniz. Katılımınız için teşekkürler.

Bu çalışmaya tamamen gönüllü olarak katılıyorum ve istediğim zaman yarıda kesip çıkabileceğimi biliyorum. Verdiğim bilgilerin bilimsel amaçlı yayınlarda kullanılmasını kabul ediyorum.

Katılımcı:

Adı, soyadı:

Adres:

Tel:

İmza:

Araştırmacı:

Adı, soyadı:

Adres:

Tel:

e-posta:

İmza:

Tarih: _____

APPENDIX-G: Ethics Committee Approval



T.C.
HACETTEPE ÜNİVERSİTESİ
Rektörlük

Sayı : 35853172-101.02.02
Konu : İlknur PAMUK (Etik Komisyon İzni)

EĞİTİM BİLİMLERİ ENSTİTÜSÜ MÜDÜRLÜĞÜNE

İlgi : 18.12.2019 tarihli ve 51944218-101.02.02/00000911655 sayılı yazı.

Enstitünüz Yabancı Diller Eğitimi Anabilim Dalı İngiliz Dili ve Eğitimi Bilim Dalı Doktora programı öğrencilerinden **İlknur PAMUK**'un **Prof. Dr. Nuray ALAGÖZLÜ** danışmanlığında yürüttüğü '**Tersyüz Öğrenme Yaklaşımının İngilizceyi Yabancı Dil Olarak Öğrenenlerin Yazma Başarısına Etkisi**' başlıklı tez çalışması Üniversitemiz Senatosu Etik Komisyonunun **07 Ocak 2020** tarihinde yapmış olduğu toplantıda incelenmiş olup, etik açıdan uygun bulunmuştur.

Bilgilerinizi ve gereğini saygılarımla rica ederim.

e-İmzalıdır
Prof. Dr. Rahime Meral NOHUTCU
Rektör Yardımcısı

APPENDIX-H: Declaration of Ethical Conduct

I hereby declare that...

- I have prepared this thesis in accordance with the thesis writing guidelines of the Graduate School of Educational Sciences of Hacettepe University;
- all information and documents in the thesis/dissertation have been obtained in accordance with academic regulations;
- all audio visual and written information and results have been presented in compliance with scientific and ethical standards;
- in case of using other people's work. related studies have been cited in accordance with scientific and ethical standards;
- all cited studies have been fully and decently referenced and included in the list of References;
- I did not do any distortion and/or manipulation on the data set.
- and **NO** part of this work was presented as a part of any other thesis study at this or any other university.

17/01/2023

(Signature)

İlknur PAMUK

APPENDIX-I: Thesis/Dissertation Originality Report

17/01/2023

HACETTEPE UNIVERSITY

Graduate School of Educational Sciences

To The Department of Foreign Languages Department

Thesis Title: The Effect of Flipped Learning Approach on EFL Learners' Writing Achievement

The whole thesis that includes the *title page. introduction. main chapters. conclusions and bibliography section* is checked by using **Turnitin** plagiarism detection software take into the consideration requested filtering options. According to the originality report obtained data are as below.

Time Submitted	Page Count	Character Count	Date of Thesis Defense	Similarity Index	Submission ID
17/01/2023	145	175098	06/02/2023	17 %	1994047634

Filtering options applied:

1. Bibliography excluded
2. Quotes included
3. Match size up to 5 words excluded

I declare that I have carefully read Hacettepe University Graduate School of Educational Sciences Guidelines for Obtaining and Using Thesis Originality Reports; that according to the maximum similarity index values specified in the Guidelines. my thesis does not include any form of plagiarism; that in any future detection of possible infringement of the regulations I accept all legal responsibility; and that all the information I have provided is correct to the best of my knowledge.

I respectfully submit this for approval.

Name Lastname: İlknur Pamuk

Student No.: N15242163

Department: Foreign Languages Education

Program: English Language Education

Status: Masters Ph.D. Integrated
Ph.D.

Signature

ADVISOR APPROVAL

APPROVED

(Prof. Dr. Nuray Alagozlu. Signature)

APPENDIX-J: Yayımlama ve Fikrî Mülkiyet Hakları Beyanı

Enstitü tarafından onaylanan lisansüstü tezimin/raporumun tamamını veya herhangi bir kısmını, basılı (kâğıt) ve elektronik formatta arşivleme ve aşağıda verilen koşullarla kullanıma açma iznini Hacettepe Üniversitesine verdiğimi bildiririm. Bu izinle Üniversiteye verilen kullanım hakları dışındaki tüm fikri mülkiyet haklarım bende kalacak, tezimin tamamının ya da bir bölümünün gelecekteki çalışmalarda (makale, kitap, lisans ve patent vb.) kullanım hakları bana ait olacaktır.

Tezin kendi orijinal çalışmam olduğunu, başkalarının haklarını ihlal etmediğimi ve tezimin tek yetkili sahibi olduğumu beyan ve taahhüt ederim. Tezimde yer alan telif hakkı bulunan ve sahiplerinden yazılı izin alınarak kullanılması zorunlu metinlerin yazılı izin alınarak kullandığımı ve istenildiğinde suretlerini Üniversiteye teslim etmeyi taahhüt ederim.

Yükseköğretim Kurulu tarafından yayınlanan "**Lisansüstü Tezlerin Elektronik Ortamda Toplanması, Düzenlenmesi ve Erişime Açılmasına İlişkin Yönerge**" kapsamında tezim aşağıda belirtilen koşullar haricince YÖK Ulusal Tez Merkezi / H.Ü. Kütüphaneleri Açık Erişim Sisteminde erişime açılır.

- Enstitü/Fakülte yönetim kurulu kararı ile tezimin erişime açılması mezuniyet tarihinden itibaren 2 yıl ertelenmiştir. ⁽¹⁾
- Enstitü/Fakülte yönetim kurulunun gerekçeli kararı ile tezimin erişime açılması mezuniyet tarihinden itibaren ... ay ertelenmiştir. ⁽²⁾
- Tezimle ilgili gizlilik kararı verilmiştir. ⁽³⁾

17/01/2023

(imza)

İlknur PAMUK

"Lisansüstü Tezlerin Elektronik Ortamda Toplanması, Düzenlenmesi ve Erişime Açılmasına İlişkin Yönerge"

- (1) Madde 6. 1. Lisansüstü teze ilgili patent başvurusu yapılması veya patent alma sürecinin devam etmesi durumunda, tez danışmanının önerisi ve enstitü anabilim dalının uygun görüşü üzerine enstitü veya fakülte yönetim kurulu iki yıl süre ile tezini erişime açılmasının ertelenmesine karar verebilir.
- (2) Madde 6.2. Yeni teknik, materyal ve metotların kullanıldığı, henüz makaleye dönüşmemiş veya patent gibi yöntemlerle korunmamış ve internette paylaşılması durumunda 3 şahıslara veya kurumlara haksız kazanç; imkânı oluşturabilecek bilgi ve bulguları içeren tezler hakkında tez danışmanın önerisi ve enstitü anabilim dalının uygun görüşü üzerine enstitü veya fakülte yönetim kurulunun gerekçeli kararı ile altı ayı aşmamak üzere tezin erişime açılması engellenebilir.
- (3) Madde 7. 1. Ulusal çıkarları veya güvenliği ilgilendiren, emniyet, istihbarat, savunma ve güvenlik, sağlık vb. konulara ilişkin lisansüstü tezlerle ilgili gizlilik kararı, tezin yapıldığı kurum tarafından verilir*. Kurum ve kuruluşlarla yapılan işbirliği protokolü çerçevesinde hazırlanan lisansüstü tezlerle ilişkin gizlilik kararı ise, ilgili kurum ve kuruluşun önerisi ile enstitü veya fakültenin uygun görüşü üzerine üniversite yönetim kurulu tarafından verilir. Gizlilik kararı verilen tezler Yükseköğretim Kuruluna bildirilir.

Madde 7.2. Gizlilik kararı verilen tezler gizlilik süresince enstitü veya fakülte tarafından gizlilik kuralları çerçevesinde muhafaza edilir, gizlilik kararının kaldırılması halinde Tez Otomasyon Sistemine yüklenir

*Tez danışmanının önerisi ve enstitü anabilim dalının uygun görüşü üzerine enstitü veya fakülte yönetim kurulu tarafından karar verilir.

