

**Effects of Pen-Pal Letter Writing on EFL Saudi Students'
Communicative Ability, Language Competence and Writing
Motivation**

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Abstract

Driven by the views of ESP genre theorists who see texts as interactions between writers and readers and influenced by specific discourse conventions, this study has identified the gap in research on the effects of authentic written interaction on the development of students' communicative writing ability and focused on pen pal letter writing of Saudi EFL first year undergraduate students studying in a Saudi university. It specifically explored the Saudi EFL students' use of metadiscourse markers when communicating with their English pen-pal friends, while also tracking the changes in the use of markers through one academic semester. The study also examined the extent to which pen-pal writing had effects on Saudi EFL students' language development (measured by vocabulary breadth and lexical diversity) and their writing motivation. To achieve these aims, the study employed a quasi-experimental design, using an experimental group of 22 Saudi female students who participated in four exchanges of pen pal letter writing with 22 English (11 female and 11 male) first year undergraduate students studying at a North American university, and a control group of 22 Saudi female students who did not have such exchanges. To ascertain the effects of pen pal writing on students' writing motivation, Deci and Ryan's (1985) intrinsic motivation questionnaire and semi-structured interviews with students were also utilised. The findings demonstrated that pen pal writing had many positive benefits. It developed students' repertoire of metadiscourse markers, increased their vocabulary breadth and their writing motivation. The students with pen pal writing experience expressed more enjoyment with writing, felt more competent in writing and were less tense. However, no difference was found between the two groups with regard to the development of their lexical diversity. The study makes a significant contribution to enhancing our understanding of the development of written communication and offers important pedagogical implications for EFL teachers and material developers.

Dedication

In memory of my mother,

Lala-Amenah Abdulmalik Alsaban,

*who was right behind every step I took in my life in the right
direction.*

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Declaration

I declare that this thesis is a presentation of original work and I am the sole author. This work has not previously been presented for an award at this, or any other, university. All sources are acknowledged as References.

Chapter 1 Introduction

1.1 The Rationale of the Study

This study draws on the social constructivist view of writing and argues that writing is a communicative activity which is always performed for specific purposes and in a specific social context. To perform such an activity successfully, the knowledge and the contextual norms and expectations for how an activity should be performed is essential. As Hyland (2009, p. 34) puts it, a written text holds specific meanings and “gain[s] its communicative force only by displaying the patterns and conventions of the community for which it is written” (Hyland, 2009, p.34). Therefore, language choices that a writer makes are always connected, either implicitly or explicitly, to a specific discourse community and influenced by the conventions of that community. The social constructivist view of writing also highlights the social interaction between writers and readers during which writers use specific rhetorical writing devices to convey their purposes and establish a communication with their readers. Writers use a diverse range of such linguistic devices to organise their written texts, engage with their readers by opening a dialogue, and express their attitude to their audience or towards the text. Hyland’s (2005) model, also called the interpersonal model of metadiscourse, shows how these aspects of interaction can be conceptualised in texts. The model includes two dimensions of interaction which are the interactive and the interactional dimensions. While the interactive dimension is concerned with the organisation of the propositional content to help readers to perceive the text as coherent and convincing, the interactional markers serve to engage the reader in the discourse. An example of the use of interactive markers is when writers utilise transitions such as *in addition*, *but*, and *thus* to express relations between main clauses, or use hedges as interactional markers such as *might* or *perhaps* to engage readers within the dialogue.

However, writing has often been viewed as an isolated and individual activity and taught by mostly focusing on language surface forms, grammar rules, and accurate production of the language (Sun & Zhang, 2020). Such approach to the teaching of writing has occupied the field of foreign and second language teaching for many decades and is still of use in many language

teaching contexts, including Saudi Arabia where this study was conducted (Aldegether, 2020; Ali & Ramana, 2018; Alkodimi & Al-Ahdal, 2021). The product-oriented format and process are the predominant approaches in the teaching of writing and little attention is given to communication in Saudi English language classrooms. It has been argued that the traditional methods such as the product or the process-oriented approaches consider writing as an isolated activity in which the writer focuses on the surface features of writing or goes through various cognitive phases such as planning, drafting, and revising, and ignores the socio-cultural context of the activity.

In recent years, however, Saudi Arabia has undergone many reforms to improve the teaching and learning of the English language, including English writing. It has been recognised by the Ministry of Education that until recently, students' English proficiency has remained unsatisfactory and below expectations (Alrashidi & Phan, 2015; Fareh, 2010; Khan, 2011). Saudi students spend around six years studying English in intermediate and high schools but as the increasing evidence from recent studies indicates, they can barely communicate in English with teachers or use appropriate English in speaking or writing after finishing their school career (Al-Seghayer, 2011; Al Asmari, 2015; Khan, 2011). Even if students pass their tests, including writing tests, with an excellent grade, they usually do so by memorising model written texts and using that information to pass the tests. It has therefore been acknowledged that Saudi learners' English proficiency levels have remained at an unsatisfactory level (Rajab, 2013; Ur Rahman & Alhaisoni, 2013).

One of the reasons for such poor English attainment could be the focus on building students' vocabulary and grammar rather than their communication skills in EFL classes (Al-Seghayer, 2011; Khan, 2011). Central to the instruction of English in Saudi classrooms is the teaching of grammar by practising grammatical exercises and memorising words (Al-Seghayer, 2011). According to Alrashidi and Phan (2015), most students in Saudi EFL classrooms rely on memorisation as the main strategy of learning, and they only memorise paragraphs and words without understanding their meaning. Fareh (2010) further observed that the role of students in the classroom is rather passive where they receive teachers' instructions, copy sentences from the board and practise language patterns with little communication with the

teacher or their classmates. Many students also depend on the language transfer from their L1 in constructing their sentences or copy sentences from other sources into their writing assignments (Al-Seghayer, 2011).

Recent studies on Saudi students' learning of English have also revealed their low levels of motivation, which could be due to the lack of communicative approaches to learn the English language (Alamer & Almulhim, 2021; Alamri, 2011; Alharbi, 2019; Al-Seghayer, 2014; and Khan, 2011). Al-Seghayer (2014), for example, showed that Saudi students held a negative attitude towards learning English and were only externally motivated to pass their tests, rather than also being genuinely interested in learning the language. Alkodimi and Al-Ahdal (2021) have also indicated that reluctance to write or participate in writing classes is now a common phenomenon in Saudi EFL classes to the extent that Saudi students may even avoid attending composition classes or finish writing tasks. The major reasons for such motivation, as Alrabai's (2014) study with Saudi students showed, could be students' low self-esteem, low autonomy, controlling teachers behaviour, the lack of competitive atmosphere, and the lack of students' interaction in the classroom. Alkodimi and Al-Ahdal (2021) have also asserted in their study that the major reasons for Saudi students' lack of motivation in writing classes are the lack of language courses, limited opportunities to use English outside of the university setting, and the lack of technology resources in the classroom.

Given the unsatisfactory performance of Saudi students' English language, the dominance of the traditional English language teaching methods in the Saudi context and their influence on students' language development and motivation has, therefore, been challenged and new teaching and learning perspectives have been proposed. One of such proposals is a genre-based approach to the teaching of writing where writing is seen as a communicative activity that is performed in a specific socio-cultural context and should be taught and learnt as such (Barkaoui, 2007). The approach emphasises the meaningful use of the language and considers writing as a socio-constructive activity in which meaning is constructed purposefully and for a particular social context (Hyland, 2002). The approach also highlights the importance of developing learners' communicative competence which allows writers to use language effectively and appropriately according to a specific context (Ahmed,

2018). Hymes (2001, p. 60) calls such competence the “rules of use” which if not acquired, mean that “the rules of grammar would be useless” for learners (Hymes, 2001, p.60). Often such competence involves the language “tacit knowledge” that is often acquired implicitly, through participation in community practices. Thus, to acquire communicative competence, it is important to not only rely on learning the grammatical rules of a language, but to also learn and understand how to use the language effectively to communicate appropriately with others in different situations.

To help students develop their communicative competence, sufficient exposure to the target language in authentic and meaningful communication is crucial (Larsari, 2011). In the context of language learning and development, an authentic interaction is one that involves communication in a real-life or simulated real-life context. However, it is important to note that authenticity in language learning does not necessarily have to involve communication with L1 speakers. Learners can also engage in authentic language use through interactions with other speakers who share similar language learning goals and experiences (Thorne, Black, & Sykes, 2010). Creating such a learning environment is essential for learners to understand how language is used in real-life situations (Blake, 2000; Dooly and O’Dowd, 2018; Hall, 2007). In other words, by participating in an authentic interaction, learners can observe how language is utilised and gain a deeper understanding of its appropriate applications in similar situations.

Thus, teachers are encouraged to adopt writing activities in classrooms that are authentic and socially situated in which learners can experience meaningful interaction with their audience (Ahmed, 2018; Yu et al.,2020). One specific authentic writing activity that can promote students’ communicative competence and motivation- and which has been chosen for this study is pen-pal letter writing. The concept of pen-pal letter writing is not new; however, its benefits in language learning have been less known (Barksdale *et al.*, 2007). Pen pal writing is considered as a regular and friendly letter exchange, traditionally by postal mail, which involves strangers whose relationship is based entirely on the exchange of letters. With the advent of technology, email has become a popular way of exchanging pen pal letters as it is faster than traditional mail and allows for quick response. In addition, online pen pal letter

writing is available through specific online platforms and websites that can facilitate pairing up people from different parts of the world. Pen pal letter writing as a genre-based writing task engages the students in meaningful interactions, as well as purposeful writing in a specific social context. In addition to the meaningful interaction provided by pen pal writing, the activity is distinguished by its design. Unlike the one-to-many interactions provided by other modes of communication, pen pal letter writing enables students to engage in one-to-one interaction. Such modes of communication are perceived to offer the highest level of social presence (Tu, 2002). This is because when more than two students are engaged in a conversation, students' feelings of privacy can influence their participation. They can feel that they are being watched, especially when students possess an average or below average writing skills (Tu, 2002). Additionally, pen pal writing also does not require an internet connection in the classrooms, and can be administered and assessed in a classroom. This is especially more convenient in contexts where internet access or technology may not be readily available, exemplified in the current study's specific context.

Writing pen pal letters is a communicative act and every written letter is directed to a specific reader. Pen pal letter writing is distinguished from other types of L2 writing tasks in that it involves interaction with a real, authentic audience through written communication. Unlike other writing tasks that primarily focus on producing a final written product for a teacher or instructor, pen pal letter writing provides an opportunity for students to engage in an ongoing, reciprocal exchange with a specific individual who is genuinely interested in the content of their writing. This type of task can help students develop their language skills in a more interactive and communicative way, as they receive feedback and respond to their pen pal's messages (Larrotta and Serrano, 2012). Additionally, pen pal letter writing may help students develop intercultural awareness and competence, as they engage with peers from different cultural backgrounds. The activity allows each student to engage in continued negotiations with the language. This is because every writer's language choice is related to the social environment and influenced by the particular social group they belong to. This can be observed when writers use specific words, terms, and expressions to convey meaning to their readers.

Thus, social engagement and interaction provided by writing pen pal letters can then result in an improvement of students' communicative competence skills.

While little is known about the influence of pen pal letter writing on students' use of specific linguistic devices to communicate with readers (such as metadiscourse), a handful of studies that have started to investigate the effects of pen-pal letter writing on students' language development, and have so far demonstrated positive results (Barksdale, Watson & Park, 2007; Larrotta & Serrano, 2012; Liu, 2002; Stanford and Siders, 2001). For example, Stanford and Siders (2001) investigated the impact of students' engagement in e-pal letter writing on their writing development. The findings of the study showed the positive influence of pen-pal letter writing on students who were in the e-pal group in terms of their writing skills compared with the learners who wrote to an imaginary correspondent. The writing development was observed in terms of the number of words generated by students in the letters and the complexity of the sentences used. Similarly, Peterson-Hernandez (2020) found a positive impact on the development of students' writing ability after engaging in pen pal letter writing. The study indicated that students who participated in letter writing wrote longer texts and their engagement and competency were developed.

Research in the field of computer mediated communication (CMC) has further shown the potential benefits of the social interaction with an authentic audience on students' language development and communicative competence (Babni, 2019; Chen and Brown, 2012; Kitade, 2006; Li, 2000; Sanchooli et al., 2021; Shiroyama, 2021; Sotillo, 2000). Incorporating technology and computer mediated tools such as email and discussion boards can facilitate students' exposure to the target language and promote their communicative skills (Larsari, 2011). For example, Li (2000) found a positive influence on students' writing, as they wrote syntactically and lexically more complex sentences after engaging in email tasks that involved audience interaction.

In addition, pen-pal letter writing can have positive effects on students' motivation as a few studies have shown (Gambrell *et al.*, 2011;

Larrotta & Serrano, 2012; Rankin, 1992). In the study of Gambrell *et al.* (2011), students who were engaged in pen pal letter writing showed a development of self-concept and the perceived value of reading. Similarly, Larrotta and Serrano (2012) indicated in their study that the task of composing a pen pal letter in English proved to be both stimulating and enthusiastically received by students, as they were highly motivated to employ the language in their writing and felt well-assisted throughout the entire process.

Although studies which have investigated the impact of pen pal letter writing on students' motivation are limited, the reviewed literature on the impact of social interaction and communication on the development of intrinsic motivation within SDT in educational contexts shows positive outcomes. Self-determination theory (SDT) is a psychological theory that focuses on human motivation and personality development. The theory was developed by Deci and Ryan (1985), and suggests that humans have three basic needs that must be satisfied for optimal functioning and well-being: autonomy, competence, and relatedness. In learning classrooms, students who possess intrinsic motivation tend to perceive their learning experience as more enjoyable, exciting, and fulfilling compared to those who lack this type of motivation (Alberth, 2019). They are more likely to put in extra effort and willingly devote time to their studies because they find it personally satisfying and rewarding, rather than just doing it to meet external expectations or gain rewards. In essence, intrinsic motivation has been shown to enhance the quality of the learning experience and lead to more effective and sustainable learning outcomes. Given the importance of intrinsic motivation, studies that focused specifically on that the impact of social interaction and communication in educational contexts demonstrated positive outcomes on the development of intrinsic motivation (Akbari *et al.*, 2015; Alamer & Al Khateeb, 2021; Buts & Stupnisky, 2017; Challob, 2021, & Shi *et al.*, 2014). For instance, Akbari *et al.* (2015) examined the differences in terms of learning outcomes between a group of EFL English learners on a Facebook page and a face-to-face learning group. The study focused on students' feeling of autonomy, competence and relatedness and found that all three SDT variables correlated with learning outcomes. In other words, the students who had the experience of social interaction in the Facebook group felt more autonomous, competent and

related than those in the other group. In the Saudi context, the study of Alamer and Al Khateeb, (2021) examined the effectiveness of using WhatsApp on the language learning motivation of Saudi native speakers of Arabic. The findings of their study showed that the incorporating of WhatsApp as a teaching tool to enable students' social interaction was beneficial for students' autonomous motivation, as it resulted in an increased sense of enjoyment and interest in completing language tasks compared to traditional teaching methods.

Pen-pal letter writing has been shown to provide students with an environment that can support the development of students' language ability, writing competency, and motivation. Being a purely communicative task, its role in education has been little known. Instead, much focus has been on communicative features used in academic genres such as academic writing (Alghazo et al., 2021; Alharbi, 2021; Btoosh and Taweel, 2011; Farahani and Mohemmed, 2018; Zakaria and Abdul Malik, 2018). Thus, to contribute to this understanding, this quasi-experimental study set out to investigate Saudi EFL university students' development of language and communicative competence as well as their writing motivation when engaged in a specific genre of letter writing to their North American counterparts over one semester. It aims to examine the impact of using pen pal letter writing as an innovative communicative task for English language teaching, especially in contexts where internet access or technology may not be readily available. To measure students' language development, vocabulary breadth and lexical diversity were investigated as the key features of the language and weaknesses of Saudi students; to measure students' development of communicative competence, Hyland's (2004) interpersonal communication framework was applied and specific metadiscourse markers that are common in the use of general English were examined; and to measure students' writing motivation, Deci and Ryan's (1985) self-determination theory was used.

1.2 Research Questions

The specific research questions which this study addresses are the following:

RQ1: What is the effect -if any- of a pen-pal writing intervention on the development of EFL Saudi students' communicative ability to

interact with their audience? (measured by their use of metadiscourse markers);

RQ2: What is the effect of a pen-pal writing intervention on the development of EFL students' English language proficiency? (measured by their vocabulary breadth and lexical diversity);

RQ3: How does the pen-pal letter writing intervention interact with students' writing motivation?

RQ4: What are the Saudi students' perceptions about the pen-pal writing experience?

By addressing the four research questions set out above, the purpose of this study is to contribute to the literature by adding value to the understanding of pen pal writing and the view of writing as a social activity. The current study employs the English for Specific Purposes (ESP) genre approach to writing as a framework for understanding the impact of students' engagement and interaction on their communication and language development. With its focus on communicative competence, language development and motivation, the study utilised specific measures to capture this connection. First, it uses Hyland (2005) metadiscourse model which is regarded as a key dimension that helps to provide a picture of how language choices are connected to the writer's purposes while composing, and how they establish an interaction with the audience. Second, to see the impact of social interaction on the students' language development, the study focuses on investigating the vocabulary breadth and lexical diversity. Lastly, the current study adopted the Self-Determination Theory (SDT) which focuses on human needs as the energizers behind behaviours to understand the effects of pen-pal interaction on students' motivation. With the focus on these three dimensions, the findings of the study will offer pedagogical implications for teaching writing as a communicative activity.

1.3 Structure of the Thesis

This thesis is divided into seven chapters including the current introductory Chapter 1. Chapter 2 describes the context of the English teaching, that is, the teaching of second language writing in a university

classroom in Saudi Arabia. It first briefly provides a historical and social background of Saudi Arabia, and then presents information regarding the country's educational system and its higher education structure. The chapter then reviews teaching English in Saudi Arabia and more specifically the teaching approaches followed in the higher educational institutions in the country. Chapter 3 reviews the literature pertinent to the study's main topics derived according to the research questions. That is, it first reviews the literature on how writing has been viewed from a product and process approaches and then focuses on the explanation of writing from a genre approach. The chapter then proceeds with a discussion of the measurements of language development and justifies the focus on the lexical measurements used in the study, such as lexical diversity and vocabulary breadth. Next, it discusses writing for an authentic audience provided by Computer Mediated Communication (CMC). It then explains the self-determination theory as the motivational framework adopted in the study and finally reviews the previous studies which have investigated students' pen-pal letter writing and its benefits. Chapter 4 deals with the methodology of the study, providing the justification for the quasi-experimental design adopted in the study, the specific data collection and analysis methods and the study participants. The trustworthiness of the study is also discussed in this chapter. The findings of the study are described in Chapter 5, which are presented according to the research questions. The discussion of the findings then follows in Chapter 6. Chapter 7 is a conclusion which provides the summary of the findings, considers the study's limitations and makes important recommendations for EFL teachers and writing researchers.

Chapter 2 Context

2.1 Introduction

It is of great importance to understand the educational and linguistic context of the present study in order to set the scene and add to the understanding of the contribution of the study. This chapter therefore first provides a brief historical and social overview of Saudi Arabia. It then presents a specific overview of the Saudi education system in general and the English educational system specifically. It then describes the structure of higher education in Saudi Arabia and pays particular attention to the teaching of English in higher education and the teaching of writing approaches followed in higher education institutions. Last, an overview of EFL Saudi undergraduate students' current English writing ability and the existing teaching practices in Saudi Arabia are provided .

2.2 A Historical and Social Overview of Saudi Arabia

Saudi Arabia has a rich and complex history shaped by a variety of cultural, religious, and economic factors (Al-Rasheed, 2010). The region was home to several ancient civilizations, including the Kingdom of Lihyan and the Nabateans, who established a thriving trade network based on the city of Petra. In the 7th century CE, the birth of Islam in the city of Mecca transformed the Arabian Peninsula, and Prophet Muhammad's teachings inspired a wave of religious and cultural reform (Al-Rasheed, 2018). In the early 20th century, the discovery of oil reserves transformed the economy and politics of Saudi Arabia and the rest of the Middle East. The founding of the modern Kingdom of Saudi Arabia in 1932 by Abdulaziz Al Saud brought a degree of stability and unity to the region, and the country's abundant oil reserves made it a key player on the global stage. Today, Saudi Arabia is a complex and dynamic society characterised by rapid social and economic change, as well as ongoing tensions between traditional cultural values and modernisation (Al-Rasheed, 2018).

The Kingdom of Saudi Arabia (KSA) is the largest country in the Arabian Peninsula with a land area of approximately 2,150,000 km². Saudi Arabia shares borders with Jordan and Iraq in the north, the Persian Gulf, Kuwait, Bahrain, Qatar and the United Arab Emirates in the east, and Yemen and

Oman in the south. Saudi Arabia is also the second-largest country in the Arab world. In terms of religion, Saudi Arabia is a Muslim country with around 90% of the population being Muslim; the country is known as the birthplace of Islam and has the two most holy Islamic sites: Al-Masjid al-Haram in Makkah and Al-Masjid al-Nabawi in Medina. These two sites are the destinations for Muslims from all over the world throughout the year but especially during Islamic festivals such as Ramadan and Haj when Muslims perform religious practices at those two sites. Today, Saudi Arabia is diverse as many people from different ethnic and religious backgrounds have come to live and work in the country.

2.3 A Brief Overview of the Educational System in Saudi Arabia

Before the establishment of the formal and organised educational system in Saudi Arabia in 1925, the Saudi education was traditional and was based on a system called *Kuttab* (Wiseman, Sadaawi, & Alromi, 2008). The *kuttab* is an informal educational system where young children traditionally learned how to read, write, and recite the Quran. It was the only source of education in Saudi Arabia, and was initially only available for boys. This form of education was located in either mosques or the teacher's house. The teacher is often the mosque Imam, the person who gathers people for daily prayers (Wiseman, Sadaawi, & Alromi, 2008). The *kuttab* system in Saudi Arabia traditionally reinforced memorization as a key aspect of learning. The primary focus of the *kuttab* was to teach children how to read and memorise the Quran, and this was accomplished through a combination of recitation, memorization and repetition. Students would often spend hours each day reciting verses of the Quran aloud, under the guidance of their teacher, until they were able to commit them to memory. The emphasis on memorization in the *kuttab* system was seen as important both for preserving the Quran and for instilling a deep reverence for it in the students. The beginning of the Saudi education actively demonstrates that the education in Saudi Arabia was based on memorization whether for learning Arabic or reading the Qur'an.

The role of education in Saudi Arabia received specific attention with the establishment of the Ministry of Education (MOE) in 1953 and the General

Presidency of Female Education in 1959, which were later combined into one ministry (Ur Rahman & Alhaisoni, 2013). In 1975, the Ministry of Higher Education was established to supervise all universities and higher education institutions in Saudi Arabia. The MOE developed a ten-year strategic plan (2004-2014) which aimed at improving the society at many levels and preparing individuals for a better state socially, educationally and economically (UNESCO, 2010). With plans and strategies initiated by the ministry towards achieving this development, the numbers of schools, universities and students have all increased (Ur Rahman & Alhaisoni, 2013). This has resulted in the number of literate students has significantly increasing over recent years.

The Saudi school system consists of several stages. The first is the kindergarten stage which accepts children from the age of four to the age of six, followed by the primary stage which pupils start at the age of six and remain until they are eleven. The third stage is the intermediate stage or middle school, which pupils attend from the age of twelve until they reach fifteen. The fourth stage is the secondary school stage (the high school stage), which students attend from fifteen to eighteen. Students choose between two fields of study, science or education, during their second year in high school. The high school stage is considered fundamental because students' success in completing their three years in either science or education determines whether they can join a university. At the university level, students spend four to five years depending on the institution or the major chosen. As in some other Islamic gulf countries, the schools and universities are segregated for male and females, and study at every stage in the system is free for Saudi children.

2.4 Higher Education in Saudi Arabia

At the time of the establishment of Saudi Arabia in 1932, there were no higher education institutions in Saudi Arabia. Higher education in the country started in 1957 with one institution which had twenty-one students and nine members of staff, and by 1982 the number of universities in Saudi Arabia had increased to seven (Saleh, 1986). After this increase in the number of institutions, the Ministry of Higher Education was established under the MOE to deal with tertiary institutions and higher education affairs (Alamri, 2011). In 2000, the number of institutions had increased significantly to include 24

government-funded universities and to geographically cover many areas and offer many different fields of study (Al-Seghayer, 2011).

The philosophy of the Saudi higher education system is derived from Islam, which promotes education and considers it to be an obligation for all people (Saleh, 1986). Education is valued as it is encouraged in the Qur'an (the Muslim holy book) to be a pursuit to enlighten people's minds and help them to participating in spreading knowledge. The Saudi government has therefore made considerable investments in the development of the higher education sector and a variety of educational programmes, including study-abroad scholarship programmes. The rapid growth in the number of higher education institutions in Saudi Arabia has resulted over the past decade in 192 institutions. These include 23 government universities and 33 private universities and colleges which offer a variety of degrees in many fields of study.

At almost all universities in Saudi Arabia, English is taught as a compulsory course in the first year of any programme. The Ministry of Higher Education developed a one-year preparatory course or a foundation-year programme in 2007. Prior to attending a university in Saudi Arabia, all students joining or intending to join any state university in the country need to complete this programme. During this course, students are required to learn English as a mandatory subject, especially students who wish to major in science fields such as medicine, computer science and engineering (Al-Seghayer, 2011). The preparatory year aims to bridge the gap between the public education system and the university studies and to prepare high-school students for the higher education level in Saudi universities. Beside learning English, the preparatory year includes other subjects such as Arabic, mathematics and chemistry. The teaching hours for the English courses vary depending on the programme and the university. The English courses provided by the Saudi universities, according to the Ministry of Higher Education, aim to develop the students' ability to express themselves, develop language competency and help students write correctly and coherently.

English is regarded as a vital component in the development and success of students in Saudi's higher education. Today, English is offered as a major field of study in many state universities in Saudi Arabia. The establishment of English departments in Saudi universities has also had a positive impact on research in the fields of education, TESOL and translation. A few universities also use English as a medium of instruction, such as King Fahad University, and the integration of English as a medium of instruction is increasing for all subjects (Soliman Nouraldeem & Elyas, 2014).

Saudi Arabia's higher education system has experienced significant changes in recent years due to a series of reforms that have been implemented. One of the efforts made to reform and develop higher education in Saudi Arabia is the Afaq project. The project was initiated in 2006, and it aims to improve the quality of higher education in Saudi Arabia. The plans of the project will continue until 2030. One of the main goals of the project is to develop students' skills to match the standards of their international peers (Afaq, 2007). However, while the project was seen as a positive step in order to improve the quality of higher education in Saudi Arabia, the project progress has stalled and it is no longer a topic of discussion (Al-Essa, 2010). Hamdan (2015) suggested that in order to achieve the goal of transforming Saudi educational institutions into world-class universities and colleges, Saudi higher education needs to engage in more rigorous and constructive research that identifies and addresses the challenges that higher education encounters, while also offering solutions to overcome these challenges.

2.5 The English Status in Saudi Arabia

It is not clear how English was first introduced in Saudi Arabia because Saudi Arabia was never colonised by any European power (Al-Seghayer, 2011). Culturally, the lack of influence by European culture affected how people perceived English when it was first introduced (Soliman Nouraldeem & Elyas, 2014). Two main reasons were found to be the driving force behind the introduction of English in Saudi Arabia since its establishment in 1932. First, Saudi Arabia is an Islamic country which holds the two most important religious sites which attract Muslims from all over the world to visit the country. With the enormous number of English-speaking Muslims who come to Saudi Arabia, it has become essential to teach English to Saudi citizens so that they can

communicate successfully with tourists and visitors. Second, the Arabian American Oil Company ARAMCO, which was established in 1968, has played an integral role in the use of English and has increased the demand for Saudi native speakers to communicate with foreign experts. The government therefore introduced an English programme which would facilitate communication with other countries and serve the interests of Saudi Arabia. English was introduced to serve the country's academic, technical, diplomatic and international interests (Al-Seghayer, 2011).

The formal beginning of English in the educational system in Saudi Arabia was in 1928, according to Al-Seghayer (2011). The role of English in Saudi Arabia used to be very limited, but it has gained increasing attention and is now regarded as an important component in the development of the educational system. English was introduced as a subject to be taught at the elementary level for four hours a week. In 1959, after the establishment of the intermediate level, English became a subject with designed objectives to be taught for six hours a week in this transitional level between elementary and secondary school and for students in grades seven, eight and nine (Al-Seghayer, 2011). In 1960, English became a subject of study at the secondary level, but the hours of instruction per week varied as it was first taught for eight hours a week, then six hours in 1980, and again four hours in 1982, and it has remained at four hours until recently. English is the only foreign language taught in public schools in Saudi Arabia, and it is now the medium of instruction in some colleges such as medical schools and technical institutions (Ur Rahman & Alhaisoni, 2013).

The status of English in Saudi Arabia has changed from 2002 and has continued to change until now. English was introduced in the academic year 2002/2003 as a compulsory subject in primary schools from grade four. This was a significant change in the country's education system as previously, English was taught as a subject in secondary schools only. The introduction of English in primary schools aimed to provide students with early exposure to the language and promote its use as a global means of communication. It was also a response to the growing importance of English as a language of business, science, and technology, as well as the increasing role of Saudi Arabia in the global economy. To implement this change, the government

provided training programs for primary school English language teachers, developed new English language textbooks and teaching materials, and provided schools with resources such as audio-visual aids and computer-based learning tools. The introduction of English in primary schools has had a significant impact on education in Saudi Arabia, contributing to the improvement of students' language skills and their ability to communicate with people from different countries and cultures. It has also had a positive impact on the country's economic and social integration with the world. Nowadays, English has a strong presence in the Saudi education system. In the academic year 2002/2003, English was introduced as a compulsory subject in primary schools in Saudi Arabia, starting from grade four. In its most recent annual report, the MOE announced that starting from the new academic year in 2022, English will be taught from grade one (MOE, 2020). Being fluent in English is now an important requirement for job opportunities offered in both the private and public sectors (Al-Seghayer, 2011).

A great deal of effort has therefore been put in by the government, researchers and scholars in Saudi Arabia to set plans to overcome the current obstacles and improve the output of Saudi universities in terms of the development of English language proficiency. For example, the King Abdullah Scholarship Programme which began in 2004 sought to assess the country's educational transformation by allowing undergraduate and postgraduate students to study in foreign countries (Al-Seghayer, 2011). By 2011, around 120,000 Saudi students each year were receiving their education in foreign countries (Al-Seghayer, 2011). The huge numbers of students who returned to Saudi Arabia after obtaining their degree from a variety of universities around the world have participated in the development of the country's social, economic and educational plan.

In 2017, the KSA unveiled Saudi Vision 2030, the themes of which are concerned with establishing a strong foundation for economic prosperity while also building an educational system which equips young Saudis with the skills which they will need for future jobs. The educational plan which is to be achieved by 2030 is devoted to the development of the whole education sector in the country so that it is fully aligned with the market needs. Since the announcement of the 2030 vision, Saudi schools and universities are being

reformed with new plans and teaching objectives which support the new vision. The aim is to serve the demands of the labour market in Saudi Arabia and the Saudi Vision 2030. In addition, the plans are focused on revising the instructional pedagogies which are hindering the development of students' language skills (Aldegether, 2020).

With the educational reformations in light of the 2030 vision, there is a growing interest in teaching English as a lingua franca in Saudi Arabia (Al-Nofaie, 2021). Teaching English as a lingua franca (ELF) in Saudi Arabia refers to the approach of teaching English not as a native language, but as a means of communication between speakers of different languages. Given that English is widely used as a lingua franca in many contexts around the world, including business, technology, and academia, ELF instruction has become an important part of the language education in Saudi Arabia. In ELF instruction, the focus is on developing communication skills that enable speakers to effectively use English as a means of communication, rather than on mastering English as a native speaker would. This approach takes into account the fact that English is not a uniform or standardised language, but rather a diverse and evolving language that is used in many different ways by people from different linguistic and cultural backgrounds. This perspective is driven by the current lack of students' communicative competence and existing deficiencies in the teaching approaches that do not adequately prepare students to use ELF for international communication (Alqahtani, 2019; Al-Seghayer, 2011; Assulaimani, 2019). The notion of ELF is underpinned by the theory of communicative competence that emphasises the social and contextual aspects of the language (Al-Nofaie, 2021). Thus, with the country's goal to gain global position, the Saudi Ministry of Education (MoE) aims to internalise Saudi universities by preparing Saudi students to be effectively competent. Efforts have been made to transform the academic programs and research centres in Saudi by establishing agreements with top-ranked institutions and universities worldwide which can facilitate preparing Saudi graduates for the labour market.

2.6 English Language Teaching Approaches in Saudi Arabia

English has been taught in Saudi schools using traditional methods which have focused primarily on the grammar-translation method (GTM) and the audio-lingual method (ALM) (Alqahtani, 2019; Al-Seghayer, 2011; Assulaimani, 2019). The GTM has been the predominant approach to teaching English in Saudi Arabia since the 1940s (Alqahtani, 2019). The focus of this approach involves translating texts from the target language into the native language, and Arabic, the students' native language, has been used as the medium of communication inside the classroom. Students are required to memorise lists of words and grammatical rules and then apply in different exercises provided by the teachers in the classroom (Alqahtani, 2019; Al-Seghayer, 2011). The focus has been on practising the correct grammatical patterns and correct sentence structures. In other words, the final product of writing is one of the most important criteria for assessing successful writing in the country. The teaching practice in the GTM is entirely teacher-centred as teachers are the only source of information and direction whilst students are only required to complete tasks given by the teachers. As a result, the GTM approach to teaching English has been criticised for neglecting the development of students' communicative ability.

Due to the deficiency of the GTM approach in developing students' speaking skills in Saudi Arabia, a shift was made to emphasise oral skills, and the GTM was replaced by the ALM in the 1950s. This approach involved students learning the phonology, morphology and syntax of the target language and compared them with their L1 (Alqahtani, 2019). The assumption was that by developing the students' listening and oral skills, they would be able to read, write and learn effectively. As a result, reading and writing skills were not viewed as important in this approach, and the order of the four skills in teaching changed to listening, speaking, reading and then writing (Alqahtani, 2019). School textbooks were focused on short dialogues and drills which mainly focused on introducing grammatical structures. The ALM approach to teaching English remained the dominant for teaching English in schools until now (Alharbi, 2019). By concentrating on repetitive techniques as in the traditional methods, students were able to memorise the dialogues but they could not participate in real-life communication. Fareh (2010) noted that memorization and rote learning affected Saudi students' critical thinking and

problem solving skills. He adds that EFL students tend to think in their native language, and render their ideas into English which results in producing incoherent texts. Ali and Ramana (2018) have also noted that EFL Saudi students put high value on memorisation and copying to pass exams, while less importance is given to the language aspect. They added that one of the reasons contributing to the Saudi students' weak abilities to write is the lack of writing activities that satisfy students' needs and interests, and also the lack of opportunities for students to practice English in authentic real-life settings.

The dominance of the GTM and ALM teaching approaches and their negative influence on Saudi students' English proficiency level led to a move towards Communicative Language Teaching (CLT) (Alqahtani, 2019). In 1981, the Ministry of Education introduced a new pedagogy to shift from the focus on grammatical structure to real-life communication. The CLT approach to teaching highlights the importance of developing students' ability to use the target language in a variety of contexts while also helping them to understand the functions of the language (Al Asmari, 2015). When it was implemented in Saudi schools, however, the approach was not very effective due to the lack of opportunities for students to interact and communicate. Al-Seghayer (2011) asserted that the factors that are currently lacking include introducing communicative activities that can meet students' interests and needs while also giving them a sense of achievement in the use of English. This can be achieved by creating opportunities that allow for an exchange internationally with the world using English (Al-Seghayer, 2011).

During recent years, much effort has been put into changing teaching approaches in Saudi Arabia in order to improve students' English language proficiency. As part of the educational revolution in Saudi Arabia, the Saudi Tatweer project redefined the government's educational plans and policies in 2013 (Assulaimani, 2019). It was implemented over a decade from 2013 to 2023 and intended to develop public education in Saudi Arabia. The new plans and policies as summarised by Assulimani (2019) included developing the teaching methodologies according to the findings of recent studies produced by local and international higher education institutions. To shift from traditional approaches of teaching, the Tatweer project promoted the implementation of information communication technology (ICT) enhanced learning in the

teaching of all subjects including TEFL with the intention of promoting learners' autonomy, intellectual skills and communicative abilities. The Tatweer project also considered redefining the role and responsibilities of teachers within the new Saudi vision and providing them with training programmes which would shift their traditional role as the main source of information. Additionally, the project aimed to equip them with teaching practices which would encourage students' participation. In addition to the changes introduced in the public school sector, higher education is also now being reformed with the introduction of new teaching strategies. The education system within the Saudi 2030 vision is now acknowledging that the use of traditional approaches to teaching English is not effective for students in higher education. The aim is to incorporate different approaches to develop cross-cultural competency which will enable students to interact effectively with different people from different cultures (Aldegether, 2020). With the current focus on developing the teaching approaches in Saudi Arabia, research on EFL Saudi students' writing ability stresses the importance of introducing a new approach to teaching writing skills as the current practices still do not satisfy students' needs and do not help students improve their writing competency (Alkodimi & Al-Ahdal, 2021).

2.7 The English writing ability of Saudi EFL undergraduate students

Due to the heavy reliance on traditional teaching methods, there are several problems EFL undergraduate Saudi students encounter. Most Saudi students who graduate from high school have a poor English proficiency level; therefore in their first year at the university, they face a lot of challenges accomplishing school work or communicating with their peers and instructors (Alghammas & Alhuwaydi, 2020; Al-Khairi, 2013). In fact, according to Ansari (2012), more than half of the pupils in Saudi universities are unable to write in English. This discouraging number illustrates the significant barrier to students' academic success, and some teachers believe teaching writing to be challenging as well (Alghammas & Alhuwaydi, 2020). This is because faculty members who are accountable for finishing a specific syllabus in Saudi universities may find it difficult to start from scratch with their pupils. As a result, college instructors have a high failure rate in their classes (Alghammas & Alhuwaydi, 2020).

Writing is still neglected and discouraged by students in Saudi Arabian institutions (Alkodimi & Al-Ahdal, 2021). Research which focuses on investigating Saudi students' writing ability has identified some reasons that might have contributed to the issue. For instance, Alghammas and Alhuwaydi (2020) indicated that the focus of teaching writing in Saudi universities is placed on the surface level of the sentence such as the grammatical accuracy without paying attention to the meaning or the function of the language, which resulted in the students' weak ability to convey the meaning to their readers. Alkodimi and Al-Ahdal (2021, p. 401) asserted that when teaching writing, teachers instruct students to focus solely on the grammatical accuracy aspect of writing, thus students cannot express themselves or produce coherent texts, especially considering that writing "is an integrated communicative competency that requires intelligent and purposive allocation of time and resources". Al-Zubeiry (2020) conducted a study to investigate Saudi male and female undergraduate students' writing ability. According to the study, it was observed that learners frequently struggle with creating written texts that lack coherence, contain jumbled sentences, and are riddled with grammatical errors. He indicated that these difficulties pose a potential threat to their academic progress and could serve as a demotivator for pursuing further education. Al-Zubeiry (2020) analysed 30 scripts using an analytical coherence scale developed in the light of Bamberg's (1984). The study corpus analysis uncovered the underlying reasons for coherence issues in the students' writing as follows: 1) difficulties in constructing texts that express clear ideas supported by relevant and appropriate details; 2) the influence of Arabic rhetorical traditions in organising information within the text; 3) inadequate knowledge of the systematic arrangement of information in the text being written; 4) incorrect usage of conjunctions, references, and vocabulary to connect sentences in the text; 5) low proficiency in constructing well-formed sentences that effectively convey ideas.

While Saudi educational institutions are trying to train students to write competently, inadequate English resources and insufficient teaching methods are, in general, the main causes of students' poor writing skills (Alghammas & Alhuwaydi, 2020). According to Al Harbi (2017) there's an absence of specific textbooks or materials for writing classes in Saudi Arabia which suggests that

there is a lack of a structured curriculum to guide and support students in developing their writing skills. This lack of guidance and resources can make it challenging for students to learn and practice the necessary skills needed for effective writing. Without a defined curriculum, teachers may struggle to find appropriate materials and methods to teach writing, leading to inconsistencies in teaching and learning outcomes. This can ultimately hinder students' ability to communicate effectively in written English and negatively impact their academic and professional success (Al Harbi, 2017).

The cultural and linguistic differences that exist between the Saudi students' L1 and L2 are also likely to have a major impact on the students' writing abilities (Al-Zubeiry, 2020). Alghammas and Alhuwaydi (2020) have also asserted that L1 interference has a significant impact on Saudi students' writing. Arabic and English have vastly different writing systems in terms of both syntax and semantics, making it challenging for Saudi students to write appropriately. They added that one significant area of difficulty for these students is the proper use of English articles such as a, an, and the. Similarly, Farooq & Wahid (2019) found that the L1 of the students had a significant impact on their EFL writing performance. The researchers identified several areas where the influence of L1 was most evident, including vocabulary, grammar, discourse, and cultural norms. For example, the students' use of vocabulary in their EFL writing was heavily influenced by their L1, with many students using direct translations of words and phrases from Arabic. The study also found that the students' use of grammar in their EFL writing was significantly affected by their L1, with many students struggling to apply the rules of English grammar correctly. Additionally, the study highlighted the impact of cultural norms on the students' EFL writing performance, with many students struggling to express their ideas in a way that was culturally appropriate for an English-speaking audience.

In addition, the absence of the English language exposure in an authentic setting has affected Saudi students' ability to write using the language appropriately. With the lack of authentic writing tasks, Saudi students are not exposed to the acceptable writing conventions in L2 context. Alrabai (2016) asserted that the dominance of Arabic in Saudi EFL teaching classrooms is the main reason for the Saudi students' lack of exposure to the English

language. Teachers in Saudi EFL classrooms rely heavily on using Arabic, the mother tongue, as a medium of instruction in teaching English writing which results in the lack of opportunities for students to use the target language in the classrooms (Alrabai, 2016). The Saudi instructors' and pupils' beliefs towards the utilisation of Arabic in EFL classrooms was investigated in a study conducted by Alshammari (2011). The data of the study was gathered from 13 Saudi instructors and 95 students enrolled in EFL classes at The College of Technology in the Madinah region. The results indicated that the majority of the students (61%) and instructors (69%) preferred to use Arabic in the classroom. Saudi instructors believed that the use of Arabic was important when teaching grammatical rules, presenting new vocabulary, and explaining concepts. The teachers indicated that it was useful as it could save their time, improve students' comprehension, and effectively impact the learning process. On the other hand, students who participated in the study indicated that they believed that the use of Arabic was beneficial as it helped them understand the new vocabulary and feel more comfortable and less stressed.

In addition to the absence of the English language exposure, there is a lack of interaction and collaborative learning in writing classrooms, and a lack of the use of technologies that can facilitate learning and increase students' writing motivation (Alghammas & Alhuwaydi, 2020). The integration of educational technology has significantly increased in Saudi English classrooms over the past ten years. Saudi teachers have been using such types of technology as Wikis, social media applications, mobile learning, and interactive whiteboard (Aljameel, 2022). However, the incorporation of educational technology in Saudi higher education has been challenging due to lecturers' training, inadequate infrastructure, and the shortage of technology resources (Aljameel, 2022). For example, Alqahtani & Issa (2018) investigated the barriers to the adoption of educational technology such as social media networks in four Saudi Arabian universities and found that Saudi teachers' readiness to integrate technology, the poor quality of the internet speed in Saudi higher institutions, and students' concerns about privacy and security threats were the most important factors hindering social networking usage. Alkodimi and Al-Ahdal (2021) have also investigated teachers' perception of the teaching of writing at a college level in Saudi Arabia. The study included

one hundred EFL teachers from three randomly selected universities in Saudi Arabia. The quantitative study aimed also to investigate the current actual teaching practices followed by the teachers in the universities. The results of the study show that the main causes of poor English writing skills and attitude among EFL Saudi college students are the inefficient teaching methods and resources used in classrooms such as the use of technology. The study concluded that it is crucial to incorporate new and innovative strategies of teaching that enable EFL college students to be actively engaged in the classroom.

This observation was also made by Al-Khairi (2013), who stated that the absence of collaborative learning and the utilisation of modern technologies is one of the factors influencing students' weak writing ability. He added that the employment of fun writing activities in an interactive atmosphere can help students improve writing ability and enhance their motivation. In fact, many governmental and private Saudi universities are not utilising any kinds of technologies in classrooms. This was found in a study conducted by Parvez, Akhtar, and Mohammad (2013) who asserted that the use of web 2.0 applications such as blogs, wikis, Facebook, and RSS is not popular in Saudi universities, and only few universities found that were using blogs for the university's news and not for educational purposes. Ansari (2012) also points out that due to the lack of interaction opportunities in the classrooms, students' communicative ability remains weak. This, in turn, undermines students' confidence to use the target language due to their weak ability to communicate. He stated that Saudi students only focus on using the grammar that they have learned to produce similar products that enable them to obtain sufficient grades to pass writing courses.

Another main factor that affects Saudi EFL students' writing ability is their lack of motivation. Previous studies have acknowledged that Saudi EFL learners do not possess high levels of motivation which are likely to have contributed to their low English language achievements (Alamer and Almulhim, 2021; Alamri, 2011; Alharbi, 2019; Al-Seghayer, 2014; Khan, 2011). Alyousif and Alsuhaibani (2021) have recently examined the factors that demotivate Saudi students in learning English as a foreign language (EFL). The findings of the study indicated that Saudi high school EFL students reported subject-

related and teacher-related factors as the most significant demotivating factors. Specifically, students reported a lack of engaging topics, inadequate opportunities for practicing English, lack of technology use, excessive focus on grammar, and teacher incompetence as the most demotivating factors influencing their English learning. The research provided insights into the concerns of EFL students and highlighted the need for educators to address these factors in order to improve students' motivation to learn English. Daif-Allah and Aljumah (2020) have also argued in their study that EFL Saudi students have low levels of motivation as the current practices do not satisfy their needs. They indicated that Saudi college students are aware of the importance of learning about the target culture and benefit from learning English. The researchers highlighted the need to establish cross-cultural communication in Saudi teaching classrooms as the current situation does not allow Saudi students to interact with members of the target language. In addition, they stressed that due to the low level of Saudi students' motivation, it is of a great importance to shed more light on this issue by identifying students' needs and understanding their motivational orientations.

2.8 Summary

This chapter aimed to present the educational and linguistic context of the present study in order to set the scene and add to the understanding of the contribution of the study. In this chapter, I provided a brief overview of Saudi Arabia and the education system in the country and then provided a more specific description of the higher education system. I also discussed the current status of English in Saudi Arabia and the influence of the Saudi 2030 Vision on the reformation of the whole education structure. I have also presented the different approaches used to teach the English language in Saudi Arabia over several decades, their effectiveness and their implications. Lastly, an overview of the current situation in regard to Saudi EFL undergraduate students' writing ability was provided, and current teaching practices were discussed.

Chapter 3 Literature Review

3.1 Introduction

The chapter reviews the literature pertinent to the study's main topics. Sections 3.2 and 3.3 discuss writing as a product and as a process from a cognitive perspective. Section 3.4 explains writing from a socio-constructive perspective with a particular focus on English for Specific Purposes (ESP) genre-based writing approach and then Section 3.5 introduces the use of metadiscourse which writers use to help them to build relationships with readers and which is also studied by researchers to investigate the extent to which writers build these relationships. Sections 3.6 and 3.7 describe and justify the measures of lexical richness adopted in the current study, including lexical diversity and vocabulary profile. Section 3.8 discusses writing for an authentic audience in the field of Computer Mediated Communication (CMC). Then, section 3.9 presents the motivational framework of self-determination theory adopted from Deci and Ryan (1985) and then provides a detailed overview of relevant studies which have focused on motivation in writing. Section 3.10 reviews the studies which investigate learners', both L1 and L2, pen-pal letter writing practices, their effects on the development of communication and language skills, as well as the studies which have specifically investigated the role of pen-pal letter writing in students' motivation. Finally, section 3.11 reviews the theoretical, methodological and contextual gaps regarding the effects of using pen-pal letter writing on students' communicative ability, language competence and motivation.

3.2 Writing as a Product

The product approach to writing puts considerable emphasis on the surface level of texts. In other words, texts are viewed mainly in terms of linguistic knowledge and the use of vocabulary and grammatical rules (Pincas, 1982). Therefore, the product approach considers texts as products and pays no attention to them as a whole or their connection to context and audience. The product-oriented theories can be classified into two broad approaches: 1) the focus on texts as objects and 2) the focus on texts as discourse and rhetorical aspects (Santos, 1992).

The first focus of the product-oriented approach is based on the structuralist viewpoint and driven by the transformational grammar of Noam Chomsky. This approach views texts as objects and considers writing as elements arranged according to specific grammatical rules. It puts much emphasis on accuracy in writing and conveying the semantic aspect of the language. The composition process reflects only the writer's systematic knowledge and demonstration of the grammatical rules (Hyland, 2009). Contexts do not play any role in this view, and writing is regarded as an act of transferring ideas only without considering the personal experience of readers or writers. Influenced by this view, teachers of writing would invite students to mimic the features of a text in terms of linguistic forms and text organisation. By mimicking the features of the target text, students would then produce a "parallel text by using their own information" (White, 1988, p. 5).

The second focus of the product-oriented approach is based on texts as discourse and rhetorical aspects. While also emphasising writing as a product, it looks beyond the sentence level to consider texts as discourse and as a means of communication (Hyland, 2009). Texts are regarded in terms of the organisation of ideas, so the emphasis is placed not only on the accuracy of using grammatical rules, but also on words, sentences and paragraphs levels. It also takes into account the syntax, spelling and punctuation in texts to understand how writers use language to communicate (Matsuda, 2003). According to this view, writers have goals and purposes and they make choices in terms of linguistic forms and rhetorical styles to accomplish these goals (Hyland, 2009). The analysis of texts from this perspective takes into account how texts work as communication and how writers link the context and purpose to forms.

The product-oriented approach to writing with its two broad focuses is considered beneficial in terms of introducing students to final finished text as a model and helping them to imitate it. It is also helpful in the beginning stages of writing as it provides training for students in terms of the correctness of the grammatical structure (Zamel, 1983). Students are trained to be accurate and to produce a grammatically correct final product while also focusing on the organisation of sentences and paragraphs. It also helps writers to organise their thoughts into sentences and clauses which facilitates delivering the ideas

to the readers (Hyland, 2009). Teachers' assessment in the product-oriented approach is based on monitoring, controlling and error finding in terms of grammar, the correct use of language and rhetorical usage.

Although the product approach is useful for training students to use the language correctly, it does not promote their creativity or their motivation (Yu *et al.*, 2020). Moreover, as Hyland and Tse (2004) stated, this autonomous view of texts neglects the communicative setting which should be considered in writing as students are only trained to use the language correctly and not how to apply this knowledge when writing for specific audiences or with specific purposes. Research into both first and second languages further indicates that emphasising the form while correcting students' papers does not result in accurate composition but rather students' frustration (Barnett, 1989).

3.3 Writing as a Process

The product-oriented approach was the dominant approach to teaching writing until the appearance of process-oriented pedagogy in the late 1960s (Matsuda, 2003). The reaction against the product approach was driven by the intention to shift the focus to the aspects of writing which were neglected in that approach, such as helping students to discover their own voice, planning to write and revise, choosing a topic and receiving peer feedback (Matsuda, 2003). The process-oriented approach highlights the role of the learners in developing their writing skills by working through different cognitive steps such as pre-writing, drafting, revising and editing. This view considers writing as a linear activity and a discovery of the self, and that the cognitive steps which the writer goes through are as essential and important as the final product (Hyland, 2009).

The seminal work of Flower and Hayes (1981) established the foundation of the writing process from a cognitive perspective. According to their model, the task environment and the writer's long-term memory play an integral role in the writing process. The main features of their model were that writing involves many stages which are recursive and interactive, such as planning, drafting, revising and editing. In the first step, writers have goals in the planning stage which require them – depending on their long-term memory – to define a rhetorical problem and place it in its context. The rhetorical problems include

the context such as the topic, the audience and the goal of writing. In the second step, writers convert the planned information into written text. The final step is the reviewing stage which consists of two sub-processes: evaluating and revising. Another feature of the model is that it takes into account individual differences as it distinguishes between the writing processes of expert writers and of novices. Flower and Hayes's (1981) model is categorised by its simplicity in terms of explaining the mental activities which writers go through as distinct sub-processes.

The process approach to writing has been widely adopted in teaching writing. The increasing use of personal computers in the early 1980s and the use of word processing which facilitates revising and editing has particularly encouraged the use of this approach (Hyland, 2009). Unlike the product-oriented approach, the teacher's role is not only about monitoring students' linguistic knowledge such as grammar and structure, but also the way students go through different writing stages. However, despite the wide adoption of this approach to teaching writing and its contribution to the understanding of the composing processes, the findings of studies of the process approach of writing in L2 have been disappointing (Hyland, 2009). One reason for this is that the studies have largely depended on think-aloud protocols, a method which has been criticised for not being precise in identifying the complexity of the cognitive process (Hyland, 2009). In addition, studies which have been conducted into the L2 writing process have produced contradictory findings because they have been limited to small samples of writers (Hyland, 2009).

The process approach is not very effective in teaching EFL students, especially because writing is a complex activity and not just a simple individual cognitive process as it is described in the process approach (Deqi, 2005). It does not help students to recognize the different kinds of text which writers produce, and for what reason the texts are produced (Badger & White, 2000). In addition, the approach undermines the social aspects of writing and how language functions through human interactions (Hyland, 2009). The focus on the process of writing has therefore been widely criticised from the socio-constructive perspective which regards writing as a socially situated act. The process approach also neglects the importance of linguistic knowledge, grammar and text structure, and the process of composing is the same

regardless of the text type and the audience of the text (Badger & White, 2000). In other words, as Hyland (2009. P. 18) maintained, the process approach “fail[s] to consider the forces outside the individual which help guide purposes, establish relationships, and ultimately shape writing”.

3.4 Writing as a Socio-constructive Activity

Social construction is a concept which originated in sociology and postmodern philosophy (Hyland, 2009). Successful writing, from a socio-constructivist perspective, is no longer regarded as writing which exhibits correct words, sentences and sentence structures, as in the product approach, nor the stages of writing as in the process approach. Developments over recent decades have led researchers (for example, Barnett 1989; Hyland, 2002; Johns, 1986; Nystrand, 1989; Smith, 1982) to identify communication as an important aspect of writing. Writing is considered as a means of interaction between writers and readers, so it cannot be viewed without the communicative dimension (Hyland, 2002). This view highlights the role of interpersonal relations in the production of the text. According to this view, writing is a social act and writers are part of a community in which they acquire communication skills and employ them when constructing meaning in their writing (Hyland, 2009). In other words, the language choices which writers make when constructing a text and the text’s features which they choose are largely influenced by the community to which they belong, their writing purpose and their audience.

The social aspect of human development and learning have been the focus of language theorists and researchers in the past decades. As with the socio-constructivist view, the sociocultural theory of learning which emerged from the work of the Russian psychologist Lev Vygotsky (1978), highlights the social characteristics of human learning and development. In the current study, sociocultural theory provides the theoretical framework that helps to understand the impact of pen pal letter writing on students’ communicative ability and language development by allowing them to work through cross-cultural communication with a real audience. According to SCT, human learning is a social process, and meaning is constructed through language use in a social context. This view stresses the role that social interaction plays in the development of the mind. The human cognitive functions and development

are mediated processes by culture, social artefacts, and concepts (Ratner, 2002). In this sense, learning is likely to occur as a result of the assistance the individual receives from the more knowledgeable peers such as parents and teachers (Vygotsky, 1978).

Mediation is central to the SCT view of learning. It explains how learning occurs through socialisation. According to this construct, “all human knowledge, higher cognitive abilities, and activities are considered to be mediated culturally and historically by social practices for using symbolic and material tools” (Cumming, 2018, p. 76). Language is considered the most significant tool that can mediate learning. Mitchell, Myles, and Marsden (2019) explain that, for example, in mental activities, language is the central symbolic means of mediation because while solving a problem, language is used to articulate ideas and explain steps. Lantolf, Thorne, Poehner, (2015, p. 5) assert that “[l]anguage in all its forms is the most pervasive and powerful cultural artifact that humans possess to mediate their connection to the world, to each other, and to themselves”. In this sense, cognitive development occurs as the learner moves from the external knowledge (knowing the tool by experts in a social interaction) to the internalisation state (using the tool to perform other activities).

An important construct of SCT that highlights the role of the social interaction and its impact on the cognitive development is the zone of proximal development (ZPD). It is defined as “the distance between the actual developmental level as determined by independent problem solving and the level of potential development as determined through problem solving under adult guidance or in collaboration with more capable peers” (Vygotsky, 1978, p. 86). This cooperative learning strategy indicates that with assistance and guidance from the more experienced peers, learners can develop and perform a task independently. In regard to second language learning, Ohta (1995) defines it as “the difference between the L2 learner’s development level as determined by independent language use, and the higher level of potential development as determined by how language is used in collaboration with a more capable interlocutor” (1995, p. 96). The development of the learners in the ways that they can use their new tools depends on the amount of support they receive from others (Hall, 2007). Therefore, the learning environment must

be authentic as this will enable the learners to observe how these tools such as language is used in its natural setting (Hall, 2007).

Learning in the ZPD can be scaffolded effectively by fellow learners (Barnard and Campbell, 2005). Scaffolding is an important tenant of SCT, which explains how learning occurs through the construction of meaning facilitated by individuals' interaction. In other words, scaffolding can be provided by teachers, peers, or more knowledgeable individuals, and it involves providing the necessary structure, feedback, and assistance to help the learner achieve the next level of mastery. In this sense, peers can offer a unique perspective, and they have the advantage of being closer in age and experience to the learner. They can provide a more supportive and less intimidating learning environment, which can increase the confidence and motivation of the learner. Peers can also model appropriate behaviours, provide feedback on performance, and offer strategies for problem-solving. Vygotsky (1978) explained scaffolding as the ability that a learner gains to perform an activity independently in the recurring situations without the assistance and help they receive at the beginning of their learning process. Vygotsky did not use the term, but it originated in an article by Wood, Bruner and Ross (1976) to refer to the assistance provided in the zone of proximal development (Barnard and Campbell, 2005).

Drawing on the social constructivism view, and the socio-cultural theory of learning, the current study places a considerable attention on the influence of the social interaction provided by pen pal letter writing on the students' development of their communicative ability and language proficiency, as well as motivation. The theory provides the theoretical framework for using pen pal letter writing to mediate and scaffold Saudi EFL students' communicative ability and language development within an interactive and social environment. The activity of pen pal letter writing can be argued to act as a mediating tool through which students learn how to interact with an authentic audience effectively. The American students who were employed in this study and regarded as proficient language users provide support for the Saudi students as they worked through their ZPD stage. As proficient users of the language, the American students had the potential to help provide peer-to-peer scaffolding. This authentic exposure to the language by proficient users can

help Saudi students to develop their English language skills and their communicative ability and motivate their writing.

3.4.1 Genre writing

Genre is one of the most social constructivist concepts of literacy (Johns, 2008). It emerged in the field of second language study in the 1980s with the work of Swales as a response to the limitation of the process pedagogies (Dudley-Evans, 1997; Hyland, 2009). Genre-based approaches to teaching writing have been recently considered as the major institutionalised alternative to the process approach (Rahman, 2011). Unlike the product and the process approaches, genre theories have put great emphasis on the socio-cultural aspect of writing. Although like the product approach, genre approaches acknowledge the linguistic aspect of writing, they link text to context by emphasising the importance of the social context in which texts are produced (Badger & White, 2000). Writing is considered successful when meaning is constructed purposefully for a particular social context using the specific rhetorical conventions expected by readers (Hyland, 2002).

Discourse community is a crucial concept to genre views of writing. According to this concept, individuals use language to communicate with other members of a specific social group using the same shared language conventions and norms (Hyland, 2009). The concept views writers as constructive agents (Spivey, 1997). In other words, writers are group of people working together as constructive agents to build meaning for the same potential text by using the same practice and attitude (Spivey, 1997). The concept is crucial to the genre view of writing because writing is seen as shaped by social relationships between writers and readers. This interaction influences writers to make their choices in terms of grammar, vocabulary, content and text organisation based on the readers' expectations (Hyland, 2004).

The concept of genre does not have one single definition; it is a "fuzzy concept" and a "loose term" (Swales, 1990). This is because genre has been viewed differently by scholars, and these different views have led to distinct orientations in the way that genre approaches are applied to the construction of texts (Hyon, 1996). There are three different genre-based approaches to

writing: Systemic Functional Linguistics (SFL), the teaching of English for Specific Purposes (ESP) and the New Rhetoric studies (NR) approach. All three approaches share the same perspective on the importance of the social context, form and purpose in writing, but they can be distinguished by the emphasis which they give to either text or context, and the different educational contexts to which these approaches are applied (Hyland, 2004). In the following subsections, I shall describe these three approaches in detail.

3.4.1.1 The systematic functional linguistics (SFL) approach to writing

The SFL approach was developed by Michael Halliday, whose work contributed significantly to the field of education in Australia (Hyon, 1996). In this approach, which is known in the US as the Sydney School, language is seen as shaped by social context (Hyon, 1996). Halliday regarded language as a system which includes resources by which language users can communicate and interact with each other rather than as a set of rules and structures (Halliday, 1994; Martin, 2009). The definition of genre is based on the idea that writers are part of a community and share the same language conventions in writing to achieve social purposes. Genre is defined in the SFL as “staged, goal-oriented social processes” (Martin, 1992, cited in Hyland, 2009, p.63). According to this view, genre has a purpose, a goal, a social process and sequential steps which make texts unique in their features and structure. Genres are therefore staged because meaning is constructed in steps by writers until their goal is achieved. They are goal-oriented because specific goals are set to be reached, and social processes because individuals who belong to a specific culture achieve these goals through interaction. The SFL approach is systematic and functional. It is systematic because it emphasises the language organisation or structure which writers use to achieve their social purposes; and it is functional because language performs specific communicative functions (Bawarshi & Reiff, 2010).

From the SLF perspective on genres, texts are seen as connected to contexts. Halliday (1994) referred to this link between specific situations and language features as “register”. Genre, according to the SFL, not only reflects how communication is built in a specific context, but also how writers construct register, including all of the semantic, social and lexico-grammatical aspects within it (Bawarshi, 2000). This concept of register, as a conceptual framework,

controls three broad elements which can be either at the context level or the linguistic level: field, tenor and mode. At the context level, the field refers to the social activity in which members use a specific kind of register, the tenor is related to the individuals who are taking part in this social activity, and the mode refers to the channels used for communication, such as face-to-face interaction or the use of emails (Bawarshi, 2000; Bawarshi & Reiff, 2010). At the linguistic level, Halliday (1994) identified three corresponding language aspects and called them language metafunctions. These are ideational, interpersonal and textual (Bawarshi, 2000). The language metafunction aspect which corresponds with the field is ideational; it is concerned with the linguistic representation of action in terms of who is involved in the action, what is happening and where the action is taking place. On the other hand, the corresponding aspect to tenor is the interpersonal; it deals with the interactions from a linguistic perspective which occur between individuals. Finally, the textual aspect which corresponds with mode describes how to achieve coherence and cohesion in a text in terms of the organisation of the information given and how it has been presented explicitly or implicitly. Also, the textual aspect highlights the degree of complexity in a text, such as the lexical density (Bawarshi, 2000; Halliday, 1994).

SFL claims that the understanding of how genre is constructed depends on these three linguistic resources in a text. From a pedagogical perspective, learners' writing development is connected to the language development which can be achieved through their awareness of genre (Yasuda, 2011). Therefore, explicit discussion of the relation between genre and linguistic resources such as lexis, grammar and discourse structure is crucial in the FL classroom (Martin, 2009). Hyland (2004) summarised the teacher's role as providing assistance in the SFL perspective on genre for the following reasons. First, in order for students to understand the purpose of the genre, they need to be engaged in activities which grant them access to different sites. Second, teachers provide assistance in terms of modelling the linguistic and rhetorical patterns which govern a specific genre. Third, teachers guide students through practical exercises which enable them to write in a specific genre successfully. Finally, students are allowed to practise independently as they go through different writing stages such as planning and revising.

The SFL approach was considered “the most developed pedagogically of the three orientations” (Hyland, 2009, p. 64). Its concern with the analysis of discourse patterns such as textual features which are associated with field, tenor and mode has distinguished the SFL approach from the other approaches to genre (Hyon, 1996). Influenced by the work of the Russian psychologist Lev Vygotsky, this pedagogy sees learning occurring through scaffolding within a student’s zone of proximal development (ZPD) (Hyland, 2004). Vygotsky’s notion of scaffolding provides the theoretical basis for the learning of writing from the SFL genre approach.

3.4.1.2 The New Rhetoric studies (NR) approach to writing

The NR differs from SFL by focusing on the link between text and context rather than on rhetorical conventions. Unlike the SFL which is informed by a linguistic framework, NR draws on post-modern social and literary theories and the notion of ‘dialogism’ put forward by a pioneering scholar Bakhtin (1986). Bakhtin’s concept of dialogism acknowledges the conventions governing genre, but it also gives genre more freedom and flexibility than that of the SFL (Hyland, 2004; Bakhtin, 1986). NR puts great emphasis on the dynamic characteristic of genre and how genre varies according to what it accomplishes rather than on its form (Hyland 2004).

According to the NR, genre revolves around social and cultural aspects and is therefore defined by the culture and the communities which affect the way that people use language to communicate in different situations. The research interest in this field is on the contexts and institutions as the main influencers on individuals’ values and which play an integral role in how those individuals construct meaning in writing (Hyland, 2004). As a result of this focus, NR has developed a distinctive view of genre pedagogies. Unlike the SFL and ESP, NR believes that genre cannot be extracted from its complex and dynamic contexts and cannot be located outside its authentic situations of use (Hyland, 2009). As a result, it questions the usefulness of genre-based instructions in the classroom. According to the NR, students should instead observe genres in the actual situation where they are used rather than in an artificial context such as the classroom (Hyland 2009). Genre pedagogy within the NR focuses more on expert users of language than on novice users. Unlike the ESP and SFL which adopt a linguistic perspective in research, the

ethnographic nature of NR research seeks to investigate how expert users of the language communicate and modify their choices based on particular social purposes (Hyland, 2004). Since learning to read and write requires participation in the context and communities, Hyland (2009) recommended encouraging students to investigate genre actively in its context by carrying out mini-ethnographies (Hyland, 2009).

3.4.1.3 The Teaching of English for Specific Purposes (ESP) approach to writing

The ESP approach to genre follows the SFL in the emphasis which it gives to the importance of the communicative purpose and formal properties which exist within a specific social context (Hyon, 1996). Researchers in ESP are mainly interested in the linguistic behaviour and the analysis and teaching of genre, whether written or spoken, in academic and professional settings (Bhatia, 1993; Hyland, 2004; Swales, 1990). Swales contributed significantly to ESP genre studies which focus on researching the linguistic and rhetorical features of genre in academic contexts. Hyland (2004) stated that ESP theorists generally agree on Swales's definition of genre as "a class of communicative events" which have specific communicative purposes employed by particular discourse communities (Swales, 1990, p. 45, cited in Hyland, 2009). Even though ESP theorists' views are grounded in linguistics like the SFL, the narrow focus of the ESP has distinguished it from the other approaches to the genre. ESP looks at genre as it exists in the practices of individuals in specific communities instead of the wider culture (Hyland, 2004). These practices shape the way genre is structured and influence its content and style. Thus, ESP researchers view texts in terms of the similarities which exist and can be recognized by members of a shared community.

Central to the ESP approach is the idea that people learn the language and modify it according to the occupational groups to which they belong (Hyland, 2009). Thus, the ESP genre-based application in academic settings focuses on introducing EFL learners to a wide range of written genres which can help them to master the text conventions in terms of the functional and linguistic aspects (Bhatia, 1993). In other words, it familiarises students, whether implicitly or explicitly, with the rules and writing conventions such as linguistic, social and cultural which govern the language use in a specific

context. The teaching methods in the ESP approach are considered even more varied and socially oriented than in the SFL (Hyland, 2009). The ESP genre-based framework of writing instruction has been found to be effective for teaching L2 learners. Students can gain access to texts and discourse in a context which enables them to participate successfully in EFL spoken and written interaction (Paltridge, 2001).

Furthermore, previous research on genre analysis within the ESP approach has made important contributions to identifying text features which characterise specific types of genre and to the understanding of how language works in specific contexts (Hyland, 2009). For example, the use of hedging and collocations such as '*as a result of*' and '*it should be noted that*' have been found to be characteristic of academic texts, whereas the use of collocations such as '*with regard to*' are typically found in legal texts (Hyland, 2009). This line of research has greatly informed classroom practices in the teaching of writing.

In regard to the review provided for the teaching approaches in sections 3.1, 3.2, 3.3, and 3.4, it is important to note that the genre approach of teaching writing is not seen as contradictory to the product and process approaches, but rather as a complementary approach. Writing is a social act, and a text carries its meaning through the connection it has to the writer as a member of a specific community or interest group and the way that the writer uses the language to construct that meaning.

Pen pal letter writing offers students the opportunity to negotiate meaning through writing and through the language choices the writers make. The letters that the students receive from their American counterparts help to scaffold students' writing, and equip them with a genre template through which they can develop their texts using appropriate language while focusing on what they want to share about themselves. The model letters provide structure for writing, introduce new vocabulary, phrases, and sentence structure. It also encourages learners to think about what they have read in the letters, and respond with a purpose rather than copying out a text from other resources. This authentic exposure to the native speakers' authentic language can help Saudi students develop their use of specific writing conventions while also

engaging them in the meaningful learning of the genre. In this sense, effective writing methods should incorporate insights from product, process, and genre approaches (Badger & White, 2000). Writers write more effectively when they have knowledge about the resources that are needed to create a text in terms of form and function (Hyland, 2009). The current study therefore focuses on investigating the communicative aspect of students writing while engaged in the genre of pen pal letter writing, and also exploring the impact of this authentic exposure on the development of students' language learning and motivation.

3.5 Metadiscourse as a Communicative Resource

A key dimension of the ESP genre perspective is that language embodies interaction and social engagement. The choices which writers make in terms of linguistic and rhetorical features reflect their purpose of writing. One concept which is used to capture this communicative aspect is metadiscourse. In genre analysis, metadiscourse is regarded as a key dimension which helps us to understand how language choices are connected to the writer's purposes and how they initiate an interaction with the audience (Hyland, 2005). In other words, metadiscourse is a framework used to understand communication as a social act in writing and how writers project themselves in their discourse to engage with readers. The term was first coined by Zellig Harris in 1959 to provide a way to understand how writers guide their readers through their texts. It has been described as a fuzzy term and it is difficult to define its boundaries (Swales, 1990). Hyland (2005) argued that not all analysts interpret the term in the same way. For some writers, the term has been used to describe the metatext or text reflexivity aspect which is the organisational rhetorical features which are only related to the text itself, as in 'now we turn to another topic'. Others have narrowed the term to refer to illocutionary predictors in the text, such as '*I believe that*'. Although some perspectives on metadiscourse are text-oriented, others have developed a more writer-oriented view of metadiscourse. The notion of reflexivity contributes to the writer-oriented view as it sees metadiscourse as elements which indicate the writer's awareness of the text rather than of the reader. Hyland (2005) argued that although it has provided useful insights regarding the classifications of metadiscourse, that view is rather arbitrary. Hyland (2005) added that metadiscourse refers to

aspects of the text which embody writer-reader interaction; it is about the interpersonal relation between writer and reader as the former addresses the latter in terms of the latter's need for guidance and elaboration. The distinctions in understanding metadiscourse have led to several attempts to address the theoretical implications within the term and its application.

Several taxonomies have been proposed in attempts to categorise the features of metadiscourse. Based on Halliday's (1994) metafunctions of language, the concept of metadiscourse was developed by William (1981), Vande Kopple (1985), Crismore *et al.* (1989), and more recently by Hyland (2005). The earlier models of metadiscourse greatly contributed to the development of metadiscourse but they varied in the way they considered the three metafunctions in the understanding of language in use. The following subsections describe these taxonomies in detail.

3.5.1 Vande Kopple's (1985) taxonomy of metadiscourse

Vande Kopple (1985) defined metadiscourse as "discourse about discourse or communication about communication" (Vande Kopple, 1985, p. 85). His model consisted of seven types of metadiscourse divided into two categories: textual and interpersonal. Textual metadiscourse serves to add information to the subject in the text and helps the reader to understand the text in a coherent way whereas the interpersonal category serves to provide assistance for readers to "organize, classify, interpret, evaluate, and react" to the propositional content (Vande Kopple, 1985, p. 85). Textual metadiscourse includes the following: text connectives, which are used to show how parts of the text are connected together such as sequencers ('*first*', '*next*'); code glosses, which are devices used to explain or reword in order to help readers to understand; validity markers, which indicate the writer's certainty about a statement such as the use of hedges ('*perhaps*') or attributors ('*according to*'). The final type in the textual metadiscourse of Vande Kopple (1985) is narrators, which are used to inform readers about the source of the information such as '*The Prime Minister announced that*'. The interpersonal category, on the other hand, consists of illocution markers which are used to explicitly indicate the writer's actions in the discourse, such as '*to conclude*'; attitude markers which are used to express the writer's attitude, such as '*unfortunately*',

and commentaries which are used to address readers directly (*'you will agree that'*).

Vande Kopple's taxonomy of metadiscourse has been criticised for its vagueness and for the difficulty to apply it in practice. For instance, two categories, narrators and attributors, were found to be difficult to distinguish, especially in academic writing. An example of this overlap is the use of citation in academic writing where they can be attributed to narrators (as informing about the source of the information) or used for another rhetorical function (Hyland, 2005). Hyland (2005) also argued that the model does not play any part in Halliday's metafunctions which most closely correspond to metadiscourse. That is, the three linguistic metafunctions within the SFL are not separable, which means that all text elements are linked together and can have multiple functions in the text. For instance, the textual elements provide information not only about the theme, but also about other functions in the text such as delivering particular ideational or interpersonal information to reflect writers' intentions and their assessment of readers' needs in comprehending the text (Hyland, 2005).

3.5.2 Crismore, Markkannen and Steffensen's (1993) model of metadiscourse

Crismore *et al.* (1993) introduced their developed model which was the most substantial revision of Vande Kopple's model (Hyland, 2005). They defined metadiscourse as the "linguistic material in texts, whether spoken or written, that does not add anything to the propositional content but that is intended to help the listener or reader organize, interpret and evaluate the information given" (Crismore *et al.*, 1993, p.40). Their model consisted of two categories: textual and interpersonal metadiscourse. Textual metadiscourse is divided into two sections: textual and interpretive. The textual section includes logical connectives, sequencers, reminders which are used to refer to earlier text materials, and topicalizers which are used to indicate a shift in the topic. The interpretive markers include code glosses, illocution markers and announcements which are used to announce upcoming materials in the text. The interpersonal metadiscourse, on the other hand, includes hedges, certainty markers, attributors, attitude markers and commentary.

Unlike Vande Kopple's classification, textual metadiscourse in Crismore *et al.*'s (1993) model consists of two subcategories: textual markers and interpretive markers. In their classification, narrators were dropped and some sub-functions were moved to a new category of textual markers, and code glosses and illocution were moved into a new category of interpretive markers. Both sub-sections of textual and interpretive markers were supposed to form the textual aspect of metadiscourse.

Although considerable progress was made in mitigating the overlap in the previous categorization, many important issues remained unresolved (Hyland, 2005). Hyland (2005) argued that the first problem was regarding the classification of the textual metadiscourse. He explained that there was no obvious reason why the textual category was divided in the first place because all organisational features would play a role in the coherence of the text and provide readers with the assistance they need to understand it. Hyland (2005) added that the classification within the sub-categories was puzzling; for example, reminders and announcements were classified in two different categories although they share the same function in the text.

3.5.3 Hyland's (2005) interpersonal model of metadiscourse

Hyland's (2005) model, also called the interpersonal model of metadiscourse, stresses clearly in its name the importance of the interpersonal function of metadiscourse. It was initially introduced by Hyland and Tse (2004) and later explained in detail by Hyland (2005) when he defined metadiscourse as:

the cover term for the self-reflective expressions used to negotiate interactional meaning in a text, assisting writer (or speaker) to express a viewpoint and engage with readers as members of a particular community. (Hyland, 2005, p. 44)

Although this definition relates to the previous definitions in the earlier work on metadiscourse, it differs by adopting a functional approach to the text and seeing the textual elements as part of the interpersonal discourse. Metadiscourse markers are used to signal the writer's interaction in the text and therefore express an interpersonal dimension.

Hyland (2005) introduced two dimensions of interaction to define spoken and written communication: the interactive and the interactional dimensions. The interactive dimension is concerned with the organisation of the propositional content to help readers to perceive the text as coherent and convincing. The interactive markers not only serve to organise the information in the text, but also signal the writer's intention to guide the reader's understanding and interpretation which is based on the exposure of related types of discourse. The interactive category consists of five subcategories, transitions, frame markers, endophoric markers, evidentials and code glosses. The interactional dimension consists of the markers which help to engage the reader in the discourse and includes hedges, boosters, attitude markers, self-mentions and engagement markers. The classification scheme is summarised in Table 3.1.

Table 3.1: The interpersonal model of metadiscourse (Hyland, 2005, p. 58)

Category	Function	Example
Interactive resources	Help to guide the reader through the text	
Transitions	Express relations between main clauses	In addition, but, thus, and
Frame Markers	Refer to discourse acts, sequences or stages	finally, to conclude, my purpose is
Endophoric markers	Refer to information in other parts of the text	Noted above, see Fig, in section 2
Evidentials	Refer to information from other texts	According to X, Z stated
Code glosses	Elaborate propositional meanings	Namely, e.g., such as, in other words
Interactional resources	Involve the reader in the text	
Hedges	Withhold commitment and open dialogue	Might, perhaps, possible, about
Boosters	Emphasise certainty and close dialogue	In fact, definitely, it is clear that
Attitude markers	Express writer's attitude to proposition	Unfortunately, I agree, surprisingly

Engagement markers	Explicitly build relationship with reader	Consider, note, you can see that
Self-mention	Explicit reference to author	I, we, my, me, our

Hyland's (2005) model of metadiscourse appears to be more solid theoretically and reliable analytically than the previous models because of several principles. One principle of metadiscourse is that it is distinguished from propositional aspects. Propositional materials are related to things in the world whereas metadiscourse materials are concerned with the text itself and its readers. The propositional and metadiscourse materials exist within the text and function crucially in creating the coherence and meaning of the text. This division is essential for building the theory and analysis (Hyland, 2005). The earlier models of metadiscourse such as Vande Kopple's (1985) implied that metadiscourse is a secondary discourse which has the role of organising and delivering the primary discourse. Hyland (2005) addressed this concern and argued that metadiscourse does not simply provide support to the propositional content but is used as a means to make the propositional content coherent and persuasive to the reader. In other words, it helps to "relate a text to its context, taking readers' needs, understanding, existing knowledge, intertextual experiences and relative status into account" (Hyland, 2005, p. 48). That is to say, metadiscourse markers signal engagement with the reader and particularly the communication which occurs within different social groups.

The second principle of metadiscourse is the rejection of the duality of textual and interpersonal functions which is found in the previous models of metadiscourse, such as those of Crismore *et al.* (1989) and Vande Kopple (1985). Unlike the previous models, Hyland (2005) suggested that all metadiscourse is interpersonal because writers use it as a rhetorical tool to satisfy readers' and their own needs by taking into consideration the reader's prior knowledge and textual experiences. This principle is different from the previous models by the stress it puts on metadiscourse as the means to help to establish and maintain reader-writer interaction.

The third principle of metadiscourse which Hyland (2005) proposed was the distinction between external and internal relations. Textual metadiscourse

can perform propositional or interpersonal functions and by focusing on the internal and external relations to the text, the primary function can be identified. For example, the use of conjunctions can either signal internal or external relation in the text. If they are used as an internal reference, then they would be classified as metadiscourse, and if they are used as an external reference, then they would be classified as propositional devices.

In addition to the three key principles, Hyland's (2005) metadiscourse model is distinguished from the previous models by the acknowledgment of its limitation. Hyland (2005) admitted that no taxonomy can do more than "partially represent a fuzzy reality" (p. 69), partly because most metadiscourse studies have a practical purpose and deal only with the explicit devices which are present in a text and can be easily identified. Although this practical approach is useful, equally important is the fact that this explicitness reflects the writer's presence in the discourse and her/his conscious choices. The explicitness refers to how writers are aware of their audience while creating the text. In addition, even though metadiscourse analysis is "indicative rather than comprehensive", it indicates the extent to which "authorial self-awareness" exists in the text, and the extent to which writers are capable of seeing their text as an outcome of it and of comparing how writers employ their awareness when creating texts in different genres, cultures and communities (Hyland, 2005, p.70).

In addition to his aim to re-evaluate the concept of metadiscourse, Hyland (2005) also suggested incorporating it into language teaching and especially in the teaching of reading and writing. Effective learning depends on the understanding of how language functions to help students to communicate appropriately in their communities. Hyland's (2005) efforts to develop the concept of his metadiscourse model made it more applicable and relevant pedagogically, especially in that the model was supported by Hyland's empirical corpus-based research which added to its strength. Hyland's (2005) model was found to be beneficial to be adopted in the current study to investigate students' writing communicative ability and how writers' use of metadiscourse markers reflects their awareness of their audience; Hyland's (2005) model is comprehensive considering the theoretical advantages

reviewed above. In the following section, I shall review the studies which adopted Hyland's (2005) model of metadiscourse markers in EFL contexts.

Hyland's (2005) model has been adopted in many studies to investigate students' academic writing. One scope of these studies has been related to contrastive rhetoric and has focused on investigating the use of metadiscourse markers in English texts written by Arabic native speakers in academic writing. For example, Sultan (2011) compared the discussion sections of seventy linguistics research papers written by native speakers of Arabic and of English and found that the Arab writers used more metadiscourse markers than the English writers. Transitions and code glosses were used more by Arab writers whereas frame and endophoric markers and evidentials were found more frequently in the English texts. Sultan (2011) also found that the Arab writers used more interactional metadiscourse markers except for self-mention, which was used more by the English writers. Similarly, Alotaibi (2015) compared 44 paired abstracts in both Arabic and English language published in English research articles by Arab scholars. Using Hyland's (2005) model, he found out that both Arabic and English abstracts tended to overuse interactive markers compared to interactional ones. Within the interactive category, the Arabic abstracts contained more transition markers, while English abstracts relied more on frame markers and code-glosses. In terms of the interactional category, English abstracts utilised interactional markers more frequently, except for self-mentions which were used similarly in both language groups.

More recently, Alharbi (2021) conducted a study to examine the employment of metadiscourse markers in 40 chapters of research articles and master's dissertations in the field of applied linguistics. The findings indicated that in both subcorpora transitions was the most used category of metadiscourse, while hedges were the most frequent interactional metadiscourse category used. Other studies found in this area have focused on specific metadiscourse markers, such as Hinkel (2005) who investigated the employment of hedges between Arabic and native English speakers in academic writing. That study focused on the use of hedges in the instruction of L2 academic writing and the findings showed that L2 writers employed a limited range of hedging devices in their writing compared with English writers. In addition, the types of hedge used were associated with informal discourse

and casual interaction. Despite the results found on the use of specific markers such as hedges, studies on the use of hedges by ESL or EFL learners are limited compared to the studies that investigated hedges in English native speakers writing (Neary-Sundquist, 2013).

The use of hedges in academic writing has been widely studied and is considered an essential metadiscourse feature that helps writers to express uncertainty, probability, and politeness in their writing. Kheryadi, Abdul Muin, and Ahmad Habibi Syahid (2022) compared in their qualitative study the use of hedges in academic writing between English and Arabic. The study adopted a contrastive analysis approach to compare the frequencies and types of hedges used in research articles written in both languages. The purpose was to identify distinctions and patterns in how hedges were employed in Arabic and English texts. It utilised Hyland's (2005) taxonomy of metadiscourse markers to analyse 40 articles from six linguistics journals. The study reported significant differences in the use of hedges between English and Arabic. While English writers tended to use more hedging devices, such as adverbs and nouns, Arabic writers relied more on modal verbs. These differences may be attributed to the linguistic and cultural differences between the two languages, highlighting the importance of understanding such differences in cross-cultural communication in academic writing. The study contributes to the field of contrastive linguistics and can benefit researchers and educators who work with multilingual students in academic writing across different disciplines. The findings can also help writers to become more aware of the linguistic and cultural context in which they are writing and adjust their writing style accordingly for better communication with their target audience.

Another comparative study by Alshahrani (2015) focused on a single category, the interactive metadiscourse markers between Arabic and English doctorate linguistics students. The study aims to evaluate the writers' ability to express their ideas clearly and convincingly to their target audience by effectively utilising propositional discourse and interpretations in a coherent and understandable manner. The study compared 50 discussion and conclusion chapters by using Hyland's (2005) interpersonal model of metadiscourse to examine the influence of the academic culture context on the students' use of interactive markers. This study's results suggest that Arab

graduate students' academic writing tends to be shaped by the specific discipline's genres and the institute's and examiners' expectations for producing successful dissertations. However, L1 interference in the Arab writers' understanding of their writing role is evident in their limited use of transitions, frame markers, and evidential metadiscourse markers. In contrast, native English writers frequently utilise a broader range of these devices to guide readers through the text. Similarly, Alqahtani and Abdelhalim (2020) investigated the use of interactive and interactional metadiscourse markers in a sample of (60) EFL academic essays written by male and female students in a Saudi university. The study aimed to investigate gender differences in the employment of metadiscourse markers in light of the cultural difference and discursive psychology approaches using Hyland's (2005) model. The study initially utilised a computer-based analysis to investigate each essay's interactive metadiscourse markers. Following this, the markers were examined through qualitative analysis within the texts' context to identify their specific functions. The study's results showed a significant gender-based difference in the use of interactive markers, specifically transitions, frame markers, and code glosses, with female students displaying a higher number of these markers compared to male students. Qualitative analysis also suggested that psychological and cultural differences among students may contribute to the observed gender differential. As a result, the study recommends implications for researchers, writing instructors, and textbook publishers to improve the development of interactive marker competency in EFL writing curriculums.

Additionally, a study was conducted by Vashegani Farahani and Aaddallah Mohemmed's (2018), aimed to analyse interactive and interactional metadiscourse markers usage and distribution in academic and non-academic writing. The study was descriptive, quantitative, and non-experimental corpus-based. The academic corpus consisted of 25 research articles published in international journals in different fields such as Applied Linguistics, Law, Management, Political science, and Sociology. On the other hand, the non-academic genre consisted of different sub-corpora which made up of 25 different texts in the fields of technical descriptions, short stories, news texts, business letters and exam papers. The study found that while the interactive metadiscourse markers were more frequent in the academic corpus, the

interactional metadiscourse was used more in the non-academic corpus. Transitions were the most used interactive markers in both academic and non-academic texts, while self-mention was the most interactional marker used in non-academic texts. Although the study provided useful insights about the distribution and usage of interactive and interactional metadiscourse in academic and non-academic texts, the researchers had no control over the language competence of the authors as they noted that the authors of these texts probably were native and non-native English speakers.

Another aspect of the relevant research found in the EFL context is the impact of implicit and explicit instruction on metadiscourse markers on students' writing ability. An example of the studies which used Hyland's (2005) model is that of Yaghoubi and Ardestani (2014) who investigated the effect of the difference between implicit and explicit metadiscourse markers instruction on EFL students' academic writing ability. The study aimed to discover the most effective method for teaching metadiscourse markers for improving writing skills. The study compared the effects of explicit and implicit instruction on the use of metadiscourse markers in writing among Iranian EFL learners and used a pretest-posttest design with three groups: the control group which received no instruction, the explicit instruction group which received explicit teaching of metadiscourse markers, and the implicit instruction group which received implicit teaching of the same. The results of the study showed that both explicit and implicit instruction led to an improvement in the use of metadiscourse markers in writing, with explicit instruction showing a slightly greater effect. The study highlights the significance of metadiscourse markers in enhancing writing skills and indicates that both explicit and implicit instruction methods can be useful for teaching metadiscourse markers. However, explicit instruction could provide a more effective method for teaching the use of metadiscourse markers in writing. The study offers valuable insights into language teaching pedagogy and can be useful for instructors and curriculum designers who seek to develop a more effective method of teaching metadiscourse markers for improving writing skills.

More recently, Kaya and Sofu (2020) investigated the impact of explicit teaching of metadiscourse markers on the writing proficiency of English as a foreign language (EFL) students. The study employed a quasi-experimental

research design, with the control group receiving traditional writing instruction, and the experimental group receiving explicit instruction on using metadiscourse markers. The findings of the study reveal that explicit instruction on metadiscourse markers results in improvement in EFL students' writing proficiency. The experimental group outperformed the control group in terms of the quality of their writing across various indicators, including coherence, cohesion, and accuracy. The study highlights the significance of explicit instruction on metadiscourse markers for enhancing EFL students' writing abilities.

Similarly, Fathy Abdelwahab (2020) examined the effect of using interactive and interactional metadiscourse instruction on EFL students. He aims to investigate the effect of teaching metadiscourse markers on postgraduate English majors' academic writing skills and self-efficacy. The study uses a quasi-experimental research design in which the experimental group received instruction on using metadiscourse markers, while the control group received traditional writing instruction. The findings of the study suggest that explicit instruction on metadiscourse markers leads to significant improvements in postgraduate English majors' academic writing skills and self-efficacy. The experimental group outperformed the control group on various measures, including the use of metadiscourse markers, coherence, and self-efficacy in academic writing. The study highlights the importance of explicit instruction of metadiscourse markers for enhancing postgraduate students' writing proficiency and self-efficacy.

Hyland's (2005) model has been shown to serve as a guide for conducting systematic analyses of metadiscourse markers and their functions in different types of academic writing for different purposes, therefore it was chosen for this current study to investigate reader-writer communication during pen-pal letter writing as a non-academic genre. The reviewed literature revealed a lack of empirical studies of the use of metadiscourse markers and communication in non-academic genres. This gap in the literature is particularly evident in the context of Saudi EFL teaching, where there is a need to examine the use of metadiscourse markers in non-academic genres such as letter writing.

3.6 Lexical Diversity

Lexical diversity (LD) is an important measure which helps to understand how language learners utilise their vocabulary in productive tasks (Richards & Malvern, 2000). LD refers to the variations in the word types used in a text in relation to the total number of words. A greater range of words in the text indicates a higher diversity. In other words, for a text to have LD, a writer has to deploy different vocabulary in the text with less repetition of the words already used (Johansson, 2009).

Quantifying LD is commonly conducted using a traditional measure called the Type-Token Ratio (TTR), which calculates the ratio of different words (types) to the total number of words (tokens). This method, however, has a major problem which affects its reliability. The key issue is its sensitivity to text length which means the longer the text, the lower the TTR or the calculation of the diversity of the words will be. A large amount of research has been conducted to tackle the problem and alternative measures have been proposed, such as Guiraud's Root TTR (Vermeer, 2000). A measure called *VOCD-D* was developed by Malvern *et al.* (2004) to overcome the sensitivity of the TTR to text length. This measure has received the most attention in measuring LD due to its validity compared with other measures (McKee *et al.*, 2000). For example, Jarvis (2002) compared five different formulas which had been developed to model the curve of TTR to measure LD and tested them on texts written by both EFL writing students and native speakers of English. It was found that the *VOCD-D* measure was methodologically the most accurate and it was also more valid compared with the other measures in texts which ranged between 100 and 400 tokens (Nation & Webb, 2011).

Measuring LD has been used in a variety of linguistic research areas, such as children's language development, second-language learning and the development of literacy (McKee *et al.*, 2000). It has also been used in studies to investigate the impact of interaction on teaching EFL writing. For instance, Andjuar (2016) investigated the impact of Mobile Instant Messaging (MIM) on ESL students' writing performance and their communicative competence. WhatsApp was used by the students as a medium of communication and interaction. Students' lexical diversity and syntactic complexity were analysed both quantitatively and qualitatively to investigate whether there were any

differences between the experimental and control groups. The findings showed that the use of MIM contributed positively to the development of accuracy in L2 writing; the number of errors decreased substantially in the experimental group compared with the control group. More importantly, the students in the experimental group showed greater syntactic complexity and LD in their writing. Li (2000) similarly explored how task-based email activities could influence the writing skills of ESL students while examining the different linguistic characteristics present in their writing. The study utilised planned writing assignments that incorporated various aspects such as purpose, audience, interaction, task structure, and linguistic features. These aspects were analysed in terms of syntactic and lexical complexity. The findings indicated that the task-based email activities were beneficial in improving the students' writing because they offered an opportunity for real-life communication that fostered their motivation to produce more complex writing. Additionally, task-based email activities helped to enhance students' awareness and use of authentic language features. Finally, the study highlighted the significance of task design in promoting the development of language proficiency while offering evidence of the effectiveness of task-based email activities in enhancing ESL students' writing skills.

The relationship between lexical diversity and various writing genres was examined in several studies such as in the studies of Sadeghi and Dilmaghani (2013), and Yu (2010). The two studies differ in terms of their focus and context, but both highlighted the connection between the different types of genre and students' lexical diversity. Sadeghi and Dilmaghani (2013) conducted a study to explore the relationship between lexical diversity and genre in the writings of Iranian EFL learners. The study involved 30 participants (male and female) who were at an intermediate level from the language centre of Urmia University, and were studying English based on their performance in the writing section of the International English Language Testing System (IELTS). During three consecutive sessions, the participants were asked to write on three different topics: argumentative, comparative, and narrative. The essays were compared in terms of lexical diversity, which was measured using Richards and Malvern's (1997) VocD model. The study employed a one-way Repeated Measure ANOVA to examine the relationship between genre and

lexical diversity. Additionally, the study investigated the correlation between lexical diversity and writing quality by utilising both holistic and analytic scoring methods. The study revealed that there was a significant positive correlation between lexical diversity and writing quality in the argumentative genre when analysed using the analytical scoring method. No such correlation was found in the other genres.

Guoxing Yu (2010) conducted a study to investigate the differences in lexical diversity between writing and speaking tasks in the context of EFL learners. The participants were also male and female from Filipino and Chinese background who completed both a writing and speaking task. Using Richards and Malvern's (1997) VocD model, both written texts and students' interviews were analysed. The study revealed that lexical diversity had a positive and statistically significant correlation with candidates' general English language proficiency, overall quality of writing, and speaking task performance. The correlation between lexical diversity and overall quality of written compositions varied significantly across subgroups of the sample, such as gender, L1 background, test taking purpose, and writing prompts. The study also revealed that compositions written on impersonal topics had notably higher lexical diversity compared to those on personal topics.

In the Saudi context, there are few studies that were conducted on EFL Saudi students' lexical diversity and L2 writing (Alshehri, 2022). However, in the study of Alshehri (2022), the impact of lexical diversity on the writing proficiency of Saudi learners in EFL was investigated. The study recruited 75 Saudi EFL male learners within the age range of 19-22 years, who were all native Arabic speakers and had been studying English for nine years before enrolling in university. The participants' writing work is assessed and analysed using Text Inspector. The study found that the lexical diversity of the participants was within the normal range of second language learners, and there was a significant positive relationship between lexical diversity and writing proficiency. However, the study could not establish significant differences in lexical diversity or writing proficiency across different academic levels. The study suggests that vocabulary plays a critical role in language learning and should be given attention in language instruction.

3.7 Lexical Frequency Profile

The number of words a learner knows is referred to as the vocabulary size or breadth (Nation, 2001). Measuring vocabulary breadth quantifies the number and variation of the words used by a writer, and it is one of the most important determinants of competence, especially in L2 writing (Laufer & Nation, 1995). Lexical Frequency Profile (LFP) is one of the measures used to assess vocabulary breadth and it focuses on the frequency of the words and their distribution in the texts (Laufer & Nation, 1995). Laufer and Nation (1995, p. 311) defined LFP as “the percentage of words a learner uses at different vocabulary frequency levels in her writing – or, put differently, the relative proportion of words from different frequency levels”. Vocabulary levels can be classified into four categories based on their frequency (Nation, 2001). The first level includes the most frequent 1000 words in the English language; the second level includes the second 1000 most frequent words in English, and the third adds words on the Academic Word List (AWL); the fourth level includes the words which are not included in the previous lists. Nation (2001) stated that high-frequency words are words which appear in 80% of texts, whilst low-frequency words are very large in number and do not occur frequently in texts. Technical words are also considered to be low-frequency words which are used in specific fields. The AWL is a list of words which appear in texts produced for academic purposes.

LFP as an analysis of vocabulary has advantages when used to assess lexical richness (Laufer & Nation, 1995). It has shown stable results when two different texts written by the same learner were compared (Nation & Webb, 2011). Another reason why LFP has advantages over other measures is its detailed results. Unlike other measures which only provide information regarding frequent and sophisticated words, LFP lists all the types of words found in a text and their frequency level (Laufer & Nation, 1995). It is therefore particularly suitable for use when comparing texts written by learners with different educational backgrounds (Laufer & Nation, 1995). Based on the LFP originally created by Heatley *et al.* (2002), an online software called VocabProfile was developed by Cobb (2010).

Measuring the influence of communicative writing on vocabulary breadth in students' writing using VocabProfile was the focus of only a few studies such

as MacKenzie (2015) who investigated the effectiveness of using collaborative learning tasks as a tool to increase students' breadth and depth of knowledge of business vocabulary. This study was conducted with a sample of 183 non-English major undergraduate university students, consisting of 97 males and 86 females, who were enrolled in two universities in Tokyo, Japan. The study included seven classes, with four classes in the experimental group and three in the control group. Comparison of the pre- and post-test results between the experimental and control groups showed a significant difference in favour of the students in the experimental group, who not only improved the breadth and depth of their business English vocabulary after engaging in collaborative learning, but also developed a sense of motivation towards learning.

Research on VocabProfile has shown that there is a lack of studies which have investigated the vocabulary profiles of EFL learners (Bardakci, 2016; Nur, 2015). While Mackenzie (2015) focused on the impact of collaborative writing on students' vocabulary, other studies have focused on assessing students' academic writing to develop suitable pedagogical implications for teaching English writing. For instance, Abduh and Rosmaladewi (2017) used VocabProfile to assess L2 students' academic writing; they used the Lextutor analysis tool developed by Tom Cobb to analyse thirteen academic essays written by students in the English department of an Indonesian university and found that the students' vocabulary in their academic writing comprised predominantly basic words, although also included some academic lexis and terminologies. The findings suggested the importance of familiarising students with higher-level academic words in order to enable them to engage with and understand academic English academic texts. Similarly, Aliyah Nur (2015) explored the effect of the same Lextutor on students' essay writing and found that the use of K2 and AWL words in the students' academic essays was significantly different before and after the intervention of introducing students to the vocabulary analysis. It was concluded that the VP web tool is useful for investigating the vocabulary level in the academic context.

In a recent study, Ibrahim, Muhamad, and Esa (2019) used VocabProfile to investigate the lexical richness of pre-sessional students and advanced students of the International Islamic University in Malaysia. The study used content analysis to analyse 139 essays

of entry level university students and 140 essays of third year university students. They aimed to investigate the lexical richness of these two groups of essays in the type-token ratio. They also intended to find out if there were differences between the two groups of essays in the use of the 1,000, 2,000, word levels, the AWL as well as the use of the words not-in-the-list. The study indicated that the LFP was accepted as the best available programme that could facilitate a standard analysis of lexical richness to be conducted. The study's results showed statistically significant differences in the use of the 1,000 , 2,000 word and the AWL between the two groups and concluded with pedagogical implications for the teaching of vocabulary in the language classroom.

Similarly, Akbarian et al. (2020) have used Lextutor to compare the lexical availability output of two groups of EFL learners. The study also aimed to find out if there was a relationship between students' receptive vocabulary knowledge and their lexical availability output. The participants consisted of 85 EFL learners (39 males and 46 females). All the participants spoke Persian language, were aged 18 to 25 years, and were studying at Iranian comprehensive state universities. The researchers utilised a Lexical availability task and a vocabulary test to collect the data of the study. This research demonstrated that the type of prompt used in the lexical availability task, as well as the amount of instructional exposure, had a substantial influence on the lexical output of learners. Moreover, a significant correlation was found between the lexical availability output of English as a Foreign Language (EFL) learners and their ability to comprehend vocabulary. The study also discovered that in the lexical availability of EFL learners, the most commonly used words were within the 2,000 and Off-list categories.

In the current study, vocabulary profile was adopted to investigate whether the students' vocabulary breadth differed by their interaction with their correspondents after their pen-pal letter writing. There is a lack of research on the impact of communicative writing on vocabulary breadth. More specifically, to the best of my knowledge there have been no previous studies of the effects of pen-pal letter writing on vocabulary breadth, except previous studies of the impact of collaborative learning and students' interaction on their vocabulary knowledge have demonstrated positive outcomes.

3.8 The effects of computer mediated communication (CMC) in writing.

With the development of technology and the variety of social platforms available, bringing real-world interaction to language learning classrooms is possible. The research in the field of computer-mediated communication (CMC) indicates the usefulness of social interaction provided by the incorporation of such platforms on language learning. December (1997) defines computer-mediated communication as “a process of human communication via computers, involving people, situated in particular contexts, engaging in a process to shape media for a variety of purposes” in (Bubas, 2001, p.2). There are two forms of computer mediated communication: synchronous computer mediated communication (SCMC) and asynchronous computer mediated communication (ACMC). While the interaction occurs in real time and spontaneously in the SCMC such as in text chat and videoconferencing, in the ACMC, the communication is delayed and the participants do not need to be online at the same time such as in blogs, e-mails, and forums. The implementation of CMC in language learning has been referred to by using many different terms such as virtual connections, teletandem, and virtual exchange which increasingly is being used (Dooly and O’Dowd, 2018). O’Dowd (2018, p.5) defines telecollaboration and Virtual Exchange as “the engagement of groups of learners in extended periods of online intercultural interaction and collaboration with partners from other cultural contexts or geographical locations as an integrated part of their educational programmes and under the guidance of educators and/or expert facilitators”. A variety of platforms are used in an asynchronous or synchronous manner to provide learners with an opportunity to interact with an authentic audience in a specific sociocultural context such as blogs, wikis, social media platforms, and text-chat.

The research in the field of computer mediated communication (CMC) has shown that such interactive platforms have great potential for language learning (Alberth, 2019; Awais, 2021). One of the important traits of computer mediated communication is social presence. The concept of social presence is seen as “a quality of participants to establish and maintain social and affective connections with others in interaction and their ability to project their

self into the community” (Satar, 2015, p.2). In other words, through the establishment of interpersonal relationships and connection with others, learning can be facilitated. The authentic social interactions provided by the use of technology help to expose learners to the target language and give them the chance to put what they have learned in class into practice (Blake, 2000; Dooly and O’Dowd, 2018). It also offers many pedagogical benefits such as enhancing learners’ autonomy, supporting active learning, and fostering collaborative learning and reducing learners’ anxiety (Nguyen, 2008).

From a socio-cultural theory (SCT) perspective, educational CMC provides a range of possible advantages for students’ social and cultural development and language learning (Nguyen, 2008). First, the authentic interaction with peers offers second language learners with opportunities for peer-to-peer scaffolding. For example, Cheng (2010) examined how the authentic interaction influenced a group of non-native speaking graduate students’ academic literacy development. Utilising various methods including discourse analysis, textual analysis, and constant comparison, he showed the benefit of CMC in facilitating the students’ learning of genre and writing conventions. This was achieved through online interaction in several ways. For example, students were able to directly ask their peers about citations conventions in the online forum. In addition, students were able to learn a lot of citation and referencing styles just by the exposure to their peers’ posting. Also, the online discussion forum enabled students to discuss misunderstandings of citation procedures.

Second, studies in the field of CMC have shown that authentic communication provided by asynchronous or synchronous computer mediated communication could enhance students’ language skills (Babni, 2019; Chen and Brown, 2012; Kitade, 2006). For instance, Kitade (2006) investigated task-based email interaction between 24 native and non-native speakers with the aim to enable learners to engage in an authentic interaction to facilitate their language learning. The study focused on the negotiations routines and discourse strategies used by the participants who were engaged in asynchronous CMC. The study showed that the discourse strategies employed by the participants in the asynchronous communication were distinguished from those in synchronous and face-to-face interaction. The study concluded

that the asynchronous nature of the communication has many advantages as it allows learners more time to understand their partner and to plan, produce, and edit their written texts.

Studies that have focused on specific language skills, such as syntactic complexity, lexical complexity and grammatical accuracy have shown further advantages of CMC (Li, 2000; Sanchooli et al., 2021; Shiroyama, 2021; Sotillo, 2000). For example, Li (2000) conducted a study to examine the efficacy of implementing task-based email activities on ESL students. The study looked at the characteristics of email writing in relation to writing purpose, and audience interaction, and the linguistics features such as syntactic complexity, lexical complexity and grammatical accuracy. The results of the study indicated that students who were engaged in email tasks that involved audience interaction produced syntactically and lexically more complex written texts. In relation to syntactic and lexical development, Shiroyama (2021) also explored the impact of ACMC and SCMC on students' lexical diversity and syntactic complexity and found that syntactic complexity statistically increased and there was a significant difference by the learners in the ACMC mode of communication. In addition, Sanchooli et al. (2021) aimed to examine the effect of synchronous / asynchronous computer-mediated communication (SCMC) on writing accuracy and complexity of Iranian EFL learners. The study adopted a quasi-experiment design, and the participants were forty students from high-intermediate courses. The participants were randomly assigned to face-to face interaction (FFI), synchronous (SCMC), and asynchronous (ASCMC) groups. The results of their study showed significant difference among the participants regarding their writing accuracy; however, no significant difference was found in regard to writing complexity. The results highlighted that Synchronous/asynchronous Computer-Mediated Communication can have a positive impact on students' development.

Sotillo (2000) conducted a study to investigate the use of email communication between American and Spanish students to promote intercultural exchanges and improve language learning. The study involved 36 American university students and 18 Spanish-speaking university students who exchanged email messages in pairs for a period of 11 weeks. The participants were instructed to discuss a range of topics related to culture and

society, and to communicate in the target language throughout the exchange. The study found that email communication was a useful tool for language learning and intercultural exchanges. The participants reported feeling more connected with their partners and learning about cultural differences in a meaningful and engaging way. They also reported acquiring new language skills and improving their language proficiency through the email exchanges. The study also found that students who engaged in email communication were more motivated to learn and practise the language outside of class. In addition, the study explored the characteristics and structure of email communication for language learning. The researchers found that email exchanges allowed for more reflective and deliberate language use, as well as opportunities for self-correction and feedback. The asynchronous nature of email exchanges also allowed for more thoughtful and thorough responses, compared to face-to-face interactions. The study suggests that email communication can be an effective tool for promoting language learning and intercultural competence. It emphasises the importance of engaging in structured email exchanges that encourage reflection and deliberate language use, as well as fostering authentic and meaningful interactions to promote language learning and intercultural exchanges.

In a different context, a study conducted by Stockwell and Harrington (2003) explored the use of email communication as a tool for language learning and intercultural exchange among Malaysian and Australian university students. The study involved 28 Malaysian students and 22 Australian students who communicated via email over a six-month period. Participants were paired up and instructed to exchange at least one email per week about topics related to culture, society, and daily life. The study found that email communication was an effective tool for language learning and intercultural exchange. The researchers observed an improvement in language proficiency and intercultural competence among the participants, particularly in terms of developing awareness of cultural differences and similarities. They also found that email communication fostered a sense of cultural empathy and understanding, promoting positive attitudes towards the target culture. Additionally, the study explored the use of email communication in promoting autonomous learning among the participants. They found that email

exchanges increased learner autonomy, as participants were required to take ownership of their learning and seek out information independently. The study also suggested that email communication allowed for personalised and adaptive learning, as learners could modify the content and pace of their email exchanges according to their individual needs and preferences. Overall, the study highlights the potential of email communication as a tool for language learning and intercultural exchange. It demonstrates the positive effects of engaging in regular and authentic email exchanges on language proficiency, intercultural competence, and learner autonomy.

The research in the field of computer mediated communication (CMC) has also investigated the impact of language background on students interaction, and focused on different interaction types such as Native Speakers (NS)–Non Native Speakers (NNS), NNS–NNS, and English as a Lingua Franca (ELF). For example, Kitade (2010, p.164) argued that the different proficiency levels and the different backgrounds exist in an interaction between native speakers (NS) and non-native speakers (NNS) “increase the degree of intersubjectivity through the negotiation of meaning”. Kitade (2010) explained that such an interaction can help to create ZPD as learners are faced with new linguistic forms and unfamiliar topics to them. In the study, Kitade (2010) examined the learning process in an interaction between NNS–NNS and NNS–NS using an internet chat. The participants consisted of eleven students enrolled in an advanced Japanese as a foreign language (JFL) class at an American university, four students from an intermediate JFL in a private college, and three native Japanese speakers studying at an American university. The qualitative analysis of the study suggested that CMC contributed positively in second language acquisition as it facilitated collaborative interaction and comprehension.

In the same vein, Hoshi (2015) explored in a qualitative study how learners of Japanese as a foreign language participated in learning interactions with native speakers and other learners outside of formal classroom settings. The study used conversation analysis to analyse the participants' interactional practices and focused on how they used language, repair misunderstandings, and negotiate meaning. The study involved four native speakers of Japanese, aged 25 to 29, who were undergraduate and

graduate students with no prior experience in teaching Japanese. Fourteen students, with an average age of 19, who were taking a second-semester course in Japanese as a foreign language taught by a graduate assistant at the University of Hawai'i at Manoa also participated in the study. The findings showed that learners' participation in these interactions could provide valuable opportunities for language learning, particularly in terms of natural language use and the negotiation of meaning. The study found that learners had access to a broader spectrum of linguistic resources when interacting with knowledgeable native speakers than with instructor-led instruction. Learners then incorporated these linguistic forms while engaging with peers in other activities. The study highlights the importance of considering learning as a participatory process, emphasising the role of contextual factors and learners' agency in shaping language learning experiences beyond the classroom setting.

Authentic NS-NS interaction can also serve as a model for language learners who aspire to become proficient in their target language. By observing and participating in authentic NS-NS interactions, learners can develop their own language skills and better understand the nuances of the target language. For example, Lee and Lyster (2016) conducted a study on the interactional feedback provided by pairs of non-native speakers (NNSs) during task-based synchronous computer-mediated communication (CMC). They found that NNSs tended to adopt a facilitative approach to feedback rather than a corrective approach, which facilitated more meaningful interaction between the NNSs. One reason why NNSs adopted a facilitative approach was that they had had previous experience observing and participating in authentic NS-NS interactions. The study found that the experience of observing and participating in authentic NS-NS interaction helped learners internalise the kind of feedback that was typical in a naturalistic interaction with NSs. The authors suggested that authenticity in online communication may offer NNSs opportunities to develop competence in pragmatic aspects of NS-NS interaction and gain access to authentic contextualised language use, which may lead to more effective language acquisition and improved communication skills.

While the impact of language background on students' interaction was the focus of CMC studies that centred on pedagogical benefits, other studies aimed to compare different modes of communication in terms of their usefulness. For example, Mulken and Hendriks (2017) conducted an experimental study to examine the effectiveness of three different modes of communication: English as a Lingua Franca (ELF), L2-L1 interactions, and receptive multilingualism (RM) when speakers used their mother tongue but had receptive competence in the other language. The participants had different linguistic backgrounds and were native university students (speaking Dutch or German). The study focused on assessing communication strategies used by the participants. It focused on measuring the number of words per turn and the number of turns per chat while also analysing the chat texts for communication strategies occurrences. The results showed that with regard to the number of words, more words were significantly used in L1-L1 and in L1-L2 interactions than in the other modes of communication. The results of the investigation of the number of turns indicated that more turns were used by L1-L2 communication than in ELF.

3.8.1 The effects of blogs and wikis writing on the development of language and writing skills

Developing students' writing while writing to a real audience has also been the focus of many studies that incorporated the use of blogs and wikis. Blogs entries resemble letter writing and are directed to a real audience. Wikis also share similarities with blogs as they both encourage student collaboration, the sharing of ideas and opinions between users, and commenting on others' posts. They are informal types of writing and reflect the writer's points of view about an issue. The application of blogs in education shows its usefulness in the learning of writing (Zhang, 2009). It engages the student in a purposeful writing which helps them develop critical thinking skills and develops students' writing quality as they encounter models of written texts (Zhang, 2009). The studies that have utilised blogging in teaching EFL writing have highlighted various ways in which students' writing ability can be developed through blogging interactions. One of the main focuses of the studies that utilised blogs and wikis to develop students' writing ability is peer feedback. For instance, Quintero (2011) carried out a project to examine the impact of blog writing and

student interaction on EFL students' ability to write. The blog experience was implemented through a regular interaction of two groups of students, one from Colombia and the other from Canada. The participants were provided with three different spaces where they could write online. The first was a personal blog in which students wrote about their personal interests, the second was a group blog where students were engaged in cooperative writing, and the third blog was used for argumentative writing and debate. The study adopted a qualitative method to analyse the data, and the students' blog writing was systematically analysed based on themes. The findings of the study indicated that students' development in writing was affected by their participation in an interaction with their peers. The use of blogs acted as a mediating tool by which students shared their interests and language learning goals. The study also highlighted the role of peer feedback on the development of the students' writing ability.

Vurdien (2012) also argued that the use of blogs helped students to improve their writing skills through self-reflection and peer feedback. A group of eleven EFL learners at a language school in Spain were engaged in blog writing for five months. The students were assigned different writing tasks such as letters, articles, proposals, and reports. The data of the study was collected from the blog entries, students' discussions, interviews, and a questionnaire. The results showed that blogging contributed positively in enhancing students' writing skills through peer feedback and working collaboratively in blog discussion. Similarly, Alenezi (2022) aimed to explore the students attitude and perceptions towards learning writing by using blogging. The qualitative case study was conducted in a Saudi university and included five undergraduate students in their second year. The data of the study was collected using semi-structured interviews with the participants after they were engaged in blog writing for one semester. The study found out that the students' attitudes had changed positively after engaging in online blogging. The benefit of such an interaction was extended to students' English writing skills as they benefited from the exchange of feedback with their peers.

The advantages of peer feedback on students' writing was also highlighted in many studies that utilised wikis in teaching EFL writing. Lin and Yang (2011) carried a study to investigate the impact of wiki as a collaborative

platform and peer feedback to improve students' writing skills. The participants were 32 students enrolled in English at a college in Taiwan. The data were collected using a questionnaire, semi-structured interviews, focus group interviews, and teachers' reflection logs to record observations. The qualitative analysis indicated that students benefited from the social interaction with their peers. In particular, students learned new vocabulary, spelling, and phrases. The study also highlighted the role of peer feedback in the development of students' writing. Another study by Cequena and Gustilo (2014) was conducted on seventeen students enrolled in an English Communication course of a private university in the Philippines. The data of the study was gathered using a questionnaire and focused group discussion. The results indicated that blogging helped students to develop their writing by the exposure to their peers writing. They were able to benefit from one another in terms of content ideas, style, organisation. This helped the students to reduce the level of anxiety associated with writing traditionally in a classroom especially with the students who lacked linguistic resources and composing strategies.

Few studies were found that highlighted the role of the audience in the development of students' writing. Wang (2015) examined the impact of wiki collaboration on the development of ESP Taiwanese learners. The study was conducted with 48 participants enrolled in a southern university in Taiwan. Students were divided into two groups, experimental and control. The data of the study was collected using writing tests and a survey. The writing test was analysed using an analytical rubric that focused on format, purpose and audience, organisation, content and style, and grammar. The survey was used to collect data from the students regarding their experience, attitude, and perception of wiki writing. The study' results indicated that students who participated in wiki writing had a development in all of the mentioned criteria. However, the study did not include any information regarding the analysis method used for investigating the students' audience awareness.

The use of wikis to develop academic writing while also investigating its impact on the students' ability to consider their audience were also the focuses of a study by Kuteeva (2011). The participants of the study were enrolled at Stockholm University and were taking an Effective Communication in English

course. The data were gathered from observation throughout the course, formal (grammatical) analysis, and a self-report questionnaire. The textual analysis of the writing was conducted on seven collaborative texts and fourteen individual argumentative essays. The analysis of the content was largely qualitative and focused on structure, content, and accuracy. In addition, the use of interactional metadiscourse was investigated to see how students considered their audience. The results of the study showed that students were more aware of the correct use of grammar and the organisation of their texts through wikis. Also the reader-writer interaction was confirmed by the use of engagement markers, self-mention, and attitude markers in the argumentative essays.

Although the investigation of developing students' language through authentic interaction with an audience provided by CMC such as blogs and wikis shows some positive results, such successful outcomes are not always promised, and online interaction between language learners does not always lead to success (O'Dowd & Ritter, 2006). The term "failed communication" is used to refer to the "cases of telecollaborative interaction which end in low levels of participation, indifference, tension between participants, or negative evaluation of the partner group or their culture" (O'Dowd & Ritter, 2006, p.624). O'Dowd and Ritter (2006) provided a summary of the reasons that might contribute to students' failed interaction and explained that understanding these reasons can help to better understand and develop the design of the authentic interaction opportunities. According to O'Dowd and Ritter (2006), many complex reasons can be found in relation to four main different areas which are the exchange structure and how it is organised, the online interaction type between the groups of learners, the differences in the sociocultural contexts and the learners. The reasons in regard to students' failed interaction varied and included differences in the language proficiency level between the learners, the institutional differences between the academic calendar of the two parties, differences in the way technology is used, and lack of prior experience with online interaction. Another reason is related to the learners' level of motivation and expectations (O'Dowd and Ritter, 2006). That is, the students' perceptions and expectations of their engagement in the online activity and the extent to which they believe such engagement could be useful

and beneficial. Ware (2005) has also asserted that individual motivational differences can influence the success of an online interaction. Moreover, individual differences in dealing with the time allowed for the participation and the time relation to students' feeling of stress and tension.

The research on the development of students' writing provided by the CMC suggests the potential of pen-pal letter writing to contribute to students' language development and communicative competence. While the previous studies' results support the connection between the interaction with an authentic audience provided by synchronous and asynchronous computer mediated communication, and students' language development, the current study differs by the task design implemented. Pen pal letter writing did not require an internet connection in the classroom, and the task was designed to allow for one to one communication. The students in the current study were paired with their friends and each pair remained the same during the exchanges of letters. In addition, the current study is focused on both the language development, specifically, the development of lexical diversity and vocabulary breath, and the development of a communicative ability through the students' use of metadiscourse markers.

3.9 The Self-Determination Theory (SDT)

SDT is a motivational theoretical framework concerned with the inherent human nature of learning and life exploration. This theory was developed within the discipline of educational psychology by Deci and Ryan (1985) and posits that people can regulate their behaviour and show willingness to engage in activities according to the satisfaction of three inherent human psychological needs, autonomy, competence and relatedness. According to the SDT, autonomy is defined as the psychological need for human beings to experience freedom in regard to making decisions in selecting activities (Deci *et al.*, 1991; Skinner & Edge, 2002). An act can be described as autonomous when it emerges from the self and not from external influences such as the fear of punishment or the desire to obtain a reward. Human beings enjoy an activity and feel motivated if the activity is self-initiated and self-regulated rather than controlled or performed under pressure (Deci *et al.*, 1991). The second psychological need is competence, which is defined as the ability to

meet task goals and feel capable of attaining the desired outcomes (Deci *et al.*, 1991). In other words, people can feel motivated if they feel efficient and effective towards accomplishing a task. They can overcome the challenges encountered in the work itself or in the environment. The third psychological need is relatedness, which involves building connections and bonds with others and the feeling of belonging as well as acceptance in a social context. People can experience relatedness if they feel emotionally attached and connected to others and are able to establish relationships which involve emotions, such as trust and closeness. This psychological need for relatedness cannot be fulfilled if a person feels distant and unable to interact with others. In teaching practice, students' feeling of relatedness can be supported by teachers providing them with a context in which they experience belonging (Niemic & Ryan, 2009). The satisfaction of the three psychological needs are important for social development and human well-being (Ryan & Deci, 2000). In other words, the satisfaction of only one of these three essential needs cannot guarantee high motivation. In addition, although motivation is sometimes viewed as a single concept, people vary in their needs and the different types of factors that drive their motivation (Ryan & Deci, 2000).

Deci and Ryan (1985) proposed three types of motivation on a continuum: (1) amotivation, (2) extrinsic motivation and (3) intrinsic motivation. SDT distinguishes between intrinsic and extrinsic motivation as the main elements in the continuum. The first type is amotivation, which is a separable type concerned with the state of not having any intention to perform an activity and lacking the feeling of competence and relatedness towards it (Deci & Ryan, 1999; 2000). Extrinsic motivation is classified into four different subcategories of motivation depending on the degree of autonomy. Extrinsic motivation differs from intrinsic motivation in that it concerns achieving a task for an external reward and separable outcomes (Niemic & Ryan, 2009). The first and the least autonomous subcategory of extrinsic motivation is external regulation. This is when a behaviour is performed for a separable outcome from the activity itself, such as a reward (Ryan & Deci, 2000). The second type of extrinsic motivation is introjected regulation. This is when a behaviour is performed because of the pressure felt when addressing a particular goal, such as feelings of self-worth, pride or ego (Ryan & Deci, 2000). An example

of this type is when a student arrives in class on time simply in order not to feel like a bad student (Deci *et al.*, 1991). Although in this case the introjected regulation is internal to the individual, it is controlled by external forces and does not come from a free choice (Deci *et al.*, 1991). The third sub-category is identified regulation, which is a more autonomous and self-determined form of extrinsic motivation. In contrast with introjected regulation, identified regulation is characterised by the acknowledgment of the value, importance and usefulness of an action. A person therefore accepts the regulation of the action because of its personal importance. An example of identified regulation is when a student memorises a list of words because he or she acknowledges its importance for achieving the goal of a successful task (Ryan & Deci, 2000). The fourth type of extrinsic motivation is integrated regulation. This type shares many characteristics with intrinsic motivation and is therefore the most autonomous form of the four subcategories (Ryan & Deci, 2000). The integration occurs when the reason for performing an activity is unified with other personal goals, needs or values. This integration affects the actions and transfers them from being extrinsically motivated actions to self-determined (Ryan & Deci, 2000). The SDT continuum shows the developmental process of internalisation from the lowest to the highest. Ryan and Deci (2000) stated that the internalisation process and the intention to perform an activity depend on factors such as prior experience or situation. In other words, a person might perform an activity because of an external regulation such as a reward, and then an orientation shift can occur when the activity is experienced as intrinsically motivating because the reward is not perceived as controlling (Ryan & Deci, 2000). Thus, the development which occurs is not sequential and the differences in the motivational orientations do not necessarily move a person between the extrinsic types of motivation in sequence.

Intrinsic motivation comes in the far-right side of the continuum and concerns the feeling of pleasure and enjoyment of achieving a task when the satisfaction comes from the task itself rather than from a different source. In other words, intrinsic motivation is related to the relation between people and their activities (Ryan & Deci, 2000). According to the SDT, humans are born with a tendency for intrinsic motivation (Ryan & Deci, 2000). Intrinsic motivation results from the satisfaction of the three psychological needs of

autonomy, competence, and relatedness (Deci & Ryan, 1990; Niemiec & Ryan, 2009). Intrinsically motivated people experience the satisfaction of performing an action which is enjoyable and interesting as well as challenging but within their ability (Niemiec & Ryan, 2009). Their actions are based on self-interest and enjoyment rather than on externally imposed forces such as punishment or reward (Niemiec & Ryan, 2009).

SDT highlights the importance of the environment and the social conditions under which human beings can become productive and enthusiastic rather than apathetic (Ryan & Deci, 2000). Depending on the nature of these conditions and whether they are supportive of human needs or not, the natural tendencies can be enhanced and satisfied or they can be demolished (Ryan & Deci, 2000). In other words, the satisfaction of the three human needs of autonomy, competence and relatedness depends on the environment and whether it is supportive of the three needs. The focus on human needs as the energizers behind behaviours has distinguished SDT from other theories which focus on either goals or outcomes (Deci *et al.*, 1991). Unlike the other motivation theories, SDT is concerned with understanding why some outcomes are desirable and the direction of these outcomes (Deci *et al.*, 1991). This distinguishes it from, for example, the theories of Bandura (1977), Dweck (1986) and Eccles (1993), which only focused on the direction of behaviours and their consequences without addressing what triggers them (Deci *et al.*, 1991). SDT, in contrast, highlights not only the direction of behaviours, but also the inner human resources which are the energizers for development and growth to facilitate learning and ensure engagement. According to SDT, it is not just how motivated someone is that is important, but also the orientations of that motivation. The orientations of motivation indicate the reasons behind people's actions, such as goals and attitudes (Ryan & Deci, 2000). For example, students can have many orientations for wanting to do an activity: they can be interested in the activity itself or driven by curiosity; they can also be motivated by wanting to win the approval of their parents or teachers. In addition, SDT is distinguished from other theories by being a psychological model rather than a specific language-learning model such as those of Gardner (1985) and Dornyei (1994). SDT generally highlights aspects of the

human desire to learn and acquire new skills, so it has been applied in many fields, including educational practice, health and physical education.

3.9.1 The application of SDT in education

The application of SDT in education can help educators and practitioners design appropriate teaching methods and provide a supportive environment under which students' needs can be satisfied. They can design activities which nurture students' tendencies for learning and satisfy their psychological needs for autonomy, competence and relatedness. When these three needs are supported, they can lead to successful and long-lasting influences and development. Skinner and Edge (2002) brought together the two needs of competence and relatedness and identified them as the basis for intrinsic motivation; that is, the degree to which an individual feels able to succeed and emotionally involved in a positive environment. The importance of satisfying the three psychological needs in education was evident in Sheldon and Filak's (2008) experimental study. Manipulating competence and relatedness support within game-learning experiences to investigate their significance in regard to self-determination, they showed that the participants who had their three psychological needs satisfied in supportive conditions produced the best outcomes overall.

In educational contexts, students' psychological needs for autonomy, competence and relatedness can be supported in a variety of ways. First, students' autonomy can be supported by teachers providing them with a comfortable learning atmosphere where they can experience freedom and choice as well as helping students to acknowledge the reasons behind performing a particular activity (Niemic & Ryan, 2009). Implementing specific tasks and activities can have an influence on promoting students' ability to learn and to be creative (Niemic & Ryan, 2009). Second, students' feeling of competence can be supported by teachers' selection of activities which are challenging but understandable and can be mastered with the help of teachers' feedback (Niemic & Ryan, 2009). The challenges which students experience can affect the degree to which they feel intrinsically motivated. If the task is too easy, even if it is accompanied by teachers' positive feedback, it will not enhance students' competence because they are likely to feel bored (Deci & Ryan, 1985). If the challenge exceeds the ability of the learners, negative

feedback will affect their intrinsic motivation and result in frustration and anxiety (Deci & Ryan, 1985). Third, students' feeling of relatedness can be supported in teaching; students who feel accepted and connected as well as valued are more likely to develop self-regulation for tasks. Designing educational settings where students can establish attachments to others while learning, instead of working in isolation, can affect their motivation and lead to better learning outcomes.

3.9.1.1 Previous studies of SDT in education

SDT has been found to be beneficial when applied to educational settings (Niemic & Ryan, 2009; Noels *et al.*, 2000). It is useful for promoting learning and creativity as well as long-lasting influences (Niemic & Ryan, 2009). It also facilitates a specific kind of motivation as well as building students' self-confidence towards learning (Deci *et al.*, 1991). Researchers have identified SDT as an important factor for successful learning and have focused on a wide range of topics. Previous findings on the impact of an environment supportive of the human psychological needs in education are encouraging (Noels *et al.*, 2019). Niemic and Ryan (2009) reviewed several studies in the educational context which had applied SDT to investigate intrinsic motivation and found that intrinsic motivation, competence and high self-esteem were evident in children who were assigned to an environment which supported autonomy; that is, the students who were learning in an environment which nurtured their needs for autonomy, competence and relatedness. Dincer *et al.* (2012) have also investigated the effect of the autonomy-supportive climate on EFL learners. In that study, autonomy-supportive practice in the classroom included creating opportunities for students to choose and use informational language, and controlled practice involved giving them less opportunity to discover and directly providing them with the right answers. The study focused on students' perceptions and how they perceived their instructors as autonomy-supportive or controlling. The findings showed that the students had a high level of perceived competence in their English-speaking class, and that was positively correlated with autonomy-supportive environment and teachers' behaviour.

The other focus found on the studies which have applied SDT in an educational context is on integrating technology and collaborative learning (Alamer & Al Khateeb, 2021; Alberth, 2019; Akbari *et al.*, 2015; Awais Gulzar

et al., 2021; Buts & Stupnisky, 2017; Challob, 2021; Khojah & Thomas, 2021; Shi *et al.* 2014; Sun & Gao, 2021; Zhou, 2016). These studies have focused on designing learning activities and tasks which involve collaborative learning and social interaction in order to support students' psychological needs. For example, Awais Gulzar et al. (2021) intended to understand how the use of social media is related to the students' academic engagement and creativity through intrinsic motivation. The study was conducted on 267 undergraduate and postgraduate Chinese students. The researchers developed a 14-items scale to measure the students' motivation, creativity and engagement. They found that the incorporation of social media had led to a significant improvement on students' intrinsic motivation which consequently was related to the students' engagement and creativity.

Alberth (2019) aimed to investigate the incorporation of Facebook into a conventional writing class and the impact of social interaction on students' intrinsic motivation. The study utilised the Intrinsic Motivation Inventory (IMI) questionnaire to measure students' intrinsic motivation using the subscales of interest/enjoyment, pressure/tension, and perceived choice. The results showed that all the mean scores that indicated the students' intrinsic motivation were increased after the intervention. Further results were provided by qualitative data obtained from students' interviews which indicated that students found their learning experience more enjoyable, more interesting and fun and that they gained more confidence in their learning. Akbari *et al.* (2015) have also sought to explain the differences in terms of learning outcomes between a group of EFL English learners on a Facebook page and a face-to-face learning group. They emphasised the influence of social networking and its effect as an autonomy-supportive environment on students' learning. The study also used the IMI to measure students' autonomy, competence and relatedness and found that the students in the Facebook group felt more autonomous, competent and related than those in the other group, and that all three SDT variables correlated with learning outcomes.

Similarly, Sun and Gao (2021) have examined students' intrinsic motivation and students' behavioural intention in relation to technology adoption in mobile-assisted language learning. The participants were 169 undergraduate students majoring in education in a university in China. The

study utilised a survey to collect data in relation to the students demographic information and the time the students spent on mobile devices to accomplish different task types. The study found out that intrinsic motivation was not directly associated with students' behavioural intention in mobile-assisted language learning. However, it indirectly affected students' behavioural intention through perceived usefulness. In other words, students who felt that the mobile technology is suitable for learning tasks were more likely to use the mobile for educational purposes.

A study by Buts and Stupnisky (2017) also investigated the influence of social interaction to support students' psychological needs, however it only focused on the psychological need of relatedness. The study aimed to implement an online discussion board designed to scaffold students' relatedness development. They adopted Deci and Ryan's (1995) SDT theoretical framework. The experimental study was conducted on 83 graduate students enrolled in master programs in the United States. The study adopted a mixed method design and utilised qualitative and quantitative data. The study's results indicated that students who participated in the intervention improved their feeling of relatedness. Zhou (2016) also examined the interrelationship between learning orientations, learner autonomy and social anxiety in Chinese young learners. The study was conducted on 286 fifth-grade L2 primary students in China. The findings of the study showed that collaborative learning has the potential to support students' need of autonomy and reduce students' anxiety level. The study concluded that collaborative learning approaches therefore have the potential to meet the basic human needs as described in the SDT.

In an EFL Arabic native-speaking context, Challob (2021) examined the effect of collaborative environment provided by flipped learning on students' writing performance, autonomy and motivation in learning English writing. Flipped learning is a form of blended learning pedagogy in which students are given the study materials in advance electronically in order for them to prepare for lessons comfortably in their own time outside the classroom. Later, in the classroom, they spend time discussing the materials and deepening their understanding of them. This form of study builds on research which links the use of technology in teaching English language with its positive impact on

writing performance and motivation. Fifteen male and female students from an Iraqi university participated in the qualitative study which used pre- and post-study writing tasks, post-study interviews, diaries and observation. The results showed that students' writing performance, autonomy and motivation were enhanced by the collaborative learning environment created by the flipped writing classes.

The incorporation of mobile-assisted language learning and its influence on students' motivation was the focus of a study conducted by Alamer and Al Khateeb (2021). They examined the effectiveness of using WhatsApp on the language learning motivation of Saudi native speakers of Arabic. The app was used to share knowledge, extend the time of learning and provide opportunities for collaborative communication between the students and the instructor. The results showed the usefulness of WhatsApp on students' autonomous motivation which was demonstrated in their feeling of enjoyment and interest in accomplishing the language tasks compared with traditional teaching. Similar findings were reported by Khojah and Thomas (2021) who have conducted a study to investigate the use of smartphone-mediated task-based language teaching with 72 Saudi female university students. The study used a mixed method design in which SDT was used to explore students' motivation in relation to the use of mobile-assisted language learning tasks. The data of the study were collected using pre-tests and post-tests, observations, questionnaires and focus groups. The study's results showed a significant difference by the students who were taught using task-based language teaching and mobile tasks compared to the students who were taught in a traditional classroom.

Thus, as the above studies show there is a link between the satisfaction of the three human needs and the mediation orientations proposed by SDT (Noels *et al.*, 2019). In addition, there is a potential of developing students' intrinsic motivation through interaction and communication in English language classrooms. However, as the reviewed literature regarding the application of SDT in education showed, most of the studies have centred on teachers' practices in the classroom and on designing tasks for EFL learners to support the psychological needs for autonomy, competence and relatedness. Studies investigating the benefits of social activities such as pen pal writing on

motivation are lacking. Moreover, no studies on this relationship exist in the EFL Saudi context and on Arabic native speakers learning English as a second language.

3.10 Pen-Pal Letter Writing to Promote Communicative Competence and Motivation

The genre-based approach to learning highlights the role of the learners in constructing meaning and making sense of the world around them. The premise is that human social interaction and communication is essential for the construction of meaning and that through the process they can learn. In this sense, writing is seen as a communicative practice which is driven by expectations between readers and writers (Hyland, 2005). The potential for the successful interpretation of what writers intended to say in a text increases when writers anticipate what their readers expect (Hyland, 2005). One genre-based writing activity which can promote communication and meaningful authentic learning is pen-pal letter writing. As a specific genre, it has a specific communicative purpose and addresses a particular audience. It offers real-world interactions which provide students with the means to participate effectively in them. Pen-pal letter writing, as an authentic writing activity, engages the participants in purposeful writing to address a real audience.

Pen-pal letter writing as an authentic writing activity has the potential to improve students' language skills. Language learning and the ability to produce and comprehend lexical phrases can be achieved by engaging students in a communicative act (Ahmed & Pawar, 2019; Tovar Viera, 2017). This is because the exposure to the language in its context can bridge the cultural and linguistic differences and the gap between L1 and L2 (Al-Zubeiry, 2020). Pen-pal letter writing has shown a positive influence on students' language skills (Walker-Dalhouse *et al.*, 2009) and offers students the opportunity to engage in a communication which can influence their production of words. In other words, Pen-pal letter writing provides students with models of written forms, content and language use which can facilitate learning (Harmston *et al.*, 2001). Some learning is likely to occur because the received letters from native speakers are regarded as acceptable models of writing conventions, especially if the pen-pal correspondents are more mature

(Harmston *et al.*, 2001). In other words, engaging learners in meaningful interactions enables them to become familiar with acceptable language usage in a specific context (Tovar Viera, 2017). As a result, this exposure to the language through pen-pal letter writing in the language context can enable students to use the language successfully in different situations.

Studies which have examined pen-pal letter writing in an educational context have demonstrated positive outcomes. Pen-pal letter studies in educational contexts have used English both as the first language between native speakers of English (for example, Gambrell *et al.*, 2011; Rankin, 1992; Stanford & Siders, 2001) and between non-native speakers and second-language learners (for example, Barksdale *et al.*, 2007; Harmston *et al.*, 2001; Larrotta & Serrano, 2012; Liu, 2007; Walker-Dalhouse *et al.*, 2009). In both groups, however, research on the impact of adopting pen-pal correspondence for teaching to enhance students' writing skills and motivation is limited. The studies found on pen-pal communications have been conducted using pen-pal letters as a tool to enhance communication and develop cross-cultural understanding between native and non-native speakers of English (Barksdale *et al.*, 2007; Harmston *et al.*, 2001; Liu, 2002). To the best of my knowledge, few studies have investigated the influence of implementing pen-pal letter writing on literacy gains and writing skills and they have focused on primary school students with learning disabilities or on special education students (Harmston *et al.*, 2001; Rankin, 1992; Stanford & Siders, 2001). Two studies were found which focused on implementing pen-pal letter writing as an authentic learning strategy and aimed to develop the writing skills and motivation of native speakers and non-native speakers of English (Gambrell *et al.*, 2011; Larrotta & Serrano, 2012). Pen-pal letter writing has also been used in a study to provide pre-service teachers with knowledge and guidance in teaching linguistically and culturally diverse students (Mahalingappa, Hughes, & Polat, 2018; Patton, Hirano, & Garrett, 2017; Walker-Dalhouse *et al.*, 2009). In the next section, I shall describe the studies found in detail.

3.10.1 The use of pen-pal letter writing with speakers of English as their first language (L1)

Researchers who have examined L1 English speakers' pen-pal letter writing have been mainly interested in the development of students'

communicative ability and their literacy skills, with a specific focus on the development of learners with disabilities at elementary school level and on developing pre-service teachers' skills. For example, Rankin (1992) carried out a pen-pal project which focused on the growth of literacy skills of native-speaking, elementary-level special-education pupils and specifically examined the development of academic skills such as reading, writing and oral communication. The project was conducted with 480 pupils in a Midwestern US school, who corresponded with graduate students majoring in special education in the University of Nebraska. The study provided the students with an authentic experience which could enable them to communicate and move away from traditional teaching instruction. The pen-pal connection was one of the requirements of a module called 'Diagnosis and Correction of Reading Disabilities' which also aimed to benefit graduate students in terms of developing their analytical skills and educational decision-making. They were asked by the researcher (as their course instructor) to collect the letters which they received from their correspondents every week and to analyse them. The graduate students recorded the changes found in the letters from the elementary pupils throughout the exchange of letters. The changes were compared in terms of the letters' form, writing mechanism and use of communicative writing which was only assessed by counting the number of questions which the students asked and responded to. The findings showed a positive influence on the pupils' writing skills and communication. Their first and last letters were compared to establish whether there was any development. The ability to use correct letter form was evident in 47% of the pupils and an increase in the use of communicative writing was observed in 78% of them. The researcher concluded that the pen-pal project had a positive impact on the students' motivation and helped them to engage in writing even though motivation was not measured in the study but only referred to in the teachers' observations. It was shown that the students had developed a personal relationship and attachment which was observed between the pairs who exchanged letters. However, despite the results which highlighted the impact of pen-pal correspondence on the participants' writing ability and communication, the communicative style investigated focused mainly on the number of questions which the students asked and responded to in the letters.

In addition, the students' communication in writing was assessed in terms of how they moved from formal to informal language and topic initiation.

Another study which explored pen-pal letter writing and focused on students with disabilities was conducted by Stanford and Siders (2001) who sought to understand how students with disabilities who usually struggle with text production skills and face difficulties in planning and revising develop their writing skills when writing pen-pal letters. In addition, they focused on the benefits of technology specifically on the writing of students with disabilities. The study was conducted with 80 middle-school pupils in grades 6-8 (11-13 years old) and 48% of them were classified as having specific learning disabilities. Their correspondents were university undergraduate students majoring in special education in elementary education who were taking a Survey of Special Education course. The study involved three groups. The first group were the pen-pal pupils who corresponded by traditional handwritten letters with the university students. The second group comprised e-pal learners who wrote electronic letters to the same correspondents. The third group was the control group, which contained participants who wrote letters to an imaginary correspondent and had no real-life communication. To assess the students' writing, the study focused on the number of words generated in the letters and the complexity of the sentences used. The results showed the positive influence of pen-pal letter writing on students with and without disabilities who were in the e-pal group and the handwritten letter writing group in terms of their writing skills compared with the learners who wrote to an imaginary correspondent. The study highlighted the importance of providing a real audience for students who are learning writing. The results explained that providing an opportunity to communicate with a genuine audience helped the children to use their writing skills in a social context which had a positive impact on their writing.

A focus on the literacy skills of elementary pupils such as reading, writing and discussion using pen-pal letter writing was the aim of a study by Gambrell *et al.* (2011). Seven elementary teachers and 180 pupils in grades 3-5 (8-10 years old) in four different schools in the US participated in the study. The study sought to engage the pupils in reading books and writing pen-pal letters about the books as an authentic task which would develop their literacy

motivation and their reading, writing and discussion skills. A mixed-method design was used to explore the relationship between an authentic literacy task and the literacy motivation of the children and to document whether they demonstrated accountability to community, content and critical thinking during small-group discussions. Arguing that both the cognitive process and social practices are important for developing listening, speaking, reading and writing skills, Gambrell *et al.* (2011) adopted a socio-cognitive framework derived from the work of Purcell-Gates *et al.*, (2007). From this perspective, language should be practised and placed within its cultural and social purposes because the use of language in a social context adds meaning and purpose to literacy. Data for the study were collected from pre and post scores on the Literacy Motivational Survey (Gambrell *et al.*, 1996), interviews and records of discussions with students. Social practice and students' observations and learning experiences correlated with successful literacy gains. The findings from the quantitative and qualitative data also suggested that students' engagement in pen-pal letter writing as an authentic task had a potential to support their literacy gains and motivation; writing motivation was only measured by including two items in the survey and the other sub-constructs in the survey were related to motivation, self-concept and the perceived value of reading.

Similar findings in a recent study were reported by Hendrickson and Peterson-Hernandez (2020) who implemented a six weeks pen pal project in a third-grade classroom. The project aimed to engage the students in an interactive pen pal letter exchange with pre-service teachers to motivate the students to write. The letters were analysed in terms of spelling, grammar, and organisation. A survey was also used to gather the students' perception about the writing task in general. The study found out that pen pal letter writing had a positive impact on the development of students' writing ability. Students' letters were longer and were composed in a shorter period of time after their engagement in pen pal writing. In addition to this, there was a development in students' engagement and competency in reading.

The other focus found in pen-pal letter studies conducted in L1 with native speakers of English was on engaging pre-service teachers, second-grade teachers and second-grade students in a communication in which they could

integrate mathematics into a literacy activity using pen-pal letter writing. The study which was conducted by Norton-Meier, Drake, and Tidwell (2009) took place in a US Midwest university. The pre-service teachers were enrolled in an elementary literacy methods class, and the second-grade students were living in a federally designated rural poverty area. The data were collected from the pen-pal letters, interviews with the participants (pre-service teachers, second-grade students and second-grade teachers), and observations which were documented through field notes and videotape. The results suggested that exchanging pen-pal letters was a successful vehicle for mathematical communication. There was a significant influence on developing skills and enhancing understanding for both students and teachers.

3.10.2 The use of pen-pal letter writing with speakers of English as a second language (L2)

The studies which have been conducted with non-native speakers of English have focused on topics such as implementing pen-pal letter writing as an authentic strategy to develop students' language learning experiences, communication skills and cross-cultural understanding. For example, Liu (2002) examined pen-pal letter writing using e-mail with two groups of second-grade (7-8 years old) pupils; one group consisted of 23 native Americans in the US and the other comprised 65 Chinese pupils in Shandong, China. The study investigated the effect of pen-pal writing on the children's language learning experience and cross-cultural understanding. The two teachers responsible for the two classes had different goals. The American schoolteacher wanted to use pen-pal correspondence to help her pupils to learn about the similarities and differences between the two cultures, whilst the Chinese teacher wanted to help the pupils to develop their English language and keyboarding skills through authentic communication. The data were collected through field notes, written samples, photographs, questionnaires and recorded interviews with the two teachers. The findings showed that pen-pal letter writing gave the pupils an opportunity to have a meaningful interaction with children in another country which in turn broadened their understanding of other cultures. It also benefited the pupils in terms of their literacy gains and language development as they were engaged in reading, writing and oral communication. The study did not, however, adopt a specific assessment for

the pupils' writing. The development was observed in their written samples and in the interviews with the teachers.

Another study which focused on the development of literacy and cultural understanding was conducted by Barksdale *et al.* (2007) who carried out a pen-pal project between 90 children in an American public school and 85 children in a school in Domasi, Malawi. Most of the American participants were from lower socio-economic status families who lived in an isolated part of Virginia. The exchange occurred seven times over a period of three years. Unlike other studies which used email as a means of delivering letters, this study used hard copies simply because of the lack of technology and digital communication in Malawi. University faculty members who happened to travel back and forth between Malawi and Virginia as a part of a USAID grant helped to deliver the letters to the two schools. The study used a qualitative design and an inductive method to analyse the common themes and characteristics in the letters. Focusing on the nature of the children's communication through the exchange of letters, themes were identified, compared and coded. The three themes which emerged were understanding and comparing cultures and everyday life, language, and connections. The results showed that the pen-pal project helped the children in both countries to form a better understanding of cultures other than their own. The researchers stated that the impact of writing pen-pal letters on the Malawian children extended to gains in their writing abilities, motivation and linguistics, but the study did not use any specific analysis method to investigate writing or motivation, and only examples from the children's letters were used to show the development. Also, there was a partner change in 30% of the correspondences because of the long period of the project and the fact that some letters were written to children who had left the school.

Promoting students' learning and developing individual engagement was the aim of a study by Larrotta and Serrano (2012) who used pen-pal letter writing as a holistic and socio-cultural approach to literacy development. The study highlighted the role of human interactions in the development of literacy. Pen-pal correspondence was adopted to provide English-language learner students with an authentic experience to enhance their writing abilities and engagement. The participants were six US native English speakers who were

master's students majoring in adult education. They were enrolled in an ESL Literacy Track to obtain a minor degree in teaching English as a second language to adults. The pen pals were thirteen ESL adults from Spanish-speaking countries, aged 31 to 40, who were attending informal ESL classes in Texas. The data were collected through interviews, questionnaires, field notes and the participants' letters. The researchers identified common emerging themes as well as noting linguistic and cultural gains made by the participants. The results included the benefits of pen-pal correspondence on the students' engagement, the scaffolding of their learning and the benefits for teachers in preparing mini-lessons. The students' motivation was assessed by questionnaire. The questionnaire was not based on any motivational theory and contained questions about the students' experience of pen pal writing.

Another goal found for implementing pen-pal communication with non-native speakers was developing the skills of children with disabilities. Harmston *et al.* (2001) adopted pen-pal letters to investigate the usefulness of pen-pal writing on six pupils in grade 6 (aged eleven) with language learning disabilities (LLD). The correspondents were South African non-native speakers of English and pupils with normal language abilities in the city of Pietermaritzburg, in Kwa Zulu, South Africa. The aim of the study was to create an authentic learning environment which could help LLD students with below-average learning abilities to develop their skills and gain different experiences of other cultures. The project lasted for ten weeks during which the LLD children composed about seven letters to their pen pals. The researchers suggested a strategy called CRAFT (Context, Role of the writer, Audience, Real writing Format, and a writing Topic) by which teachers could create assignments. The researchers used the writing process approach during the correspondence. The LLD pupils were guided and instructed through pre-writing, writing and revising. Kratcoski's (1998) portfolio assessment was used to measure the progress which the students had made in their writing: their letters were compared in terms of content, grammatically correct sentences and writing mechanism (spelling, capitalization and punctuation). The scores obtained were compared between the US pupils and the South African children. The results showed that exchanging pen-pal letters helped the LLD children; the project had a positive influence on their writing in terms of content,

form and use of the language. It also affected their motivation as the researchers found that the children were enthusiastic about sharing their letters. For the South African pupils, the project was beneficial in terms of enhancing their cultural knowledge and understanding.

Adopting pen-pal letter writing has not only sought to benefit students, but also pre-service teachers. Walker-Dalhouse *et al.* (2009) studied the correspondence between 53 pre-service teachers majoring in elementary or early childhood at a state university in the US upper Midwest and 53 middle-school ELL refugees. The purposes of the project were to investigate the knowledge and attitudes of the pre-service teachers about ELL refugees before and after engaging in a pen-pal project and to investigate their understanding of teaching linguistically and culturally diverse students. The mixed-method study involved an experimental group and a comparison group and questionnaires were administered before and after the project. The results showed that the project had an effective impact on the teachers who participated as it better prepared them to work with ELL students than the comparison group and the teachers who did not participate. The project broadened the participants' knowledge about refugee ELL students.

Patton, Hirano, and Garrett (2017) have also carried out a pen pal project between preservice teachers in the US and English as a foreign language (EFL) students. The study aims to investigate what preservice teachers learn through pen pal letter exchanges with Brazilian EFL students. Eighteen reflections were gathered from the participants and were analysed qualitatively for recurring themes. The findings of the study suggest that pen pal letter exchanges can provide a valuable opportunity for preservice teachers to learn about the language and culture of EFL students, develop empathy and understanding towards them, and improve their own language skills. Similarly, EFL students can benefit from the exchanges by practicing their language skills, learning about the culture of the target language, and building connections with native speakers.

Similarly, Mahalingappa, Hughes, and Polat, 2018 have conducted a study to investigate the impact of electronic pen pal letter writing on the self-efficacy and instructional practices' knowledge of American preservice

teachers. This quasi-experimental study involved seventy-four preservice teachers who exchanged pen pal letters for a semester with a group of English Language Learners (ELL) in public schools. The findings of the study suggest that the online pen pal experiences with ELL students had a positive impact on the self-efficacy and instructional support knowledge of the preservice teachers. The preservice teachers reported an increased confidence in their ability to teach ELLs, as well as a better understanding of the needs and challenges they may face. The study also found that the preservice teachers developed a deeper understanding of language acquisition and pedagogical strategies for teaching ELL students. The study highlights the potential of virtual exchange programs as a tool for Developing preservice teachers and offering them specially designed training experiences to meet the needs of a variety of school students.

3.11 Gaps in the Literature

The review of the literature discussed throughout this chapter helped to identify some theoretical, methodological and contextual gaps regarding the effects of using pen-pal letter writing on students' communicative ability, language competence and motivation. In this final section, I shall summarise the main points which arose from the review and their contribution to the current study.

The review of the approaches to teaching writing showed that the cognitive approaches had an impact on the ways in which writing has been understood, researched and taught in language classrooms. Although this line of research has provided useful insights into the writing process, the lack of focus on the communicative aspect of writing has left gaps in our knowledge of writing as a communicative activity. Viewed from genre-based perspectives, writing is no longer seen as an individualistic surface-focused activity, but an activity which embodies socially constructed meanings. The ESP genre-based framework of writing is influential in teaching L2 students but is still inadequate in terms of research on writing (Cheng, 2008). There is a lack of genre-specific writing research in the EFL context and there is a need for it especially for EFL students who encounter difficulties in writing in terms of understanding the audience's needs and the purpose of writing (Rahman, 2011). Implementing

pen-pal letter writing as a genre-specific task has the potential to fill this gap by providing students with an opportunity to see how language works in social situations, especially given the limited exposure to authentic English writing in classrooms (Rahman, 2011). Additionally, The current study focuses on using the social constructivism and socio-cultural theories of learning to explore how pen pal letter writing can facilitate Saudi EFL students' development of communication skills and language proficiency. By engaging in cross-cultural communication with American students through letter writing, Saudi students are provided with an opportunity to interact with an authentic audience and learn about different language conventions. The American students, as proficient users of the language, can serve as peer-to-peer scaffolding and provide support for the Saudi students to work through their ZPD stage. This exposure to the language and writing conventions can help Saudi students to improve their communication abilities and develop their language proficiency in a meaningful and authentic way.

In the current study, pen-pal letter writing was carried out within a specific context, for a specific audience and with a specific purpose. However, the review of relevant pen-pal studies revealed a lack of studies which have investigated pen-pal letter writing as a genre-based writing activity. It was found that research into the use of pen-pal letter writing in L1 and L2 has focused on language learning and developing cross-cultural understanding between native and non-native speakers of English (Liu, 2002; Barksdale *et al.*, 2007; Harmston *et al.*, 2001). The review showed that only a few studies have investigated the influence of implementing pen-pal correspondence on literacy gains and writing skills and that those which do exist had focused on primary students with learning disabilities and on special education students (Rankin, 1992; Stanford & Siders, 2001; Harmston *et al.*, 2001). Only two studies were found which had examined implementing pen-pal letter writing as an authentic learning strategy to develop the writing skills and motivation of both native and non-native speakers of English (Gambrell *et al.*, 2011; Larrotta & Serrano, 2012). In addition, pen-pal letter writing was used to provide pre-service teachers with knowledge and guidance for teaching linguistically and culturally diverse students (Walker-Dalhouse *et al.*, 2009).

In addition, since the focus of previous studies has mostly been on students' engagement and cultural understanding, they were found to be predominantly qualitative in their design, such as those of Barksdale *et al.* (2007), Larrotta and Serrano (2012) and Liu (2002). Thus, they did not investigate communicative competence and writing was not specifically assessed in terms of the development of writers' ability to communicate. The focus has been predominantly on the progress of students' writing in terms of form, content and grammatically correct sentences, as in the study by Harmston *et al.* (2001). Studies in the corpus analysis had significantly informed L2 writing instruction, whereas the current study used several methods to capture the communicative aspect of writing and the writers' language choices, such as the use of metadiscourse, vocabulary breadth and lexical diversity, which can be influenced by the specific context and audience.

Furthermore, the benefits of pen-pal letter writing on students' motivation have not been the main focus of previous studies. They have only referred to the development of students' motivation from the feedback on students' writing or teachers' observations, as in the studies of Larrotta and Serrano (2012), Stanford and Siders (2001) and Barksdale *et al.* (2007). Students' motivation was assessed by Gambrell *et al.* (2011) who adopted the literacy motivation survey developed by Gambrell *et al.* (1996) but the study was conducted in an L1 context and with native speakers of English and focused on motivation, self-concept and the value of reading. In the current study, SDT was chosen to measure students' motivation in relation to the impact of adopting pen-pal letter writing as a genre-based writing activity. SDT has been distinguished from other motivational theories by its focus on human needs as the energizers behind behaviours, and the orientations of motivation which are the reasons behind actions such as goals and attitudes (Deci *et al.*, 1991). Although studies which have adopted SDT specifically in an EFL context are limited (Noel *et al.*, 2019), the reviewed literature on the impact of social interaction and communication on the development of intrinsic motivation SDT in educational contexts showed positive outcomes, as in Akbari *et al.* (2015), Buts and Stupnisky (2017), Challob (2021) and Shi *et al.* (2014). More specifically, the studies that were conducted in the Saudi context, as in Alamer and Al Khateeb (2021), Khojah and Thomas (2021).

In addition, the research in the field of computer mediated communication (CMC) has shown that different mode of communication such as synchronous computer mediated communication (SCMC) and asynchronous computer mediated communication (ACMC) can have great potentials for students to develop their communicative competence, language development and motivation. Pen pal letter writing can be beneficial, especially considering the specific task design that allows for one to one communication. Additionally, the delayed nature of the responses and the advantages indicated in the reviewed literature regarding the time this mode provides learners to plan, produce, and edit their written texts. The pen pal letter project in this study however was implemented using papers and without an internet due to the lack of the use of technology in the institution where this study was conducted. The current study therefore focused on exploring the students' communicative ability by investigating their use of metadiscourse markers, while also examining the influence of the authentic interaction with an audience provided by pen pal letter writing on students' language development using lexical diversity and vocabulary profile, and their motivation.

Contextually, research on the impact of pen-pal letter writing in the educational context has been conducted mainly in the EFL context for non-Arabic native speakers, such as for students in South Africa, China, Malawi and Spain. More specifically, there is a lack of research on the impact of pen-pal letter writing in the development of students', and especially L2 students', writing skills and their motivation. Studies conducted specifically in Saudi Arabia or for EFL Arabic native speakers focusing on the development of students' communicative competence are particularly lacking. In addition, the review of the literature related to the current situation in teaching EFL students writing in Saudi Arabia indicated that there is an absence of the English language exposure and a lack of interaction and collaborative learning in writing classrooms. In addition, there are still many barriers that prevent the use of technologies which can facilitate learning and increase students' writing motivation (Aljameel, 2022; Alqahtani & Issa, 2018). This is specifically important as the recent studies on Saudi students' learning of English revealed their low levels of motivation, which could be due to the lack of communicative approaches to learn the English language (Alkodimi & Al-Ahdal, 2021; Daif-

Allah & Aljumah, 2020). Thus, to fill these gaps, the current study was designed to investigate the effects of pen-pal letter writing on Saudi EFL college students' writing performance, language competence and motivation. The study examines students' communicative skills by focusing on their use of metadiscourse markers, the impact of such communication on their language ability by investigating students' lexical diversity and vocabulary breadth, while also investigating their motivation.

Chapter 4 Methodology

4.1 Introduction

The present chapter provides an overview of the methods and the rationale for choosing the research design of this study. The chapter is divided into ten main sections. Section 4.2 presents and justifies the quasi-experimental design implemented in the study, and Section 4.3 provides information about the study participants and the three groups which were formed for the study purposes. Section 4.4 sets out a detailed discussion of the data collection methods, and Section 4.5 describes the procedures followed in the data collection. Section 4.6 then specifies the data analysis methods used, and Section 4.7 introduces the pilot study. Section 4.8 addresses the study's ethical issues, and Section 4.9 explains how the quality criteria were established in the study. Finally, Section 4.10 provides a summary of the chapter.

The aim of the current study was to investigate the effects of pen-pal letter writing on students' ability to project their readers and to establish a relationship with them using appropriate English language, while also examining the role of pen-pal letter writing in students' language development and writing motivation. The following research questions and sub-questions were formed to achieve these aims:

RQ1: What is the effect -if any-of a pen-pal writing intervention on the development of EFL Saudi students' communicative ability to interact with their audience? (measured by their use of metadiscourse markers)

1. How does the use of metadiscourse markers in pen-pal letter writing compare in the pre- and post-test results of EFL Saudi students in the experimental and control groups?
2. How does the use of metadiscourse markers in pen-pal letter writing compare between EFL Saudi students in the experimental group and American students as their correspondents?

3. How does the use of metadiscourse markers in pen-pal letter writing compare for EFL Saudi students in the experimental group at different points in time over one semester?
4. What are the most frequent metadiscourse markers which EFL Saudi students in the experimental group and American students use in their pen-pal letter writing over the semester?

RQ2: What is the effect of a pen-pal writing intervention on the development of EFL students' English language proficiency? (measured by their vocabulary breadth and lexical diversity)

1. How does the vocabulary breadth compare between Saudi students in the experimental and control groups in their pre and post test results?
2. How does the vocabulary breadth in pen-pal letter writing compare between Saudi students in the experimental group and American students?
3. How does the lexical diversity of Saudi students compare between the experimental and control groups in their pre and post test results?
4. How does the lexical diversity in pen-pal letter writing compare between Saudi students in the experimental group and American students?

RQ3: How does the pen-pal letter writing intervention interact with students' writing motivation?

1. How does the motivation compare between Saudi students in the control and experimental groups at the start of the experiment?
2. How does the motivation compare between Saudi students in the control and experimental groups at the end of the experiment?
3. How does the motivation compare for Saudi students in the control group between the start and the end of the experiment?

4. How does the motivation compare for Saudi students in the experimental group between the start and the end of the experiment?
5. How do Saudi students in the experimental group develop relatedness in their pen-pal letter writing?

RQ4. What are the perceptions of the Saudi students in the experimental group about their pen-pal letter writing experience?

4.2 Research Design

A research paradigm consists of four different components: epistemology, ontology, methodology, and methods. An epistemological perspective refers to the ways knowledge is acquired and created, and ontological stance refers to what makes and constitutes social reality (Crotty, 1998). Every research paradigm is established according to its epistemological and ontological stance. In other words, each stance represents different assumptions of reality and knowledge and therefore leads to a specific research approach. The research methodology is defined as the strategy, plan, and design that lies behind the choice of a particular method and how that choice is linked to the outcomes (Crotty, 1998). The last component of a research paradigm is the methods which are defined as the techniques and procedures for collecting and analysing the data (Crotty, 1998).

Positivism is the position which believes that reality exists objectively without human consciousness, and this reality can be discovered by observing it (Bryman, 2016). Therefore, positivists theorists maintain that phenomena exist independently of human interpretations (Scotland, 2012). The knowledge to be discovered is seen as absolute and value free, and “is not situated in a political or historic context” (Scotland, 2012, p. 10). Since knowledge must be discovered objectively, the research, the researcher, and the participants are all different entities that must be separated to appropriately develop knowledge (truth) (Scotland, 2012). In contrast to this stance, interpretivism maintains that there is no such an objective truth and, therefore, meaning is not discovered but constructed. Interpretivist theorists believe that reality is multiple and humans construct meaning in different ways. Therefore, the job of the social

scientist is to interpret human actions and the social world from the humans' own perspective (Bryman, 2016).

Pragmatism came as a philosophical choice to combine the two philosophical positions of positivism and interpretivism. The word pragmatism is derived from the Greek word "pragma", which means action, and which is the main concept of this philosophical stance (Pansiri, 2005). It maintains that reality exists independently of the human mind, which is in line with the positivist view; however, they do not accept that the truth about reality is determined (Teddlie & Tashakkori, 2009). According to pragmatism, human behaviour is inextricably linked to one's prior experiences and the ideas that resulted from those experiences, and, therefore, humans have the power to control their own experience by their actions and choices (Pansiri, 2005). Reality in this sense is dynamic and is always changing through actions.

Positivism typically favours quantitative methods and deductive approach, whereas the constructivism emphasises qualitative methods and inductive approach. However, pragmatism is often associated with mixed methods research. Mixed method research is seen as the third methodological paradigm which rejects forced choices between positivism and constructivism in terms of methods, logic, and epistemology (Teddlie & Tashakkori, 2009). Pragmatism therefore challenges the distinction between subjectivity and objectivity and sees these two paradigms as existing "on a continuum, rather than on two opposing poles" (Teddlie & Tashakkori, 2009, p. 87). By adopting this stance, the researcher's selection of the research design and methodology is determined based on how appropriately they address the research questions.

As an overall methodological position, the present study adopts a pragmatist research paradigm. The philosophical paradigm chosen for the present study is determined based on the study's aims and the nature of the study's data. Since the present study is focused on investigating the impact of pen pal letter writing as a pedagogical method to develop students' communicative ability, language development, and writing motivation, the study required both quantitative and qualitative methods. The selection of this specific perspective of the study comes from the belief that learning is

constructed and that social contexts and learning environments have an influence on the learners' development and behaviour. The current study concurs with this view, and the combined research method of both quantitative and qualitative approaches, utilising such data collection methods as quasi-experiment, semi-structured interview, and a motivational questionnaire.

The selection of mixed methods within this methodological design allowed to obtain rich results and a thorough understanding of the investigated issues (Cohen *et al.*, 2011). This is especially important since exploring writing practice and genre involves adopting a combination of several methods (Hyland, 2004; 2009). Furthermore, the selection of mixed method design is beneficial when dealing with contexts in which maintaining control over different variables is difficult, such as classrooms. In other words, various factors such as teaching styles, learners' preferences and peer relationships can all influence the results, so it is best to combine classroom experiments with other forms of data collection (Hyland 2009). By seeking "to verify one set of finding against the other" (Dörnyei, 2007, p. 164), the study therefore benefits from both quantitative and qualitative methods in different combinations to address the research questions.

The use of the quasi-experiment in this study was driven by the nature of the research questions. Since the key feature of experimental designs is to identify the effects of assumed causes (Shadish *et al.*, 2002), an experimental design was deemed suitable to investigate these causal relationships (Bryman, 2016; Shadish *et al.*, 2002). Furthermore, in educational research, quasi-experiment is the most frequently used design and differs from true experiments by the absence of the random assignment of the participants. In other words, in situations in which it is hard and almost impossible to obtain randomly selected groups and the researcher must employ already existing groups, a quasi-experiment design is more suitable (Brown & Rodgers, 2002; Cohen *et al.*, 2011). Although quasi-experiments are regarded as less strong than true experiments, their external validity is not a concern as long as they take place in an authentic setting (Dörnyei, 2007). This also adds to the design's ecological validity, which means that it enables a researcher to investigate a specific situation occurring in its natural setting (Cohen *et al.*, 2011). In this current study, it was impossible to obtain randomly assigned

classes because of the regulations of the English Language Centre (ELC) where the data were gathered, so instead, two existing classes in the ELC were selected. Hence, a quasi-experimental design was adopted for the present study.

4.3 Study context and participants

The study took place in the English Language Centre (ELC) at Taibah University in Saudi Arabia and focused on the learning of English in the Preparatory Year English Language (PYEL) programme. This is one of the key programmes that the ELC offers and it is a compulsory prerequisite for students who are enrolled in various undergraduate programmes, such as science, health, or humanities.

For the purpose of the study, a total of 66 students, 44 Saudi EFL students and 22 American proficient speakers of English, participated in the study. All of the participants were learners of English writing including the American students. Since Saudi educational institutions are segregated, the Saudi EFL students were all female. The students were studying in their first semester and were non-randomly assigned to two groups, experimental and control. The control group which consisted of 22 Saudi students was used in the study to mitigate any threats to the study's internal validity, and to ensure that the introduction of the intervention is the only difference between the two study's groups (Crano, et al., 2014). In other words, the control group served the same basic function as in experimental research; that is, to provide a baseline for the comparison with the experimental group. The key difference is that in quasi-experimental research, the groups are not randomly assigned, which limits the ability to infer causation. Nonetheless, the control group can still help to rule out alternative explanations for any observed changes in the experimental group, thereby increasing validity in the results.

At Taibah University, Saudi students who join the PYEL programme are required to take the Oxford Placement Test. According to their results in the Oxford Placement Test. The English proficiency of the two classes obtained in the current study ranged from B1 intermediate to B2 upper intermediate. Two English modules are required in the PYEL, which are divided into the two semesters ENG101 and ENG102. Students took the ENG 101 course in the

first semester of the academic year, and ENG 102 in the second semester. Each English course has four credit hours per week and is divided into two two-hour sessions, one for reading and writing, and the second session is for listening and speaking. The pen pal writing experiment was integrated in the reading and writing session in ENG101 for the experimental class. The semester was a fast track with 15 weeks in which the data of the study was collected. The description of the module provided by the ELC explains that the course is one of the modules of the prep-English programme, and aims to familiarise students with the basic English language skills. It also provides students with the help they need to write sentences and paragraphs. The course books used in the academic year for both the experimental and control groups is Q Skills for Success by Gramer et al. (2011). The book series which included 3 levels, is covered in the space of the academic year. Each book in every level consists of 8 units. In the first semester, the students focus on level one and half of the content of level two books, while in the second semester, they continue with the other half and also complete level three of the books. Each level consists of two books, one for listening and speaking, while the other for reading and writing. Both experimental and control groups covered the same units provided in the two reading and writing books during the semester; however for the experiment group, the pen pal letter writing tasks were substituted with four writing tasks from four units to enable students to compose their letters in the classroom. For the control group, the students undertook all of the writing assignments as required and indicated in the textbook. The writing section was located at the end of each unit and required students to complete some exercises, answer questions, and then compose a paragraph. The texts required for each unit differed in terms of their purpose depending on the theme of the book unit. The topics that were covered in the first semester were the following:

- What is a good job?
- Why do people immigrate to other countries?
- Why is vacation important?
- What makes you laugh?
- How do sports make you feel?
- Is it ever OK to lie?

- How are children and adults different?
- What are you afraid of?
- Why does something become popular?
- How do colours affect the way we feel?
- What does it mean to be polite?
- What makes a competition unfair?

The writing course outcomes were rather general, and there were no specific outcomes regarding specific skills such as writing. For example, the course mentioned developing students' communicative ability, such as being able to interview classmates and giving presentations on a specific topic. The course also aimed to develop students' ability to participate in group discussion, while also working independently in activities such as designing a survey. Additionally, the teaching methods used as provided by the ELC included demonstrations, pair, individual and group work, whole class discussions, and E-learning. Additionally, the course learning outcome assessment provided by the ELC was based on continuous assessments of writing 5%, writing Portfolio 5%, and speaking 10 %, online activities 5%, midterm exam 35%, and final exam 40%. The final exam was a comprehensive test which covered all the four skills such as listening, reading, writing, and language use (grammar & vocabulary).

The third group, which was the reference group, consisted of 22 American proficient users of English enrolled on a Composition course in their first year university studies at the University of Pittsburgh (based in Bradford in North America). All of the recruited students in this group were aged between 18 and 22 and comprised eleven male and eleven female students and were taking two composition courses, Composition I (ENG 101) and Composition II (ENG 102), at the time of the data collection. Both courses were mandatory for them to graduate from a four-year university programme and involved various writing activities, including pen-pal letter writing. There was no test required for the American students by the University of Pittsburgh to join the programme. Therefore, writing and literacy levels of the American students were not available for the researcher. Unlike the Saudi students, pen pal letter writing was a required writing task for the American students and was

included in their course syllabus. According to the syllabus description, the purpose of the pen-pal letter writing element for the American students was to develop students' critical thinking as it applied to specific writing situations and instructions, and their competency in proofreading their own work and making revisions to basic letter writing, as well as to enable them to practise grammar, spelling and rhetorical techniques related to audience, purpose and topic. Table 4.1 below summarises study participants

Table 4.1: Characteristics of the study participants (n=66)

Group	Age	Number	Gender	Oxford Placement Test Scores
Experimental	18-25	22	Female	B1 Intermediate : 15 B2 upper intermediate: 7
Control	18-25	22	Female	B1 Intermediate : 14 B2 Upper intermediate: 8
Reference	18-22	22	Female (11) Male (11)	-

4.4 Data Collection Methods

4.4.1 Pre- and post- writing tests

At the beginning of the study, the Saudi students in the experimental and the control groups took a pre-writing test to establish the parity of the two groups in terms of their writing level. Another writing test was undertaken by the two groups at the end of the semester after the experiment. For these two writing tests, the Saudi participants in the experimental and control groups were given instructions and a description of an imaginary person to write a pen-pal letter to. The topics of their letters were similar to the topics which they were required to write about or discuss in their classrooms. That is, the instructions and topics for the pre and post writing tests were as follows:

- **Pre-test writing task:**

Imagine that you are writing a pen-pal letter to a male college student in the US. He is eighteen years old and in his first year studying maths. Think about the following topic and decide what you want to write to your pen-pal about it.

There are some people who are so addicted to their cell phones that they can't stop looking at them. Do you think you are addicted to your phone? What are some solutions for this problem?

- **Post-test writing task:**

Imagine that you are writing a pen-pal letter to a female college student in the US. She is nineteen years old and in her first year studying history. Think about the following topic and decide what you want to write to your pen pal about it.

People deal with stress in many different ways. Some prefer to stay in a quiet place reading, whilst others surround themselves with friends and do activities. How do you deal with stress? And what is your favourite place to go when you feel stressed?

In total, 88 letters were written in the pre and post writing tests, and collected from the experimental and control groups with a total of 10, 462 words.

4.4.2 A pen-pal letter writing task

Four pen pal letter writing tasks were designed to measure students' communicative ability in the use of metadiscourse markers and language development such as vocabulary breadth and lexical diversity. For the study's purpose, the pen pal letter writing tasks were chosen as an authentic writing activity that can engage the participants in purposeful writing to address a real audience. The writing topics of the pen pal writing tasks were similar to the topics planned for the pre and post writing tests and were familiar to the students and which they used to discuss or write about in class. Since the Saudi students did not have prior experience with pen pal letter writing, the sub-genre of problem-solution topics was chosen to facilitate the discussion between the students. In addition, the Saudi participants were novice writers, and the writing prompts could encourage them as well as provide them with support to share their own opinions and generate ideas. Therefore, letters' pre-decided topics functioned as an ice breaker, and students were able to talk about themselves and get to know each other beside giving their opinion about the given topics. See Appendix 4 for samples of the students' written pen pal letters.

The instructions and topics for the pen pal writing experiment were as follows:

Week 2 writing task:

You'll be writing a pen pal letter to a college student in the United States. Think about the following topic and write what you want to communicate with the person about it.

Some people complain that they are busy and cannot find time to do any enjoyable activity. How do you think people can overcome this problem? And what kind of activities do you prefer doing in your free time?

Week 4 writing task:

You'll be writing a pen pal letter to a college student in the United States. Think about the following topic and write what you want to communicate with the person about it.

Some people decide to travel to a new place to overcome difficult times. Have you ever travelled to a new or exotic place? Talk about your experience, and how travelling can be a solution and improve emotional health.

Week 6 writing task:

You'll be writing a pen pal letter to a college student in the United States. Think about the following topic and write what you want to communicate with the person about it.

The number of people who are eating fast food regularly is increasing, which can cause health problems. Do you eat fast food regularly? How do you think this problem can be solved?

Week 8 writing task:

You'll be writing a pen pal letter to a college student in the United States. Think about the following topic and write what you want to communicate with the person about it.

People always plan their dreams and goals. Sometimes, achieving these dreams can be challenging. Talk to your pen pal friend about your dreams and goals and how to overcome the challenges.

The writing tasks were accomplished in four sessions during one academic semester. Each session was one hour and 50 minutes long. After the American students had sent their letters about each topic to their pen pal friends, the Saudi students were instructed to carefully read the letter which they had received and then write a reply letter in which they responded to their pen pal's questions. Students were allowed to use dictionaries if they needed, and translators. The composed letters had to be a page in length and double-spaced. The time frame allowed for four exchanges of letters during the semester, which was found adequate to follow students' writing development per semester. The writing tasks were assessed for the Saudi and American students at both institutions. By the end of the pen pal letter exchanges, a total of 28,886 words resulted from the collected 176 pen pal letters.

4.4.3 Intrinsic Motivation Inventory questionnaire (IMI)

The Intrinsic Motivation Inventory (IMI) questionnaire was adopted to investigate the possible benefits of pen-pal writing for the Saudi EFL students'

writing motivation. The IMI was originally designed by Deci and Ryan (1985) to evaluate participants' subjective experiences regarding a specific activity. It has since been widely used in experiments investigating students' intrinsic motivation and self-regulation (for example, Deci *et al.*, 1994; Plant & Ryan, 1985; Ryan, 1982; Ryan *et al.*, 1983; Ryan *et al.*, 1990; Ryan *et al.*, 1991) and can be downloaded from the official website of the Self Determination Theory (SDT): www.selfdeterminationtheory.org.

The questionnaire consists of seven sub-scales to assess students' interest/enjoyment, perceived choice, perceived competence, pressure/tension, effort and importance, value/usefulness and relatedness. Most of the sub-scales are positive indicators of intrinsic motivation but pressure and tension are regarded as a negative indicator of intrinsic motivation. All seven of the sub-scales of the questionnaire were employed in the current study. The relatedness sub-scale which assesses interpersonal interaction was removed from the pre-questionnaire for both groups, experimental and control, and from the post questionnaire for the control group, as no interaction occurred during these stages. The relatedness sub-scale was only added to the post questionnaire for the students in the experimental group. Two versions of the questionnaire were created; one for both the experimental group and the control group at the beginning of the experiment, and the other for the experimental group at the end of the experiment, when the control group received the same questionnaire as at the beginning.

The IMI questionnaire's items were modified slightly to fit the study's specific writing activities in which the students were engaged. For example, the item 'I tried very hard on this activity' was changed to 'I tried very hard on this pen-pal letter writing activity' for the students in the experimental group. In the other version, it was modified to 'I tried very hard to write'. Another example of modifying one of the items in the IMI questionnaire was the item 'I think I am pretty good at this activity', which was modified to 'I think I am pretty good at writing', and to 'I think I am pretty good at writing pen-pal letters' in the post questionnaire for the experimental group. The modified items were later randomised across the seven sub-scales to minimise any ordering bias.

In addition, questions about students' demographic information and their experiences in relation to pen-pal letter writing and writing in English in general were also added to the questionnaire. More specifically, the demographic part included questions about students' age, major and year of study, and the background part included questions about the students' pen-pal letter writing experience and their experience of writing in English in general, including the use of social media websites (the full versions of the revised questionnaires are in Appendix 1).

4.4.4 Semi-structured Interview

Semi-structured interviews with students were used to acquire in-depth information about the students' perceptions towards their communication with their pen pals and to investigate their motivation during the pen-pal letter writing activity. More specifically, semi-structured interviews were conducted at the end of the experiment, after the completion of the post-motivational questionnaire, and offered students opportunities to elaborate on their pen pal exchanges in terms of the following topics:

- The students' prior experience of pen-pal letter writing in English. The students were asked whether they had any experience related to writing letters either online or by a conventional mail letter.
- The students' feelings about their pen-pal letter writing experiences, especially about their enjoyment of pen-pal letter writing, their competence, and their feeling of relatedness towards their pen pal.
- The difficulties and the usefulness of pen-pal letter writing, especially, how students coped with the activity and whether they faced any challenges or difficulties related to pen-pal letter writing. Questions about whether students found pen-pal letter writing helpful and useful were also asked.

Depending on the direction of the conversation between the researcher and the interviewees, the planned themes and questions (Appendix 2) were used flexibly to allow for follow-up questions as needed and to obtain information about the participants' beliefs which needed to be interpreted (Brinkmann & Kvale, 2015). This was particularly useful in the current study as it allowed the participants to express their thoughts without restraining potential further discussion. There were therefore many open-ended follow-up

questions which helped me to elicit as much information as possible about the participants, their situation and their experience.

Nine Saudi participants from the experimental group were invited to participate in the interviews. They were selected on the basis of their post-questionnaire overall scales scores. In other words, aggregate scores of all three SDT dimensions were used to identify their motivation level. Based on the students' level of motivation, three high-motivated students, three mid-motivated students, and three low-motivated students were selected. The purposeful selection of interviewees allowed to eliminate any possible bias resulting from randomly selecting interviewees (Dörnyei, 2007) and made it easier to examine their perceptions of pen-pal letter writing in relation to their motivation scores.

Each participant was interviewed once and individually. The interviews were conducted over the telephone because of the students' exams at the end of the semester. The interviews were audio recorded with the interviewees' consent and they each lasted around 20-30 minutes. The interviewees were asked to find a quiet place which had no distractions in order to ensure good communication between the researcher and the interviewee, as well as to enable a good quality of the audio recording. To make the participants feel comfortable and to minimise any potential pressure that they might feel in using English, and which might have affected their ability to express themselves freely, the interviews were conducted in Arabic, the native language of the participants.

4.5 Data collection Procedure

The data collection was carried out at the beginning of the Saudi academic year in September 2018. The following procedures were followed when conducting the study.

At the beginning of the semester, a meeting was held between the researcher and the Saudi module' instructor to explain the experiment and its procedures. Prior to the students' participation, the Saudi participants were asked to read and sign an informed consent form. Both groups were asked to answer the pre-IMI questionnaire, after which both the experimental and the

control groups took a writing test in which they were asked to write a pen-pal letter to an imaginary person. This was done for both groups separately, each in their own class, at the same time, in a period of one hour and 50 minutes. After completing both the questionnaire and the test and the following experimental session, students in the experimental group were provided with information about the writing task to a pen pal. At the first session held between the students and their instructor, an introduction to the US, the receiving university and the correspondents to whom they would be writing during the project, was delivered. Before the start of every exchange, I sent the writing instructions to the American students' course instructor. To facilitate the procedure of sending the letters between the instructors of the classes and the researcher, an online dropbox was created. This was accessible by the American instructor and the researcher to send and collect the letters after every exchange. To organise the process, files were created in the dropbox according to the number of exchanges and were shared between the researcher and the American instructor.

The American students received the instruction about the first exchange through their course instructor and started composing their letters first. The first group of letters arrived in the researcher's dropbox in a folder classified according to the American participants' names. Next, they were delivered to the Saudi students in the experimental group by their course instructor. The first group of letters in the first exchange was distributed randomly for the students in the Saudi groups, but after the Saudi students and the American students had been paired, the subsequent letters were sent and received by the named members of the established pairs (for example, '4th pen-pal letter from Tom to Amal'). Each pair remained unchanged during the four exchanges of the letters. The letters were all checked and read before every exchange by the researcher and the American course instructor to make sure that they did not include any personal information such as telephone numbers and email addresses. The reason for this precaution was to control the students' communication as much as possible during the experiment and to prevent any influence which the students might have on their development from any type of communication other than pen pal letter writing.

This process was repeated four times and was scheduled over the twelve-week semester. The control group was taught the same English reading and writing module as the experiment group provided by ELC at Taibah University and by the same Saudi course instructor. At the end of the semester, both groups undertook a writing post-test and completed the post-experiment questionnaire. After the writing experiment was completed, interviews were conducted with the nine selected participants from the experimental group. Table 4.2 summarises the data collection procedure. The 176 letters resulting from the four exchanges between the Saudi and the American students were gathered at the end of the experiment. As all of the participants completed all the letters in the four exchanges, 88 letters in total were collected from the Saudi students, and 88 letters in total were collected by the American students.

Table 4.2: The pre- and post-study design

Control group	Motivation questionnaire & pre-pen pal writing test	No intervention	Motivation questionnaire & post-pen pal writing test	-
Experimental group	Motivation questionnaire & pre-pen pal writing test	Four pen-pal writing exchanges with American students	Motivation questionnaire & post-pen pal writing test	Interviews with students

4.6 Data Analysis Methods

4.6.1 The analysis of the students' writing

To analyse the students' written texts obtained from the pre- and post-writing tests and the four exchanges of pen pal letter writing, the study combined several analysis methods, such as a corpus-based approach, text-based analysis, and statistical tests to investigate the effect of pen pal letter writing on the development of EFL Saudi students' communicative ability (measured by their use of metadiscourse markers) and the English language proficiency (measured by vocabulary breadth and lexical diversity). As discussed in section 3.5.3, Hyland's (2005) metadiscourse model was chosen to investigate the reader-writer communication during pen pal letter writing as a non-academic genre for several principles that made the model theoretically solid and analytically more reliable than the previous models. The selection of metadiscourse markers' categories was based on their relevance to the genre

of pen pal letter writing as it will be explained in the following section. Some categories were excluded as they were relevant to the academic writing genre, but not general English, which was the focus of this study. For example, endophoric markers which are used to refer to information in other parts of the text such as *noted above*, *see fig*, and *in section 2*, were excluded. The other category that was excluded was evidentials, as they used to refer to information from other texts such as *according to X* and *Z stated*.

To measure students' language development, vocabulary breadth and lexical diversity were selected in the current study. The selection of these two measures is based on two reasons. First, previous studies on genre that addressed L2 writers' development have focused mostly on the macro-level textual features such as texts' organisation and content, but little on the micro-level such as vocabulary, grammar, and mechanics (Yasuda, 2011). Since the primary focus of the study is on investigating students' communicative ability and language development, and considering the nature of pen pal letter writing genre as an informal and communicative task, the two measures of vocabulary breadth and lexical diversity were found more applicable. Second, the students participating in the study have a low language proficiency level; therefore the study focused on investigating the language development which might be influenced by the students' interaction by quantifying the number of words used and their variety.

For the statistical tests used in the analysis of students' writing, all the data was exported to the Statistical Package for the Social Sciences (SPSS) for analysis. Non-parametric tests were used since classical null hypothesis significance tests are not appropriate to be used in corpus linguistics due to the impossibility to fulfil the assumption of normality (Koplenig, 2019). The following sections will discuss the analysis methods used in detail.

4.6.1.1 Metadiscourse analysis

The pre and post writing tests completed by the Saudi students in both the experimental and control groups, and the pen-pal letters obtained from both the Saudi students in the experimental group and the American students in the reference group, were analysed to determine the use of metadiscourse markers. Hyland's (2005) interpersonal model of metadiscourse (see section

3.5) was used to investigate the students' communication with their correspondents during the letter writing. A group of specific markers which were relevant to a more general genre of pen-pal letter writing were selected to investigate the letters. Table 4.3 presents the markers used in the study along with examples of their use.

Table 4.3: Selected metadiscourse markers and their examples

Category	Function	Example
Interactive markers	Guidance to the readers in the text.	
<i>Code glosses</i>	Aid readers to grasp meaning by elaborating on what has been said.	for example, such as, in other words,
<i>Frame markers</i>	Used to sequence parts of the text or order an argument	first, then, 1/2, finally, well, right, OK, now.
<i>Transition markers</i>	Involve the readers in the text by helping them to identify connections between clauses.	Conjunctions and adverbial phrases (in addition, but, thus, and).
Interactional markers	Involve the readers and open opportunities for them to contribute.	
<i>Engagement</i>	Involve readers either to focus their attention or participate in the discourse.	consider, note, ?, inclusive we.
<i>Attitude</i>	Convey surprise, agreement, importance, obligation, frustration.	agree, prefer, unfortunately, hopefully, surprisingly.
<i>Boosters</i>	Employ writer's certainty and close down alternatives.	clearly, obviously, in fact.
<i>Self-Mention</i>	Explicit reference to the author.	First person pronouns (I, me, mine, we, our)
<i>Hedges</i>	Emphasise the subjectivity of a position and open it for negotiation.	possible, might, perhaps, about.

As shown in Table 4.3, in the selected interactive metadiscourse category, there were code glosses, frame markers and transitions. Code

glosses are used to clarify the meaning by elaborating on the information given. Frame markers draw the reader's attention to the steps of the subject matter or state the goal of written discourse. Transitional markers are concerned with the way in which the writer moves between parts in the text, as in the use of conjunctions and phrases which guide the reader through the transitions between ideas. The selected interactional metadiscourse markers, on the other hand, were engagement, attitude, boosters, self-mentions and hedges. Engagement markers are used to establish a relationship with the reader and to help her/him to feel part of the discourse. Attitude markers are used to help the writer express his or her reaction to propositions. Boosters are words used by writers to show their confidence and the validity of the information provided. Self-mention is the use of first-person pronouns by writers which help the readers acknowledge their presence. Hedges indicate "the writer's commitment to a proposition" and "emphasize[s] the subjectivity of a position by allowing information to be presented as an opinion rather than a fact" (Hyland, 2005, p. 52).

Hyland (2005) stated that almost all metadiscourse markers can serve a propositional or a metadiscoursal function. The procedure for distinguishing between the propositional and the metadiscoursal functions of the markers is challenging because both functions can occur together in the text (Hyland & Tse, 2004). For example, some markers can be used as propositional and therefore do not reflect the use of metadiscourse. Propositional elements are concerned with the world outside the texts, whereas metadiscoursal elements are concerned with the text and the audience (Hyland & Tse, 2004). Additionally, some markers can also fit into two categories depending on their function in the sentence. Because of these ambiguities of metadiscourse use, the metadiscourse markers in the students' writing were analysed both manually and electronically. In other words, during this procedure, all the metadiscourse markers in the texts were checked to determine their function. The examples below were taken from the students' letters to illustrate these functions. In example (1), *so* is used as a transition to shift the topic whilst in example (2), it is used to serve a propositional function.

1- ***So***, what do you think about fast food?

- 2- *you must know I am of the Islam faith as I assume you are also. If **so**, would you be able to teach me more things about it.*

As well as the issue of the duality of functions, some markers were checked to identify the category to which they belonged. A few were identified in the students' letters; for example, *should* was used as an engagement marker as shown in example (3), and as a hedge as in example (4).

- 3- *You will enjoy it, but if you like the beach you **should** consider Jeddah.*

- 4- *I also agree with you that it **should** not be banned completely.*

The analysis of the metadiscourse markers was conducted using AntConc, a freeware and multi-purpose corpus analysis toolkit designed by Laurence Anthony (Anthony, 2005). AntConc has many features including a powerful concordancer, and word and keyword frequency generators. The software also enables KWIC (Key Word in Context), a feature which can be used to view the searched words in the original text file. This feature was useful in the current study for investigating the metadiscourse function in the text. Before starting the analysis, all of the written letters were converted into text files so that they could be run in the AntConc software and then analysed for the occurrence of specific discourse markers.

The frequencies of all the metadiscourse items were compiled into separate files according to their category. Due to the variation in the lengths of the texts, the frequencies of the markers used were calculated per 100 words by multiplying the total for each marker by 100 and then dividing it by the total number of words used in the letter. The process was repeated for all the exchanges of letters, as well as the pre and post writing tests of the Saudi students in the experiment and control groups. Finally, the results obtained were converted into percentages and organised in Excel sheets according to the pre and post test results and the four exchanges of pen-pal letters by Saudi and American students.

The second procedure was to check if there were any statistically significant differences in the use of metadiscourse markers between the groups and across the four pen pal letter exchanges. A nonparametric Mann-Whitney U test was used to compare the use of metadiscourse markers

between the experiment and control group at the pre and post writing test. It was also used to investigate the total use of markers between the experimental and reference groups. Furthermore, a nonparametric paired-sample Wilcoxon test was used to compare the results of experiment and control groups separately at the pre and post writing test. To investigate the use of metadiscourse markers by the Saudi students in the experimental group and the reference group across the four exchanges, the Friedman Two Way ANOVA test was used to see if there were any significant differences in four time points.

4.6.1.2 The analysis of students' vocabulary profile (VP) in writing

Vocabulary profile, or also called lexical frequency profile, was used to assess how EFL writers use vocabulary and to provide an overview of the size of the vocabulary which a writer uses (Laufer & Nation, 1995). To establish a lexical frequency profile and its development in the Saudi students in both the experimental and the control groups, as well as in American students in the reference group, a programme called Lextutor, also known as 'Range and Frequency', was used. Developed by Thomas Michael Cobb (2002), the programme is available on www.lextutor.ca. The programme identifies words which fall into four word lists established by Bafia Laufer and Paul Nation (1995) and provides a measure of a user's lexical frequency profile.

Nation (2001) stated that vocabulary can be divided into four categories: high-frequency words, academic words, technical words and low-frequency words. High-frequency words are words which constitute 80% of the words in a text, such as the 2000-word families in the *General Service List*. Academic words are the words used in academic texts and constitute around 9% of the words in a text, such as the Academic Word List (AWL) (Coxhead, 1998). Technical words are words which are specific to a particular subject area and they vary depending on the area to which a text is related; they constitute only 5% of the words in a text. Low-frequency words are words which are rarely used in the language and do not fall into any of the previous three categories; however, this category is the largest of the four categories. This method of assessing vocabulary use in writing has been shown to be valid and reliable (Laufer & Nation, 1995). It provides a detailed picture of vocabulary use and is considered to be a useful diagnostic tool (Laufer & Nation, 1995).

The pre and post writing tests taken by the Saudi students in the experimental and control groups as well as the pen-pal letters from Saudi students in the experimental group and from the American students were scored for vocabulary breadth and lexical diversity. These scores were used to assess whether there was any development in the use of vocabulary during the exchanges of letters between the two groups and to compare it with the use of vocabulary by the control group. The analysis was conducted according to the four vocabulary levels described above, the K1 level with the 1000 most frequent word families, K2 with the second 1000 most frequently used word families, the AWL and off-list (OL) or non-English words and words which do not appear on the other lists.

The analysis began by organising the acquired written samples. Each text was then run in the Lextutor programme to obtain the VP. Using Excel sheets, the data obtained for the four vocabulary levels of K1, K2, AWL and OL words were recorded as numbers and percentages for each student. The average in every category was then calculated for the Saudi and American students.

The second procedure was to check if there were any statistically significant differences in the use of vocabulary between the groups and across the four pen pal letter exchanges. A Mann-Whitney U test was used to compare the use of K1 and K2 words between the experimental and control group at the pre and post writing test. It was also used to investigate the total use of markers between the experimental and reference groups. Furthermore, the Paired-sample Wilcoxon test was used to compare the results of the experimental and control groups separately at the pre and post writing test. To investigate the use of K1 and K2 words by the Saudi students in the experimental group and the reference group across the four exchanges, Friedman Two Way ANOVA was used to see if there were any significant differences between four time points.

4.6.1.3 The analysis of students' lexical diversity in writing

To establish lexical diversity (LD) and its development of the Saudi students in both the experimental and the control groups, and of the American students, an LD analysis tool was used. LD is measured by the variety of the

vocabulary used in a text and the amount of repetition of words which the writer uses. A text is considered lexically diverse the more variation it contains in terms of the words used by the writer. As has already been explained, a typical measure for investigating LD is the Type-Token Ratio (TTR). This is obtained by dividing the number of different words (types) by the number of words in a text (tokens) (Durán *et al.*, 2004). One issue associated with this measure is the lack of accuracy due to its sensitivity to text lengths (Durán *et al.*, 2004). That is, the longer the texts are, the lower the values of the TTR which can result. To overcome this problem, a D measure known as *VocD* was developed by Richard and Malvern (2004) to assess LD in texts of different lengths. Unlike TTR, the D measure is not sensitive to text length and is reliable for assessing LD in a text (Durán *et al.*, 2004). Durán *et al.* (2004) recommended that this measure is also useful for measuring LD in second-language research and for investigating the influence of a specific task or environment on the performance of the language.

One issue which has been identified in relation to the use of *VocD* for measuring LD is its insensitivity to text length. *VocD* uses random sampling of the texts, so every time the same text is run in the software, a slightly different D score is produced. Durán *et al.* (2004) advised that this issue can be solved and the consistency of the results increased by calculating the average of three D results from the same text. In addition, *VocD* has shown positive results compared with TTR (McCarthy & Jarvis, 2010) between the D measure and thirteen alternative measures, showing that *VocD* had better performance than the others and was the most accurate technique for measuring LD (Johansson, 2009). The findings of McCarthy and Jarvis (2010) also showed that the D measure was suitable for use with texts containing between 100 and 400 tokens (Johansson, 2009). Since the students' letters fell within this range and because of *VocD*'s better performance over TTR, it was chosen for conducting the analysis of LD in the current study.

According to the scale, adult second-language learners' writing would have a D measure of around 40-70, whereas a native-speaking adult's academic writing would score around 80-105. Thus, a higher D value indicates higher LD and lower D values indicate lower diversity of the vocabulary used. To ascertain the lexical diversity of the students in the current study, Text

Inspector, a web-based language analysis tool created by Stephen Bax was then used (available at <https://textinspector.com>). The texts were first converted to the CHAT format in order to be read by the software in Text Inspector. Following Durán et al.'s (2004) advice, three D scores were obtained for each text individually in the software and were organised in an Excel sheet. The average was calculated from the three results for every text. The calculated averages of the three scores of every text were then used to calculate the average for all the texts in the group. All the results were organised on Excel sheets and were classified by writers' names for the pre and post writing tests and another file was created for the exchanges of the letters for later comparison.

The following procedure was used to check if there were any statistically significant differences in the lexical diversity scores between the groups and across the four pen pal letter exchanges. A Mann-Whitney U test was used to compare the scores between the experiment and control group at the pre and post writing test. It was also used to investigate the total use of markers between the experimental and reference groups. Furthermore, the Paired-sample Wilcoxon test was used to compare the results of the experimental and control groups separately at the pre and post writing test. To investigate the lexical diversity scores by the Saudi students in the experimental group and the reference group across the four exchanges, a Friedman Two Way ANOVA test was used to see if there were any significant differences in four time points.

4.6.2 The analysis of the IML questionnaire

To investigate the Saudi students' motivation in both the experimental and control groups, the revised questionnaire was implemented before and after the intervention. After collecting the pre and post questionnaire responses from the Saudi students in the experimental and control groups, several pre-analysis steps were employed. Because the two questionnaires were answered using the online host Qualtrics, all the data was exported to the Statistical Package for the Social Sciences (SPSS) for analysis. All data from the responses were checked to make sure that there were no missing data and that all the participants had answered both the pre and the post questionnaires.

The second procedure conducted was to check the internal consistency and reliability of the two questionnaires, using a Cronbach's Alpha test for all the sub-scales in the questionnaire. The original IMI questionnaire contained seven sub-scales, interest/enjoyment, perceived choice, perceived competence, pressure/tension, effort and importance, value/usefulness, and relatedness. As explained earlier, the relatedness sub-scale was removed from the control group in the pre and post questionnaires and from the pre questionnaire for the Saudi students in the experimental group. The reason for this was because it was found that the sub-scale was inapplicable, so in regard to the relatedness sub-scale, only descriptive analysis of the post-IMI questionnaire results was performed for the students in the experimental group. That is, the frequency of every item in the subscale was reported in percentage.

Two procedures were carried out before conducting the four comparisons. The first procedure was to check the internal consistency reliability of the pre and post questionnaires using a Cronbach's Alpha test. The procedure was conducted first on the total items in the questionnaires and then on each subscale. The results were found to be acceptable and indicated a good internal consistency of the scales, as can be seen in Tables 4.4. 4.5 and 4.6.

Table 4.4: The Cronbach's Alpha test results of the pre and post questionnaires for the experimental and control groups

Measure	Cronbach's Alpha	Number of Items
Control pre questionnaire	.776	37
Control post questionnaire	.850	37
Experimental pre questionnaire	.793	37
Experimental post questionnaire	.813	37

Table 4.5: The Cronbach's Alpha test results of the pre and post questionnaires for the experimental group

Measure	Cronbach's Alpha pre Q	Cronbach's Alpha post Q	Number of Items
Interest/enjoyment	.737	.725	7
Perceived competence	.699	.695	6

Effort/importance	.757	.705	5
Pressure/tension	.748	.798	5
Perceived choice	.738	.692	7
Value/usefulness	.780	.841	7

Table 4.6: The Cronbach's Alpha test results of the pre and post questionnaires for the control group

Measure	Cronbach's Alpha pre Q	Cronbach's Alpha post Q	Number of Items
Interest/enjoyment	.762	.857	7
Perceived competence	.724	.788	6
Effort/importance	.724	.723	5
Pressure/tension	.717	.734	5
Perceived choice	.776	.788	7
Value/usefulness	.734	.780	7

Furthermore, the second procedure was conducted in order to decide on the correct test (that is, whether to use a parametric or non-parametric test) to analyse the questionnaire results. I checked whether the data in the responses to the pre and post questionnaires were normally distributed. Typically, in order to assess the normality of data distribution, data can be checked numerically and graphically, although Field (2009) warned that a graphic investigation is not always reliable and does not provide an accurate result. Essentially, although it could show whether the distribution of data deviates from normal, it cannot indicate how large the deviation is (Field, 2009). For these reasons, the data distribution was checked both numerically and graphically using a histogram, obtaining a Q-Q plot and running the Shapiro-Wilk test. Following Field (2009), the Shapiro-Wilk test was chosen to test the normality distribution of the data as it is more accurate than other normality tests such as Kolmogorov-Smirnov. In addition, the Shapiro-Wilk test is considered to be more sensitive and is commonly used with small sample sizes. The results of these tests are presented in Tables 4.7 and 4.8.

Table 4.7: Test of normality distribution for the pre- IMI questionnaire

Subscales	Kolmogorov-Smirnov^a			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
Interest/enjoyment	.163	44	.005	.944	44	.034

Perceived Competence	.158	44	.008	.963	44	.164
Effort/importance	.122	44	.100	.945	44	.035
Pressure/tension	.118	44	.136	.984	44	.811
Perceived Choice	.121	44	.103	.981	44	.671
Value/usefulness	.134	44	.044	.958	44	.107
Overall	.100	44	.200*	.974	44	.430

Table 4.8: Test of normality distribution for the post- IMI questionnaire

Subscales	Kolmogorov-Smirnov^a			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
Interest/enjoyment	.140	44	.029	.937	44	.018
Perceived Competence	.112	44	.199	.965	44	.192
Effort/importance	.093	44	.200*	.976	44	.488
Pressure/tension	.142	44	.027	.977	44	.525
Perceived Choice	.128	44	.069	.964	44	.190
Value/usefulness	.137	44	.038	.915	44	.003
Overall	.091	44	.200*	.960	44	.127

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

a. Lilliefors Significance Correction

The Shapiro-Wilk test ($p < .05$) showed that the scores obtained from the pre and post IMI questionnaires in some subscales violated the normality assumption. In the pre-questionnaire, the interest/enjoyment, perceived competence, effort/importance and value/usefulness subscales violated the normality assumption, as shown in Table 4.7, and similar results are shown in Table 4.8 regarding the post questionnaire in the three subscales of interest/enjoyment, pressure/tension and value/usefulness.

Given the Shapiro-Wilk test results and the small sample size of the study, non-parametric tests were selected to analyse the questionnaire data. Specifically, I used the non-parametric Mann-Whitney U Test to investigate the differences between two independent samples, that is, the control and

experimental groups, and a non-parametric Wilcoxon test to examine the differences between two related samples, that is, the pre and post results of the control group and the pre and post results of the experimental group.

4.6.3 The analysis of the semi-structured interviews

To conduct the analysis of the students' perceptions about pen pal letter writing, all the interview recordings were first transcribed in Arabic, the same language used in the interviews. The transcriptions were then translated into English carefully by the researcher who speaks both Arabic and English by focusing on preserving the meaning, since this is the main goal of translation (Cormier, 2017). All the transcripts were then back-translated by a bilingual colleague to ensure that the translated transcripts included all the information needed (Cormier, 2017).

The analysis of the interview responses was conducted manually following Braun and Clarke's (2006) thematic analysis process. Thematic analysis is a commonly used method for examining qualitative data obtained through semi-structured interviews. The purpose of this approach is to identify patterns in the data, which can then be used to generate codes. Thematic analysis involves grouping the codes derived from the data into broad themes. This process condenses large amounts of raw data into a concise and structured form that accurately reflects the views and opinions expressed by the participants. The procedure of the analysis comprised six steps which were not necessarily linear in nature, and moving between the steps was acceptable if necessary (Braun & Clark, 2006). My first step was to read and re-read all the transcriptions to become familiar with the data. While reading through the transcripts, I took notes regarding the emerging topics. The predetermined themes of the interviews were the students' prior experience of pen-pal letter writing in English, their feelings about their pen-pal letter-writing experience, and the difficulties and usefulness of pen-pal letter writing. Thus, a combination of inductive and deductive approaches was applied for analysing the interview data. The second step was to generate initial codes. I first approached the data with the predetermined themes in mind by systematically working through all the data line-by-line to initiate codes. Using a highlighter, codes were generated, developed and modified for potential themes to be grouped later. The third step was to search for themes. Themes are defined as patterns found

recurring in a set of data which capture something important in regard to the research questions (Braun & Clarke, 2006). It is important to note here that the identification of themes did not follow any statistical measures. In other words, according to the analysis scheme of Braun and Clarke (2006), what counts as a theme is not a matter of the proportion of the data set which represents evidence of the occurrences, but rather how they are related to the research and the study's goals (Braun & Clarke, 2006). In this step, the relevant codes were sorted into the predetermined themes as well as other potential themes. Six themes were identified as preliminary themes. These were prior experience with pen-pal letter writing, the perceived value and usefulness of pen-pal letter writing, challenges and difficulties in pen-pal letter writing, emotional response to pen-pal letter writing, perceived competence in pen-pal letter writing, and developing relatedness in pen-pal letter writing. The fourth step was to revise the preliminary themes, which included making sure that the data supported the theme and that there was no overlap between the themes. In this stage, some changes were made and two sub-themes were created regarding the usefulness of pen-pal letter writing. The themes and their codes were revised several times on two levels. The first level dealt with the coded extracts to make sure that they formed a pattern and fitted in the group of the codes, and the second was at the themes level to make sure that they were relevant. The fifth step was to check and revise all the themes and establish relationships between them. The sixth and final step was to write the results. At this stage, I highlighted representative extracts from the transcripts to be used to illustrate the results.

Next, I sought to establish inter-coder reliability for the transcription, that is, the extent to which two coders agreed on the same coding scheme (Hayes & Krippendorff, 2007). Establishing inter-coder reliability "is a critical component of content analysis and (although it does not ensure validity) when it is not established, the data and interpretations of the data can never be considered valid" (Lombard *et al.*, 2002, p. 590). A PhD colleague was invited to act as the second coder. The coding scheme was explained to the second coder at the beginning of the process. An example was shown in order to explain the coding system and how to apply it to the transcripts. After the demonstration, the inter-coder reliability check entailed the researcher and the

second coder separately coding a text. After the second coder had completed the text coding, I compared my coding with that of the other coder. The coefficients of the inter-coder reliability were calculated using percent agreement (Hayes & Krippendorff, 2007). Percent agreement is the number of units on which two observers agree (Hayes & Krippendorff, 2007). This measure shows 0% when the two coders disagree on every unit and 100% when there is full agreement. After conducting this procedure, the results indicated 92%, which is a high and acceptable agreement.

4.7 Pilot Study

A pilot study was carried out two months prior to the main data collection in July 2018. The purpose of the pilot was to gain an in-depth understanding of the study's planned procedures and instruments and to test the study's data collection instruments and assess their usefulness in the study's context. In addition, the pilot was used to investigate any obstacles that might arise during the procedures of the data collection. The three data collection tools, pen-pal letter writing tasks, the motivation questionnaire and interviews, were piloted. Although the IMI questionnaire had been validated and checked for reliability by Deci and Ryan (1985), it was still piloted to ensure that it was comprehensible and suitable for the participants of the current study. Moreover, the literature review showed that the questionnaire has not been used before in the same context as the current study. In addition, the pilot study was useful for testing the mechanics and procedures of analysing the letters and gaining a better understanding of the different software adopted to analyse VB, LD and the use of metadiscourse markers. Piloting the interview questions was necessary to investigate their suitability and to ask the pilot participants about the topics chosen for the writing instructions used in the main study since the time available was not sufficient to allow piloting all the writing topics.

Two groups of participants (n=20) were recruited for the pilot study. Ten Saudi EFL students were recruited from the ELC at Taibah University who were enrolled in the Preparatory Year English Language (PYEL) course, which is the same site where the full-scale intervention was implemented. Ten English speaking students from North America were also selected by

their course instructor whom the researcher had contacted and informed about the planned pilot study. None of the pilot study participants were involved in the main study. All the pilot participants signed informed consent forms prior to their participation. The pilot was carried out over a period of four weeks during which students exchanged one pen-pal letter each.

The Saudi participants were required to answer the pre-IMI motivation questionnaire. Next, the American course instructor was sent instructions regarding the topic about which the English speaking students had to write in their letter. The instructor used an online dropbox to deliver the letters to the researcher who in return forwarded them to the Saudi course instructor to be distributed among the students. The Saudi students then wrote replies to the letters which they had received and were then asked to complete the post-IMI motivation questionnaire. Four Saudi students were selected randomly to be interviewed by the researcher. The interviews were audio recorded and were conducted in Arabic and then translated into English to be analysed.

4.7.1 Post-pilot modifications

Overall, the results of the pilot study confirmed the appropriateness of the study's data collection instruments and the planned procedures for the data collection. However, during the interviews with the pilot participants, they were asked about the suitability of the pen-pal letter writing topics and they said that one topic seemed difficult to write about. The topic in question was about discussing the advantages and disadvantages of teenagers who decide to work while they are studying. The participants commented that the topic seemed irrelevant culturally as students normally work after finishing college. So a change was made in the selection of the topics to suit the level of the students' circumstances and comfort.

4.8 Ethical Considerations

Before the data collection, several measures were taken to ensure that the research was ethically acceptable. First, I applied for and received an ethical approval to conduct the study from the Ethical Committee at the University of York. I then obtained the approval of the ELC at Taibah University as well as the participants' signed consent forms which contained information about the aims and procedure of the study (see Appendix 3). The participants

were informed of the guarantee of anonymity and assured that the data obtained would not enable them to be identified and would be stored under codes for the purpose of the research and then kept in that condition for three years. Additionally, the students were informed that they could withdraw from the study at any time during the data collection and up to a week afterwards because, after that time, all identifying information would be destroyed and it would be impossible to withdraw as the data would be completely anonymous.

4.9 The Quality Criteria in the Study

In recent years, the quality of mixed-method research has been a widely debated topic (Fàbregues & Molina-Azorín, 2017). Collins *et al.* (2012) commented that the mixed-method design as a distinctive methodology has its own representation and legitimization challenges because the existence of both qualitative and quantitative components in a research study exacerbates the challenges found in each method if adopted alone. The challenges associated with the representation refer to the degree of management that the researcher follows in obtaining adequate meanings from different sources such as narratives and numbers (Collins *et al.*, 2012). The challenges regarding the legitimization of inferences are concerned with the researcher's ability to provide credible, dependable and transferable findings from both quantitative and qualitative inquiries (Collins *et al.*, 2012).

Fàbregues and Molina-Azorín (2017) conducted a systematic review of the literature concerning the quality criteria in the mixed-method design. They sought to identify a common set of core quality criteria found across many disciplines. The type of criteria suggested were not specific to any procedure in the mixed-method design, but included aspects related to the quantitative and qualitative components, as well as generic research criteria. These criteria are of great importance to ensure a high quality mixed-method design. The quality criteria centred around the quantitative and qualitative components were (1) providing a link between the procedure implemented in each component, the study's aim and the research questions, and (2) providing a detailed explanation of the procedures implemented in the research. The generic criteria were (1) the clarity of the philosophical assumption that the researcher makes, (2) an explanation of a link between the mixed-method design, the study's aims and research questions, and (3) that the study's

findings and inferences are consistent. The quality criteria of mixed-method research were also discussed by Dörnyei (2007), who argued that three specific aspects should be considered separately: the rationale for applying a mixed-method approach, the rationale for the study's specific design including the selection of particular methods, and the quality of the specific methods applied in the research in terms of their validity and reliability.

Consequently, I have provided a detailed account of the rationale for implementing the research design and its link to the research questions and the aim of the study, and also how I ensured the validity and reliability of the specific methods adopted. Therefore, measures were carried out by the researcher to ensure the quality criteria in both the quantitative and the qualitative components of the study (Dörnyei, 2007). In the current study, therefore, the internal validity of the quasi-experimental design which has been questioned because of the lack of the random assignment of the groups was strengthened. It has been argued that some systematic differences could be found other than the existence of the treatment itself between the control and the experimental groups, which can be considered as alternative interpretations and causes of the resulting effect (Grant & Wall, 2009; Shadish et al., 2002). This concern was taken into consideration and the causal inference in this study was strengthened by ruling out any probable alternative explanations (Bryman, 2016; Grant & Wall, 2009). More specifically, I investigated all the potential alternative interpretations which could be related to the cause, which was the impact of pen-pal letter writing while designing and conducting the study. One factor which could threaten the validity of the experiment is regarding the history of the participants (Cohen *et al.*, 2011). To minimise this potential influence and bias, I added questions to the motivation questionnaire to examine how much exposure to English pen-pal letter writing the students had outside the classroom. Also, information was obtained about the students' age and year of study in order to provide further explanations when needed. In addition, to strengthen the equivalence of the two groups, I selected the participants from the same populations which made them as much alike as possible in the three groups (Cohen *et al.*, 2011). Both experimental and control groups participating in the current study were in

similar age groups, first year undergraduate students, and taking the same module at the ELC.

Furthermore, in the experimental design adopted in the study, the pre and post tests were means by which the effect of the treatment could be observed. Ensuring the reliability of the findings requires the measurement instrument to provide consistent results for the same population in different circumstances, whereas in the current study other factors not related to the test were controlled (Dörnyei, 2007). Firstly, all students in the experimental and control groups took the pre and post writing tests at the same time and under the same conditions. Secondly, the two planned topics for the pre and post tests were the same for the two groups and were also similar to the topics used in the pen-pal letter exchange. Thirdly, for both the control and the experimental groups, clear instructions were provided prior to the test.

Additionally, qualitative data obtained from the interviews were selected in the current study to strengthen the validity of the findings. Johnson and Christensen (2004) recommended that combining experiments with qualitative data enhances the validity of a study because the experiment focuses on the process under which the participants develop, and the qualitative data help to provide more information about the nature of this process (cited in Dörnyei, 2007, p.173). The validity and reliability of the qualitative data are concerned with the ways applied which are appropriate for the production of knowledge (Brinkmann & Kvale, 2015). In this regard, the interviewer, the interviewee and the process of interviewing were all taken into account. The interviewer in the current study was the researcher whose role was important in ensuring the accuracy of the qualitative account (Creswell & Poth, 2017). I had sufficient background knowledge about the research topic and while conducting the interviews I made sure to maintain good skills in recording and handling the data by not commenting on any past experiences, biases or orientations which might affect the results (Creswell & Poth, 2017). For the interviewee, I took into consideration the comfort of the participants in terms of the time, place and language used during the interview. Additionally, the interview questions were carefully designed to ensure that they would not present any threat to the interviewee or lead to a particular answer.

4.10 Summary

In this chapter, I have presented a detailed account and justification of the mixed-methods design which was adopted in the study to investigate the effects of pen-pal letter writing on students' communicative ability, language development and motivation. I started by explaining the rationale for the chosen research design and then described the study context and participants. This was followed by a description and justification of the selected data collection methods of a pre- and post-writing tests, the pen-pal letter writing tasks, semi-structured interviews and a motivation questionnaire. A detailed explanation of the intervention and the specific variables which were investigated in the study, as well as the data collection procedure, were also given. The chapter then proceeded with a detailed explanation of the approaches employed to analyse the data obtained from each data collection instrument and then ended with a consideration of the ethical issues involved in the study and the way in which the relevant quality criteria were addressed in the study. The next chapter presents the findings of the study, first focusing on the effects of pen pal writing on the development of students' communicative ability through metadiscourse. It then presents the findings related to the role of pen pal writing in students' language development and finishes with the results of students' motivation.

Chapter 5 Results

5.1 Introduction

The purpose of this study is to investigate the impact of pen-pal letter writing on students' ability to project to an audience and to establish a relationship with their audience using metadiscourse markers, and also to examine the effect of pen-pal letter writing on students' language development and writing motivation. A quasi-experimental design was employed, using such data collection methods as pen-pal letters written during one semester, a motivation questionnaire and semi-structured interviews with selected students after the experiment. The study had three groups, experimental, control and reference groups, to establish the contribution of pen-pal letter writing to their written communicative competence and their writing motivation. This chapter presents the results according to the research questions and is organised accordingly into four different sections. A summary of the chapter is provided at the end. The specific research questions which this study addresses are the following:

RQ1: What is the effect -if any-of a pen-pal writing intervention on the development of EFL Saudi students' communicative ability to interact with their audience? (measured by their use of metadiscourse markers);

RQ2: What is the effect of a pen-pal writing intervention on the development of EFL students' English language proficiency? (measured by their vocabulary breadth and lexical diversity);

RQ3: How does the pen-pal letter writing intervention interact with students' writing motivation?;

RQ4: What are the Saudi students' perceptions about the pen-pal writing experience?

5.2 The role of pen-pal letter writing in the development of EFL Saudi students' communicative ability to interact with their audience

To examine the extent to which the Saudi and American students engaged with their audience, the type and frequency of metadiscourse markers were examined using a corpus approach. The pre- and post writing tests of the Saudi students in the experimental and control groups were also examined to see if there were any changes in the use of metadiscourse markers. Three categories of interactive metadiscourse markers (code glosses, frame markers and transitions) and five categories of interactional metadiscourse markers (engagement, attitude, boosters, self-mentions and hedges) were chosen for examination.

5.2.1 The use of metadiscourse markers in the pre and post writing tests by the experimental and control groups

Pre- and post writing tests given to the Saudi students in both the experimental and control groups at the beginning and the end of the semester were analysed to investigate whether there were any differences in the use of metadiscourse markers between the two groups before and after the experiment. Table 5.1 summarises the use of metadiscourse markers in the pre and post tests for the Saudi students in the experimental and control groups.

Table 5.1: The use of metadiscourse markers in the pre and post writing tests by the experimental and control groups

Category	Pre-test						Post-test					
	Total items		Items per 100 words		%		Total items		Items per 100 words		%	
	E	C	E	C	E	C	E	C	E	C	E	C
Interactive Markers	126	154	5.38	6.02	30.21	32.15	191	169	6.42	6.52	25.77	31.00
Code Glosses	1	2	0.04	0.07	0.23	0.41	11	2	0.36	0.07	1.48	0.36
Frame Markers	14	30	0.59	1.17	3.35	6.26	37	30	1.24	1.15	4.99	5.50
Transitions	111	122	4.74	4.77	26.61	25.4	143	137	4.80	5.28	19.29	25.13
Interactional Markers	291	325	12.44	12.71	69.78	67.84	550	376	18.48	14.50	74.22	68.99
Engagement	28	31	1.19	1.21	6.71	6.47	37	37	1.24	1.42	4.99	6.78

Attitude	5	6	0.21	0.23	1.19	1.25	5	9	0.16	0.34	0.67	1.65
Boosters	9	17	0.38	0.66	2.15	3.54	20	11	0.67	0.42	2.69	2.01
Self-mention	231	200	9.88	7.82	55.39	41.75	389	305	13.07	11.76	52.49	55.96
Hedges	18	71	0.76	2.77	4.31	14.82	99	14	3.32	0.54	13.36	2.56
Totals	417	479	17.83	18.73	100	100	741	545	24.90	21.02	100	100

Note: E – experimental group; C – control group

As can be seen in Table 5.1, there was a slight difference in the total use of interactive markers between the Saudi students in the control group and those in the experimental group before the intervention, with 30.21% by the experimental group and 32.15% by the control group. However, examination of the use of specific markers shows substantial differences between the use of code glosses and frame markers. Code glosses were used 0.23% by the experimental group before the experiment compared with 0.41% by the control group, and frame markers were used 3.35% by the experimental group compared with 6.26% by the control group. There was also a slight difference between the control and experimental groups in the total use of interactional markers before the experiment and in the use of specific markers. Saudi students in the experimental group used more interactional markers at 69.78% compared with the control group at 67.84%, and they used self-mentions more at 55.39% than the control group at 41.75%. There was also a difference in the use of hedges, with the control group using more hedges at 14.82% than the experimental group at 4.31%. It is important to note these differences in the use of metadiscourse markers by the two groups before the experiment started in order to properly establish the development trends of the markers over the course of the experiment.

After the intervention, the use of metadiscourse markers by the Saudi students in the experimental group was found to have differed. Their use of interactive metadiscourse markers decreased from 30.2% to 25.7%, and the use of separate interactive markers such as code glosses and frame markers increased from 0.23% and 3.35% to 1.48% and 4.99% respectively. One particular marker, transition, decreased dramatically from 26.6% in the pre-experiment test to 19.2% in the post test. In the control group, the use of interactive markers by the EFL Saudi students decreased slightly from 32.1%

to 31.0%. Specifically, the use of transitions in this category increased slightly from 25.4% to 25.13%, whereas the use of separate interactive markers such as code glosses and frame markers decreased from 0.41% and 6.26% to 0.36% and 5.50% respectively. The use of interactional markers by the Saudi students in the experimental group increased from 69.7% to 74.2%. Although there was a slight decrease in the use of engagement, attitude and self-mention markers, the use of hedges in this category changed dramatically from 4.31% to 13.3% after the intervention. The use of interactional markers by the Saudi students in the control group increased slightly from 67.8% in the pre-experiment test to 68.9% in the post test. The use of separate markers as engagement, attitude and self-mentions increased slightly in the post test from 6.47%, 1.25% and 41.75% to 6.78%, 1.65% and 55.96% respectively whilst the use of boosters and hedges decreased from 3.54% and 14.82% to 2.01% and 2.56%: hedges in this category therefore decreased dramatically compared with the use of boosters.

To investigate whether there were any statistically significant differences, the metadiscourse markers used in the pre-writing test by the Saudi students in the experimental and control groups were also analysed. The Mann-Whitney U Test was used for the comparison between the two groups and the results are shown in Table 5.2 below.

Table 5.2: Total MD use by the experimental and control groups at the pre-writing test

Subscales	Group	No.	Mean Rank	Sum of Ranks	Mann-Whitney U	P-value
Interactive markers	Experimental	22	26.86	591.00	338.000*	.024
	Control	22	18.14	399.00		
Code Glosses	Experimental	22	22.00	484.00	231.000	.554
	Control	22	23.00	506.00		
Frame Markers	Experimental	22	17.86	393.00	140.000*	.011
	Control	22	27.14	597.00		
Transitions	Experimental	22	20.91	460.00	207.000	.405
	Control	22	24.09	530.00		
	Experimental	22	26.82	590.00	337.000*	.026

Interactional Markers	Control	22	18.18	400.00		
Engagement	Experimental	22	24.18	532.00	279.000	.361
	Control	22	20.82	458.00		
Attitude	Experimental	22	21.64	476.00	223.000	.540
	Control	22	23.36	514.00		
Boosters	Experimental	22	19.34	425.50	172.500	.067
	Control	22	25.66	564.50		
Self-mention	Experimental	22	24.68	543.00	290.000	.257
	Control	22	20.32	447.00		
Hedges	Experimental	22	14.18	312.00	59.000*	.000
	Control	22	30.82	678.00		

*The difference is significant at 0.05 level

The results of the Mann-Whitney U Test showed that there was a statistically significant differences in favour of the experimental group in the total use of interactive metadiscourse markers $U=338.000$, $z=-2.258$, $p=0.024<0.05$, with a medium effect size ($r=0.34$). In this category, the examination of the use of frame markers showed in Table 5.1 that they were used 3.35% by the experimental group compared with 6.26% by the control group. The results of the Mann-Whitney U Test also indicate a significant difference in favour of the Saudi students in the control group in the use of frame markers $U=140.000$, $z=-2.558$, $p=0.011<0.05$, with a medium effect size ($r=0.38$).

As for the use of interactional markers, Saudi students in the experimental group used more interactional markers at 69.78% compared with the control group at 67.84%. This was confirmed by the results of the Mann-Whitney U Test which indicate that there was a significant difference in favour of the experimental group in the total use of interactional markers, $U=337.000$, $z=-2.231$, $p=0.026<0.05$, with a medium effect size ($r=0.33$). In this category, the results indicate a significant difference for the Saudi students in the control group in the use of Hedges, $U=59.000$, $z=-4.380$, $p=0.000<0.05$, with a large effect size ($r=0.66$). This was shown in Table 5.1 as the control group used more hedges at 14.82% than the experimental group at 4.31%.

In the interactional markers category, while the examination in Table 5.1 showed that self-mention markers were used more by the Saudi students in the experimental group at 55.39% than the control group at 41.75%, the Mann-Whitney U Test indicated that there was no significant difference found between the two groups $U=290.000$, $z=1.132$, $p=0.257>0.05$.

The metadiscourse markers used in the post-writing test by the Saudi students in the experimental and control groups were analysed to investigate whether there were any statistically significant differences at the end of the semester. The Mann-Whitney U Test was used for the comparison between the two groups and the results are shown in Table 5.3 below.

Table 5.3: Total MD use by the experimental and control groups at the post-writing test

Subscales	Group	No.	Mean Rank	Sum of Ranks	Mann-Whitney U	P-value
Interactive markers	Experimental	22	27.27	600.00	347.000*	.014
	Control	22	17.73	390.00		
Code Glosses	Experimental	22	26.55	584.00	331.000*	.007
	Control	22	18.45	406.00		
Frame Markers	Experimental	22	22.80	501.50	248.500	.875
	Control	22	22.20	488.50		
Transitions	Experimental	22	23.20	510.50	257.500	.714
	Control	22	21.80	479.50		
Interactional Markers	Experimental	22	26.98	593.50	340.500*	.021
	Control	22	18.02	396.50		
Engagement	Experimental	22	24.55	540.00	287.000	.271
	Control	22	20.45	450.00		
Attitude	Experimental	22	20.89	459.50	206.500	.294
	Control	22	24.11	530.50		
Boosters	Experimental	22	25.57	562.50	309.500	.081
	Control	22	19.43	427.50		
Self-mention	Experimental	22	26.25	577.50	324.500	.052

	Control	22	18.75	412.50		
Hedges	Experimental	22	32.57	716.50	463.500*	.000
	Control	22	12.43	273.50		

*The difference is significant at 0.05 level

The results of the Mann-Whitney U Test showed statistically significant differences in favour of the experimental group in the total use of interactive metadiscourse markers $U=347.000$, $z=-2.468$, $p=0.014<0.05$, with a medium effect size ($r=0.37$). In this category, code glosses which were used more by the Saudi students in the experimental group (at 1.48%) than the Saudi students in the control group (at 0.36%) were found significantly different $U=331.000$, $z=-2.697$, $p=0.007<0.05$, with a medium effect size ($r=0.40$).

There were also statistically significant differences in favour of the experimental group in the total use of interactional markers $U=340.500$, $z=-2.313$, $p=0.021<0.05$, with a medium effect size ($r=0.34$). This is also indicated in Table 5.1 which shows that the total interactional markers were used more by the Saudi students in the experimental group at 74.22% than the Saudi students in the control group at 68.99%.

In this category, the results indicate a significant difference for the Saudi students in the experimental group in the use of Hedges, $U=463.500$, $z=-5.286$, $p=0.000<0.05$, with a large effect size ($r=0.79$). As shown in Table 5.1, hedges were used more by the Saudi students in the experimental group at 13.36% than the Saudi students in the control group at 2.56%.

To examine whether there were any statistically significant differences between the use of interactive and interactional metadiscourse markers at the pre and post writing test of the experimental group, the results were compared using the non-parametric paired-sample Wilcoxon test. This test was used to compare the mean scores of the use of metadiscourse markers in the pre and the post writing test for the group between the two times. These results are shown in Table 5.4.

Table 5.4: Paired-sample Wilcoxon test results of the MD in pre- and post-writing test for the experimental group

MD by Experimental group	Ranks	N	Mean Rank	Sum of Ranks	Z	P-value
Total Interactive Markers	Negative	3	6.33	19.00	-2.912*	.004
	Positive	15	10.13	152.00		
Code Glosses	Negative	1	5.50	5.50	-2.673*	.008
	Positive	10	6.05	60.50		
Frame Markers	Negative	5	6.20	31.00	-2.176*	.030
	Positive	12	10.17	122.00		
Transition	Negative	6	8.25	49.50	-2.084*	.037
	Positive	14	11.46	160.50		
Total Interactional Markers	Negative	3	3.00	9.00	-3.704*	.000
	Positive	18	12.33	222.00		
Engagement	Negative	5	8.90	44.50	-1.251	.211
	Positive	11	8.32	91.50		
Attitude	Negative	3	3.50	10.50	.000	1.000
	Positive	3	3.50	10.50		
Boosters	Negative	3	7.33	22.00	-1.984*	.047
	Positive	11	7.55	83.00		
Self-mention	Negative	5	3.40	17.00	-3.287*	.001
	Positive	15	12.87	193.00		
Hedges	Negative	0	.00	.00	-3.935*	.000
	Positive	20	10.50	210.00		

*the difference is significant at 0.05 level

The results of the paired-sample Wilcoxon test showed that there were significant differences in favour of the pre writing test in the total use of interactive MD markers for the experimental group, $Z=-2.912$, $p=0.004<0.05$ with a medium effect size ($r=.43$). Also, as seen for the use of separate interactive markers such as code glosses and frame markers which increased from 0.23% and 3.35% to 1.48% and 4.99% respectively, the paired-sample Wilcoxon test also showed that there was a significant difference between the

mean scores of the use of MD in favour of the post writing test in the separate categories: code glosses $Z=-2.673$, $p=0.008<0.05$, with a medium effect size ($r=.40$), and frame markers $Z=-2.176$, $p=0.030<0.05$, with a medium effect size ($r=.32$). Also, for the use of transitions, the statistical results of the paired-sample Wilcoxon test indicated a significant increase between the two time points $Z=-2.084$, $p=0.037<0.05$, with a medium effect size ($r=.31$).

Furthermore, the results of the paired-sample Wilcoxon test showed that there was a significant difference in favour of the post writing test in the total use of interactional MD markers for the experimental group, $Z=-3.704$, $p=0.000<0.05$, with a large effect size ($r=.55$). This was also indicated by the frequency count of the markers as they showed that the use of interactional markers by the Saudi students in the experimental group increased from 69.7% in the pre-test to 74.2% in the post-test.

In this category, the results indicated that there was a significant difference between the mean scores of the use of MD in favour of the post writing test in the separate categories: boosters $Z=-1.984$, $p=0.047<0.05$, with a small effect size ($r=.29$), self-mention $Z=3.287$, $p=0.000<0.05$, with a medium effect size ($r=.49$). There was also a significant difference in the use of hedges markers which changed dramatically from 4.31% to 13.3% after the intervention, $Z=-3.935$, $p=0.037<0.05$, with a large effect size ($r=.59$).

To examine whether there were any statistically significant differences between the use of interactive and interactional metadiscourse markers at the pre and post writing test of the control group, the results were compared using the non-parametric paired-sample Wilcoxon test. This test was used to compare the mean scores of the use of metadiscourse markers in the pre and the post writing test for the group between the two times. These results are shown in Table 5.5.

Table 5.5: Paired-sample Wilcoxon test results of the MD in pre- and post-writing test for the control group

MD by Control group	Ranks	N	Mean Rank	Sum of Ranks	Z	P-value
Interactive Markers	Negative	9	9.61	86.50	-.693	.488
	Positive	11	11.23	123.50		
Code Glosses	Negative	2	2.50	5.00	.000	1.000
	Positive	2	2.50	5.00		
Frame Markers	Negative	7	8.64	60.50	-.029	.977
	Positive	8	7.44	59.50		
Transitions	Negative	8	8.63	69.00	-.722	.471
	Positive	10	10.20	102.00		
Interactional Markers	Negative	9	7.17	64.50	-.916	.360
	Positive	9	11.83	106.50		
Engagement	Negative	7	8.07	56.50	-.604	.546
	Positive	9	8.83	79.50		
Attitude	Negative	4	6.00	24.00	-.905	.366
	Positive	7	6.00	42.00		
Boosters	Negative	9	8.83	79.50	-1.151	.250
	Positive	6	6.75	40.50		
Self-mention	Negative	6	8.83	53.00	-2.390*	.017
	Positive	16	12.50	200.00		
Hedges	Negative	19	11.39	216.50	-3.528*	.000
	Positive	2	7.25	14.50		

*the difference is significant at 0.05 level

A Wilcoxon Signed Rank Test indicated that there was no significant difference found in the total use of interactive metadiscourse markers between the pre and post writing test by the Saudi students in the control group, $Z = -.693$, $p = 0.488 > 0.05$. There were no significant differences in the use of MD in the separate categories: code glosses $Z = -.000$, $p = 1.000 > 0.05$, frame markers $Z = -.029$, $p = 0.977 > 0.05$, and transitions $Z = -.722$, $p = 0.471 > 0.05$. This was also confirmed by the percentages obtained for the markers in Table 5.1 which

showed that the use of interactive markers by the EFL Saudi students decreased slightly from 32.1% to 31.0%. Specifically, the use of transitions in this category increased slightly from 25.4% to 25.13%, whereas the use of separate interactive markers such as code glosses and frame markers decreased from 0.41% and 6.26% to 0.36% and 5.50% respectively.

For the total use of interactional metadiscourse markers, the results indicated that there was no significant difference between the pre and post writing test by the students in the control group $Z = -.916$, $p = 0.360 > 0.05$. However, there was a significant difference in the use of MD in the separate categories of self-mention and hedges. While the use of self-mention increased in the post writing test $Z = -2.390$, $p = 0.017 < 0.05$ with a medium effect size ($r = .36$), the use of hedges has dropped significantly $Z = -3.528$, $p = 0.000 < 0.05$, with a large effect size ($r = .53$). As shown in table 5.1, self-mention markers increased by the students in the control group from 41.75% in the pre-test, to 55.96% in the post-test, while hedges decreased dramatically from 14.82% to 2.56%: hedges in this category therefore compared with the use of boosters.

5.2.2 The use of metadiscourse markers in pen-pal letter writing by the experimental and reference groups over one semester

To investigate the development of the Saudi students' use of metadiscourse markers in their pen-pal letter writing, two comparisons were made. First, the total numbers of interactive and interactional markers used by the Saudi students in the experimental group and by the American students in the reference group over the four letter exchanges were examined and compared. Second, a specific comparison was conducted to investigate whether there were any differences in the use of metadiscourse markers by the experimental group and the reference group at four points during the four letter exchanges during the semester. Table 5.6 summarises the total use of metadiscourse markers by the two groups.

Table 5.6: Total metadiscourse markers used in pen-pal letter writing by the experimental and reference groups

Category	Experimental group			Reference group		
	Total items	Items per 100 words	%	Total items	Items per 100 words	%
Interactive Markers	957	7.8	36.7	894	5.3	30.0
Code Glosses	16	0.1	0.6	10	0.06	0.3
Frame Markers	182	1.4	6.9	206	1.2	6.9
Transitions	759	6.2	29.1	678	4.0	22.7
Interactional Markers	1648	13.4	63.2	2084	12.5	69.9
Engagement	117	0.9	4.4	254	1.5	8.5
Attitude	90	0.7	3.4	105	0.6	3.5
Boosters	116	0.9	4.4	156	0.9	5.2
Self-mention	1167	9.5	44.7	1307	7.8	43.8
Hedges	158	1.2	6.06	262	1.5	8.7
Totals	2605	21.3	100.0	2978	17.8	100.0

As can be seen in Table 5.6, the Saudi students in the experimental group used more interactive markers than the American students. The Saudi students used 36.7% compared with the 30% used by the American students. In the interactive markers category, transitions were the most used markers by both the Saudi students (29.1%) and the American students (22.7%). Frame markers were used similarly by the Saudi and the American students with 6.9% each. Code glosses were the least used markers by the Saudi and American students with less than 1% for both groups. In the interactional category, the Saudi students used 63.2% of markers compared with 69.9% used by the American students. Self-mentions were the most frequently used markers by the Saudi (44.7%) and the American students (43.8%). Engagements and hedges were used slightly more by the American students with 8.5% engagements and 8.7% hedges, whereas the Saudi students used 4.4% engagements and 6.0% hedges. Boosters were used similarly between the Saudi (4.4%) and the American (5.2%) students. Finally, the use of attitude

markers was also similar between the two groups with 3.4% by the Saudi and 3.5% by the American students.

The total metadiscourse markers used in the four exchanges of pen pal letters by the Saudi students in the experimental group and American students in the reference group were analysed to investigate whether there were any statistically significant differences. The Mann-Whitney U Test was used for the comparison between the two groups and the results are shown in Table 5.7.

Table 5.7: Total MD use by the experimental and reference groups at the end of the experiment

Subscales	Group	No.	Mean Rank	Sum of Ranks	Mann-Whitney U	P-value
Interactive markers	Experimental	88	92.48	8138.00	4222.000	.299
	Reference	88	84.52	7438.00		
Code Glosses	Experimental	88	91.91	8088.00	4172.000	.142
	Reference	88	85.09	7488.00		
Frame Markers	Experimental	88	85.85	7554.50	3638.500	.482
	Reference	88	91.15	8021.50		
Transitions	Experimental	88	96.35	8478.50	4562.500*	.040
	Reference	88	80.65	7097.50		
Interactional Markers	Experimental	88	78.61	6918.00	3002.000*	.010
	Reference	88	98.39	8658.00		
Engagement	Experimental	88	70.98	6246.50	2330.500*	.000
	Reference	88	106.02	9329.50		
Attitude	Experimental	88	87.26	7678.50	3762.500	.731
	Reference	88	89.74	7897.50		
Boosters	Experimental	88	83.42	7341.00	3425.000	.172
	Reference	88	93.58	8235.00		
Self-mention	Experimental	88	86.12	7578.50	3662.500	.535
	Reference	88	90.88	7997.50		
Hedges	Experimental	88	78.16	6878.00	2962.000*	.006

	Reference	88	98.84	8698.00		
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*The difference is significant at 0.05 level

While Table 5.6 showed that the Saudi students in the experimental group used more interactive markers than the American students at 36.7% compared with the 30% used by the American students, the results of the Mann-Whitney U Test showed no statistically significant differences between the two groups, $U=3522.000$, $z=-1.039$, $p=0.299>0.0$.

In this category, there was significant difference in the use of transitions which were the most used markers by both the Saudi students (29.1%) and the American students (22.7%). The results of the Mann-Whitney U Test showed a significant difference in favour of the Saudi students in the experimental group in the use of transitions, $U=4562.500$, $z=-2.053$, $p=0.040<0.0$, with a small effect size ($r=0.15$). The results showed that there were no significant differences in the use of MD in the separate categories of code glosses $U=3572.000$, $Z=-1.467$, $p=0.142>0.05$, and frame markers $U=3638.500$, $Z=-.703$, $p=0.482>0.05$. These categories were used similarly by the Saudi and the American students.

There was also a statistically significant difference in favour of the reference group in the total use of interactional metadiscourse markers $U=3002.000$, $z=-2.577$, $p=0.010<0.05$, with a small effect size ($r=0.19$). The Saudi students used 63.2% of interactional markers compared with 69.9% used by the American students. In the interactional metadiscourse category, there was also a statistically significant differences in favour of the reference group in the use of engagement markers $U=2330.500$, $z=-4.666$, $p=0.000<0.05$, with a medium effect size ($r=0.35$), and in the use of hedges markers $U=2962.000$, $z=-2.744$, $p=0.006<0.05$, with a medium effect size ($r=0.20$). This was also indicated in table 5.6 as it showed that engagements and hedges were used slightly more by the American students with 8.5% engagements and 8.7% hedges, whereas the Saudi students used 4.4% engagements and 6.0% hedges.

The results showed that there were no significant differences in the use of MD in the separate categories: self-mention $U=3662.500$, $Z=-2.053$, $p=0.535>0.05$, Boosters $U=3425.000$, $Z=-1.367$, $p=0.172>0.05$, and attitude

markers $U=3762.500$, $Z=-.344$, $p=0.731>0.05$. These categories were used similarly by the Saudi and the American students. As shown in table 5.6, self-mentions markers were used 44.7% by the Saudi students, and 43.8% by the American students, boosters were used 4.4% by Saudi and 5.2% by American, and attitude markers were also similar between the two groups with 3.4% by the Saudi and 3.5% by the American students.

The second comparison was specifically conducted to investigate the use of metadiscourse markers by the experimental group and the reference group in the four exchanges of pen pal letters and to identify the changes (if any) in the use of markers over the semester. Table 5.8 presents the results.

Table 5.8: Comparison of the use of metadiscourse markers by the experimental group and the reference group in the four exchanges of letters

Category	1 st pen pal experimental			1 st pen pal reference			2 nd pen pal experimental			2 nd pen pal reference			3 rd pen pal experimental			3 rd pen pal reference			4 th pen pal experimental			4 th pen pal reference		
	Total items	Per 100 word	%	Total items	Per 100 words	%	Total items	Per 100 words	%	Total items	Per 100 words	%	Total items	Per 100 words	%	Total items	Per 100 words	%	Total items	Per 100 words	%	Total items	Per 100 words	%
Interactive Markers	225	7.0	23.73	262	5.57	31.60	272	8.24	39.36	235	5.45	28.34	209	7.45	37.52	206	4.75	28.49	251	8.59	39.58	191	5.75	31.99
Code Glosses	3	0.09	0.31	3	0.06	0.36	5	0.15	0.72	3	0.06	0.36	6	0.21	1.07	0	0	0	2	0.06	0.31	4	0.12	0.67
Frame Markers	36	1.12	3.79	51	1.08	6.51	48	1.45	6.94	46	1.06	5.54	32	1.14	5.74	48	1.10	6.63	66	2.25	10.41	61	1.83	10.21
Transition	186	5.80	19.62	208	4.42	25.0	219	6.63	31.69	186	4.31	22.43	171	6.09	30.70	158	3.64	21.85	183	6.26	28.86	126	3.79	21.10
Interactional Markers	498	15.54	52.53	567	12.06	68.39	419	12.69	60.63	594	13.79	71.65	348	12.40	62.47	517	11.93	71.50	383	13.10	60.41	406	12.22	68.00
Engagement	14	0.43	1.47	41	0.87	4.94	34	1.03	4.92	72	1.67	8.68	56	1.99	10.0	109	2.51	15.07	13	0.44	2.05	32	0.96	5.36
Attitude	13	0.40	1.37	19	0.40	2.29	25	0.75	3.61	30	0.69	3.61	37	1.31	6.64	42	0.96	5.80	15	0.51	2.36	14	0.42	2.34
Boosters	26	0.81	2.74	34	0.72	4.10	24	0.72	3.47	47	1.09	5.66	25	0.89	4.48	37	0.85	5.11	41	1.40	6.46	38	1.14	6.36
Self-mention	405	12.64	42.72	429	9.13	51.74	291	8.81	42.11	367	8.52	44.27	185	6.59	33.21	219	5.05	30.29	286	9.78	45.11	292	8.79	48.91
Hedges	40	1.24	4.21	44	0.93	5.30	45	1.36	6.51	78	1.81	9.40	45	1.60	8.07	110	2.53	15.21	28	0.95	4.41	30	0.90	5.02
Totals	948	29.59	100	829	17.64	100	691	20.9	100	829	19.25	100	557	19.8	100	723	16.68	100	634	21.69	100	597	17.98	100

As Table 5.8 shows, there was a development in the use of metadiscourse markers throughout the four exchanges of letters. The Saudi students' use of interactive markers substantially increased from 23.73% in the first exchange to 39.36% in the second exchange and then slightly decreased in the third exchange of letters to 37.52% before increasing again slightly in the fourth letter exchange to 39.58%. In this category, the use of code glosses stayed relatively the same during the four exchanges of letters whereas the use of frame markers and transitions increased. The Saudi students used frame markers at a rate of 3.79% in the first exchange, 6.94% in the second exchange, 5.74% in the third exchange and 10.41% in the final exchange. Transition markers were used 19.62% in the first exchange, then they substantially increased in the second exchange to 31.69%. The Saudi students used 30.70% transition markers in the third exchange, while in the fourth exchange the use of transitions decreased slightly to 28.86%. The total use of interactional markers also increased noticeably from 52.53% in the first exchange to 60.63% in the second exchange. It continued to increase in the third exchange to 62.47% and decreased slightly in the fourth exchange to 60.41%. The use of engagement, attitude and hedge markers increased slightly in the third exchange compared with the other exchanges of letters, and the use of boosters and self-mentions increased gradually from the first exchange towards the fourth exchange of letters. The Saudi students used 42.72% self-mention markers in the first exchange, 42.11% in the second, 33.21% in the third and 45.11% in the fourth exchange.

Furthermore, there was a difference between the total use of metadiscourse markers in the first and last exchanges by the Saudi students. There was a substantial increase in Saudi students' use of both interactive markers, from 23.73% in the first exchange to 39.58% in the final exchange, and interactional markers, from 52.53% in the first exchange to 60.41% in the fourth. It can be seen from these percentages that there was a gap between the two groups at the beginning of the experiment in the first exchange. At the beginning of the intervention, the Saudi students used 23.73% interactive markers compared with the 31.60% used by the American students. However, the Saudi students' use of interactive markers noticeably increased to 39.58% in the fourth exchange, which was relatively closer to the markers used by

Americans at 31.99%. A similar increase was found with regard to the Saudi students' use of interactional markers. They started the process with the use of 52.53% of these markers, compared with the Americans who used 68.39%, and ended with the use of 60.41% markers, which was closer to the use of markers by the American students at 68.00%. Thus, the gap found between the two groups in the use of interactive and interactional markers at the beginning of the experiment had noticeably decreased in the final exchange.

Some observations should be noted in relation to the use of metadiscourse markers by the Saudi students in the control group in the pre and post tests in this context. As shown in Table 5.1, the Saudi students in the control group used 32.15% interactive markers in the pre test and 31.00% in the post test, and they used 67.84% interactional markers in the pre test and 68.99% in the post test. The Saudi students in the experimental group used 23.73% interactive markers in the first letter exchange and 39.58% in the fourth, and they used 52.53% interactional markers in the first exchange and 60.41% in the final exchange. The comparison of the results of the control group with the use of metadiscourse markers by the experimental group in the first and last letter exchanges shows that the difference found in the use of interactive and interactional markers for the Saudi students in the experimental group was larger than the difference in the use of the markers by the control group at the pre and post tests.

To examine whether there were any statistically significant differences between the use of metadiscourse markers across the four pen pal letter exchanges of the experimental and reference groups, the results were compared using the Friedman Two Way ANOVA test. The test was conducted on the total use of interactive metadiscourse marker, followed by a comparison in every category separately to see if there was any change across the four pen pal letter exchanges. For the Saudi students in the experimental group, the results indicated that there was a statistically significant difference in the total use of interactive metadiscourse markers across the four exchange time points, $X^2 (2, n = 22) = 13.300, p = .004$. A follow up pairwise comparisons with a Bonferroni correction for multiple comparisons indicated that the total use of interactive markers was statistically significant as it increased between the first exchange (*Mean Rank*=2.00), and second exchange (*Mean Rank*= 3.05), $p =$

.007, $z = -2.426$, with a large effect size ($r = .51$). This was observed in Table 5.8 which shows that the Saudi students' use of interactive markers substantially increased from 23.73% in the first exchange to 39.36% in the second exchange.

In the interactive category, there were statistically significant differences between the use of transition markers across the four pen pal letter exchanges of the experimental group, $X^2 (2, n = 22) = 10.639$, $p = .014$). A follow up pairwise comparisons with a Bonferroni correction for multiple comparisons indicated that the use of transitions markers was statistically significant as it increased between the first exchange of letters (*Mean Rank* = 2.11) to the second exchange (*Mean Rank* = 3.18), $p = .029$, $z = -2.182$, with a medium effect size ($r = .32$). Transitions were decreased from the second to the third exchange (*Mean Rank* = 2.14), $p = .012$, $z = -2.503$, with a medium effect size ($r = .37$). As shown in Table 5.8, transition markers were used 19.62% in the first exchange, then they substantially increased in the second exchange to 31.69%. While the Saudi students used 30.70% transition markers in the third exchange, in the fourth exchange the use of transitions decreased slightly to 28.86%.

For the total use of interactional metadiscourse markers, the results indicated that there was a statistically significant difference by the Saudi students in the experimental group across the four exchange time points, $X^2 (2, n = 22) = 12.803$, $p = .005$). A follow up pairwise comparisons with a Bonferroni correction for multiple comparisons indicated that the total use of interactional metadiscourse markers statistically decreased between the first exchange of letters (*Mean Rank* = 3.23) and the third exchange (*Mean Rank* = 1.93), $p = .005$, $z = -3.005$, with a large effect size ($r = .64$).

In the interactional category, there were a statistically significant differences in the use of engagement markers, $X^2 (2, n = 22) = 24.967$, $p = .000$), attitude, $X^2 (2, n = 22) = 12.394$, $p = .006$), and self-mention, $X^2 (2, n = 22) = 27.364$, $p = .000$). For the engagement makers, a follow up pairwise comparisons with a Bonferroni correction for multiple comparisons indicated that the use of engagement markers was statistically significant as it increased between the first exchange (*Mean Rank* = 1.80) to the second exchange (*Mean Rank* = 2.84), $p = .003$, $z = -3.011$, with a medium effect size ($r = .45$). Engagement

markers were used 1.47% in the first exchange, and 4.92% in the second exchange of letters. Another increase was found between the first exchange (*Mean Rank*= 1.80) to the third exchange (*Mean Rank*=3.34), $p=.001$, $z=-3.227$, with a medium effect size ($r=.48$). This was also observed the percentages obtained which indicate that the use of engagement markers increased from 1.47% in the first exchange to 10.0% in the third exchange of letters. However, there was a statistically significant decrease in the use of engagement markers between the third exchange (*Mean Rank*= 3.34) to the fourth exchange (*Mean Rank*=2.02), $p=.002$, $z=-3.171$, with a medium effect size ($r=.47$), as the markers dropped from 10.0% in the third exchange to 2.05% in the last exchange.

For the use of attitude, a follow up pairwise comparison with a Bonferroni correction for multiple comparisons indicated that there were a statistically significant increased between the first exchange (*Mean Rank*= 1.93) and the third exchange (*Mean Rank*= 3.09), $p=.037$, $z=-2.090$, with a medium effect size ($r=.31$). Saudi students used 1.37% attitude markers in the first exchange compared to 6.64% in the third exchange. For the use of self-mention markers, there was a statistically significant decrease between the first exchange (*Mean Rank*= 3.50) and the third exchange (*Mean Rank*=1.50), $p=.000$, $z=-3.916$, with a large effect size ($r=.59$). Also, a decrease between the second exchange (*Mean Rank*= 2.59) and the third exchange (*Mean Rank*= 1.50), $p=.003$, $z=-2.990$, with a medium effect size ($r=.45$). Another decrease was found statistically significant between the first exchange (*Mean Rank*= 3.50) and the fourth exchange (*Mean Rank*=2.14), $p=.001$, $z=-3.462$, with a large effect size ($r=.52$). As shown in Table 5.8, self-mention markers were used 42.72% by the Saudi students in the first exchange, 42.11% in the second exchange, 33.21% in the third exchange, and 45.11% in the fourth exchange of letters.

For the American students in the reference group, the results indicated that there were no statistically significant differences in the total use of interactive metadiscourse markers across the four exchange time points, X^2 (2, $n= 22$) = 6.867, $p =.076$). For the total use of interactional metadiscourse markers used by the reference group, the results indicated that there was a statistically significant difference across the four exchanges time points, X^2 (2,

$n = 22$) = 10.005, $p = .019$). A follow up pairwise comparisons with a Bonferroni correction for multiple comparisons indicated that there was one significant difference. The use of total interactional markers has decreased by the reference group between the second exchange (*Mean Rank* = 2.93) and the fourth exchange of letters (*Mean Rank* = 1.82), $p = .003$, $z = -2.922$, with a medium effect size ($r = .44$). As illustrated in Table 5.8, the percentages obtained based on the total markers in the exchange indicate that the American students used 71.65% interactional metadiscourse markers in the second exchange and 68.00% in the last exchange.

In the interactional metadiscourse category, the Friedman Test results indicated that there was a statistically significant differences in the use of engagement markers, $X^2 (2, n = 22) = 26.250$, $p = .000$), attitude, $X^2 (2, n = 22) = 13.951$, $p = .003$), self-mention, $X^2 (2, n = 22) = 22.521$, $p = .000$), and hedges, $X^2 (2, n = 22) = 28.470$, $p = .000$). For the use on engagement markers, a follow up pairwise comparisons with a Bonferroni correction for multiple comparisons indicated a significant increase between the first exchange (*Mean Rank* = 2.02) and the third exchange of letters (*Mean Rank* = 3.57), $p = .000$, $z = -3.944$, with a medium effect size ($r = .59$). However, the use of engagement has significantly decreased between the third exchange (*Mean Rank* = 3.57) and the fourth exchange of letters (*Mean Rank* = 1.84), $p = .000$, $z = -3.757$, with a medium effect size ($r = .56$). The American students used 4.94% engagement markers in the first exchange, 8.68% in the second, 15.07% in the third exchange, and 5.3% in the last exchange of letters.

For the use of attitude, a follow up pairwise comparison with a Bonferroni correction for multiple comparisons indicated that there was a statistically significant increase between the first exchange (*Mean Rank* = 2.25) and the third exchange (*Mean Rank* = 3.16), $p = .011$, $z = -2.550$, with a medium effect size ($r = .38$). This was also indicated in the percentages obtained per the total markers used which shows that attitude markers were used 2.29% in the first exchange compared to 5.80% in the third exchange. However, the results indicated that the use of attitude markers has significantly decreased between the third exchange (*Mean Rank* = 3.16) and the fourth exchange of letters (*Mean Rank* = 1.98), $p = .003$, $z = -2.932$, with a medium effect size ($r = .44$). The

use of attitude markers dropped from 5.80% to 2.34% in the last exchange of letters.

For the use of self-mention, a follow up pairwise comparison with a Bonferroni correction for multiple comparisons indicated that there was a statistically significant decrease between the second exchange (*Mean Rank*= 2.95) and the third exchange (*Mean Rank*= 1.52), $p=.000$, $z=-3.516$, with a medium effect size ($r=.53$). Another decrease was found statistically significant between the first exchange (*Mean Rank*=3.18) and the third exchange (*Mean Rank*=1.52), $p=.000$, $z=-3.531$, with a medium effect size ($r=.50$).

For the use of hedges markers, a follow up pairwise comparisons with a Bonferroni correction for multiple comparisons indicated a significant increase between the first exchange (*Mean Rank*= 2.14) and the third exchange of letters (*Mean Rank*=3.50), $p=.000$, $z=-3.834$, with a medium effect size ($r=.57$). However, the results indicated that the use of hedges markers has significantly decreased between the second exchange (*Mean Rank*= 2.75) and the fourth exchange of letters (*Mean Rank* =1.61), $p=.003$, $z=-2.957$, with a medium effect size ($r=.44$). A significant decrease was also found between the third exchange (*Mean Rank*= 3.50) and the fourth exchange of letters (*Mean Rank* =1.61), $p=.000$, $z=-3.912$, with a large effect size ($r=.59$). As shown in Table 5.8, the American students in the reference group used hedges markers 5.30% in the first exchange, 9.40% in the second exchange, 15.21% in the third exchange, and 5.02% in the last exchange of letters.

5.2.3 The most frequent metadiscourse markers in pen-pal letter writing by the students in the experimental and reference groups

Specific metadiscourse markers in the letters of the Saudi students in the experimental group and the American students were also examined to identify the most frequently used interactive and interactional markers. The categories chosen to be investigated were determined based on the results obtained from the total frequencies of the interactive and interactional markers. According to these results, the most used interactive metadiscourse marker by the Saudi and American students was transitions, and in the interactional category, hedges and engagement were the most used metadiscourse

markers. In the light of these findings, I chose to analyse the use of specific markers in each of these categories in more detail. Examples from the students' writing will also be presented to illustrate the use of the specific metadiscourse markers in the interactive and interactional categories. Table 5.9 summarises the results of the most used interactive metadiscourse markers by the Saudi and American students.

Table 5.9: The most frequently used interactive markers by the experimental and reference groups

Category	Experimental group			Reference group		
	Total items	Items per 100	%	Total items	Items per 100 words	%
Interactive Markers	957	7.8	36.73	894	5.3	30.02
Transitions	759	6.2	29.13	678	4.0	22.76
<i>also</i>	91	0.74	3.49	69	0.41	2.31
<i>and</i>	517	4.22	19.84	422	2.53	14.17
<i>because</i>	60	0.49	2.30	70	0.42	2.35
<i>but</i>	83	0.67	3.18	94	0.56	3.15
<i>however</i>	6	0.04	0.23	9	0.05	0.30
<i>while</i>	2	0.01	0.07	14	0.08	0.47

As can be seen from Table 5.9, the most used category of the interactive markers was transitions. More specifically, the frequently used markers found in this category were *also*, *and*, *because*, *but*, *however* and *while*. The different functions which these markers performed in both the Saudi and the American students' letters were addition, comparison and consequence. Both groups used *and* and *also* to add additional information to the statements which they were making; the Saudi students used *and* at a rate of 19.84% and the American students used it at 14.17%. *Also* was used at 3.49% by the Saudi students and 2.31% by the American students. It can be seen from the results that these specific additive conjunction markers were used more by the Saudi students than the Americans. Some examples of the use of *and* and *also* are presented below.

*I also think that exercise is good for health **and** helps people control eating fast food. (Saudi student)*

*I have a friend who is a doctor now **and** I always look at her as a model for me. (Saudi student)*

*I am from a very small town **and** the majority of my town was there to watch this milestone in my life. (American student)*

*I **also** do not prefer fast food. (Saudi student)*
*I **also** enjoy traveling more than anything, but I have not visited many countries. (Saudi student)*
*It was a great surprise to learn that you **also** enjoy Netflix. (American student)*
*I **also** wish traveling dreams for the both of us too! (American student)*

Comparison transition markers such as *but* and *however* were used similarly by both groups to mark arguments as different: *but* was used at 3.15% by the American students and 3.18% by the Saudi students, and *however* was used 0.23% by the Saudi students and 0.30% by the American students. Examples from the students' letters are presented below. *While* was used to show contrast and found to be more frequently used by the American students at 0.47% compared with 0.07% by the Saudi students.

*Life is not easy, **but** hard work will make it possible. (Saudi student)*
***But**, I agree being on your own will really help you to become independent. (American student)*
*It cost a lot of money and it is expensive **however**, when I get a good job after I graduate it will be easy to make it happen. (Saudi student)*
*I wanted to be a dolphin trainer; **however**, my dream has slightly changed now that I am older. (American student)*
*Or traveling as well, it is a good way to get some food **while** not taking too much time out of your trip to stop. (American student)*
***While** I have not try it yet, it is something I want to do in the future. (Saudi student)*

Transitions to draw consequence relations and show how and why things happen using *because* were used by the Saudi students at 2.30% and at 2.35% by the American students. Two examples of the use of *because* are presented below.

*And for me Turkey now is like my second home town **because** I travel there very often. (Saudi student)*
*Thanksgiving break is near, I am excited **because** my mom makes all of our favorite dishes. (American student)*

The use of interactional metadiscourse markers varied across the five subcategories for the Saudi students in the experimental group and the reference group, with the self-mention, hedge and engagement markers used the most. Table 5.10 shows the most frequent uses of hedges and engagement markers.

Table 5.10: The most frequent interactional markers used by the experimental and reference groups

Category	Experimental group			Reference group		
	Total items	Items per 100 words	%	Total items	Items per 100 words	%
Interactional Markers	1648	13.4	63.26	2084	12.5	69.94
<i>Hedges</i>	158	1.2	6.06	262	1.5	8.79
<i>About</i>	64	0.52	2.45	84	0.50	2.82
<i>Could</i>	5	0.04	0.19	10	0.06	0.33
<i>Feel</i>	13	0.10	0.49	14	0.08	0.47
<i>Felt</i>	6	0.04	0.23	10	0.06	0.33
<i>Maybe</i>	8	0.06	0.30	9	0.05	0.30
<i>Might</i>	14	0.11	0.53	40	0.24	1.34
<i>Sometimes</i>	14	0.11	0.53	14	0.08	0.47
<i>Would</i>	34	0.27	1.30	80	0.48	2.68
Engagement Markers	117	0.9	4.49	254	1.5	8.52
<i>?</i>	18	0.14	0.69	107	0.64	3.59
<i>Do not</i>	27	0.22	1.03	14	0.08	0.47
<i>We</i> (inclusive)	44	0.35	1.68	71	0.42	2.38
<i>Should</i>	14	0.11	0.53	42	0.25	1.41
<i>See</i>	14	0.11	0.53	20	0.12	0.67

As Table 5.10 shows, the Saudi students used slightly fewer hedges (6.06%) than the American students (8.79%). The most frequently used markers in this subcategory were *about*, *could*, *feel*, *felt*, *maybe*, *should*, *sometimes* and *would*. *Would* and *about* were the most frequently used markers in this subcategory by both the Saudi and the American students. The Saudi students used *about* at a rate of 2.45% and the American students at 2.82%. The Saudi students used *would* at 1.30% compared with 2.68% by the American students. Some examples of the use of these two markers are provided below.

*I also know that achieving goals **would** need patience and hard work. (Saudi student)*
*I believe it is **about** getting used to cooking and being prepared every day and planning. (Saudi student)*
*I think a better idea **would** be to lower the prices like fruits, vegetables and poultry. (American student)*
*I think it is all **about** self-control and meal planning. (American student)*

Engagement markers were used substantially more by the American students than the Saudi students. The Saudi students used them at a rate of 4.49% whilst the Americans used them at 8.52%. The most frequently used engagement markers were *?*, *do not*, *we*, *should* and *see*. The Saudi students used *?* for 0.69% compared with 3.59% by the American students. The Saudi students used *should* at 0.53% compared with 1.41% by the American students. The inclusive *we* was used more frequently in the letters by the American students (2.38%) than in the letters by the Saudi students (1.68%). 'Inclusive *we*' means the use of the pronoun *we* to give a sense of commonality: it was used to represent the writer and reader together in various contexts. Some examples of the use of these two markers are provided below.

*When **we** are in a rush, **we** do not need to wait for the meal to be prepared. (Saudi student)*
*You **should** visit my country and go to Madinah and Makkah. (Saudi student)*
*Also, **we** must reduce the times we eat fast food, like **we** can eat it once a week. (Saudi student)*
*I think **we** all wish for that, to grow old with the people **we** love. (American student)*
*I think you **should** only have fast food a few times a month and then eat healthy the rest of the time. (American student)*

5.3 The impact of pen-pal letter writing on the EFL students' English language development

To investigate the role of pen-pal letter writing on students' language development, the vocabulary breadth and lexical diversity of the three groups, the experimental group, the control group and the reference group, were investigated. The results of these analyses are presented in detail in the following sections.

5.3.1 Vocabulary breadth in the pre and post tests by the experimental and control groups

The vocabulary profile for each Saudi student in the experimental and control groups was obtained from their pre and post writing test results. A comparison was made to investigate whether there were any differences in the vocabulary breadth between the two groups at the beginning and the end of the semester. Table 5.11 summarises the vocabulary profile results for the experimental and control groups.

Table 5.11: Vocabulary profile of experimental and control groups

Groups	Pre-test					Post-test				
	K1 %	K2 %	K1+K2 %	AWL %	OL %	K1 %	K2 %	K1+K2 %	AWL %	OL %
Experimental	84.08	5.42	89.50	0.96	5.70	87.20	6.06	93.26	5.22	4.16
Control	84.54	5.95	89.44	1.43	6.87	85.33	4.16	89.49	3.62	5.09

As can be seen from Table 5.11, the Saudi students in the experimental and control groups started with relatively similar use of K1 and K2 words. The Saudi students used an average of 84.08% K1 words and 5.42% K2 words compared with an average of 84.54% K1 words and 5.95% K2 words by the students in the control group. The control group used slightly more AWL words (1.43%) than the students in the experimental group (0.96%). However, in the post- experiment test, the Saudi students in the experimental group used more K1 and K2 words than the students in the control group. The total average of the use of K1 and K2 words was 93.26%, which is around the average which the experimental group used during the pen-pal letter writing exercise. There was also an increase in the use of AWL words by both groups, with the experimental group using them 5.22% on average in the post test compared with 0.96% in the pre- experiment test, and with the control group using them 1.43% on average in the pre test compared with 3.62% in the post test.

The other comparison was conducted to investigate whether there were any statistically significant difference between the Saudi students in the experimental and control groups in the use of K1 and K2 words used in the pre

and post writing test. The Mann-Whitney U Test was used for the comparison between the two groups and the results are shown in Table 5.12

Table 5.12: Mann-Whitney U Test results of the vocabulary profile

	Group	No.	Mean Rank	Sum of Ranks	Mann-Whitney U	P-value
K1+K2 Pre-writing test	Experimental	22	18.34	403.50	150.500*	.032
	Control	22	26.66	586.50		
K1+K2 Post-writing test	Experimental	22	27.25	599.50	137.500*	.014
	Control	22	17.75	390.50		

*The difference is significant at 0.05 level

The results of the Mann-Whitney U Test showed statistically significant differences in favour of the control group in the total use of K1 and K2 words in the pre-writing test, $U=150.500$ $p\text{-value } 0.032 < 0.05$, $z=-2.149$. This effect can be described as medium ($r=0.32$).

The results of the comparison between the experimental and control groups in the total use of K1 and K2 words in the post-writing tests indicates a statistically significant differences in favour of the experimental group $U=137.500$ $p\text{-value } 0.014 < 0.05$, $z=-2.454$. This effect can be described as medium ($r=0.37$).

To examine whether there were any significant differences between the total K1 and K2 words at the pre and post writing test of the experimental and control groups, the results were compared using the non-parametric paired-sample Wilcoxon test. This test was used to compare the mean scores of the experimental and control groups in the pre and the post writing test. These results are shown in Table 5.13

Table 5.13: Paired-sample Wilcoxon test results of the vocabulary profile

groups	Ranks	N	Mean Rank	Sum of Ranks	Z	P-value
Experimental pre/post	Negative	7	5.00	35.00	-2.799*	.005
	Positive	14	14.00	196.00		
Control pre/post	Negative	13	11.54	150.00	-.763	.445
	Positive	9	11.44	103.00		

*the difference is significant at 0.05 level

A Wilcoxon signed rank test indicated that there was a significant difference in the total use of K1 and K2 words in the post writing test, $Z=-2.799$ at the 0.05 level of significance and a $p\text{-value } 0.005 < 0.05$. On the other hand, there was no significant difference found in the total use of K1 and K2 words between the pre and post writing test by the Saudi students in the control group, $Z=-.763$ at the 0.05 level of significance and a $p\text{-value of } 0.445 > 0.05$. As for the effect size, the magnitude of the difference found was medium for the experimental group between the two times ($r=.42$).

5.3.2 Vocabulary breadth in pen-pal letter writing by the experimental and reference groups

The vocabulary profile for each Saudi and American student was first obtained for every exchange letter, then the average percentage was obtained for each exchange of letters to determine whether there was any development in the use of vocabulary throughout the pen-pal letter exchange over the semester between the two groups. Table 5.14 summarises the vocabulary profile results.

Table 5.14: Vocabulary profiles of the experimental and reference groups

Group	1 st pen pal					2 nd pen pal					3 rd pen pal					4 th pen pal				
	K1 %	K2%	K1+K2 %	AWL%	OL%	K1 %	K2 %	K1+K2 %	AWL %	OL %	K1 %	K2 %	K1+K2 %	AWL %	OL %	K1 %	K2 %	K1+K2 %	AWL %	OL %
Experiment	85.10	5.13	86.47	1.92	7.87	84.82	5.60	90.38	1.92	8.51	85.10	7.85	92.96	1.24	5.80	88.15	4.58	92.73	2.47	4.95
Reference	85.33	4.71	90.04	2.90	7.07	86.73	4.89	91.48	1.07	7.45	85.83	6.25	92.06	2.02	5.93	86.00	3.94	89.95	3.81	6.25

As Table 5.14 shows, both the Saudi and the American students started the first exchange with relatively similar use of K1 words; the Saudis used an average of 85.10% words and the Americans used 85.33% words. For the use of K2 words, the Saudi students used slightly more words than the Americans in the first exchange of letters. The Saudi students' use of these words increased from 5.13% in the first exchange of letters to 7.85% in the third exchange, and the American students' use of K2 words increased from 4.71% to 6.25% in the third exchange. The use of AWL words also developed during the four exchanges of letters by both the Saudi and the American students. The Saudi students started with an average of 1.92% academic words and the American students with 2.90%, and in the fourth exchange, the Saudi students used 2.47% compared with 3.81% by the American students. The use of OL words by the Saudi students decreased from 7.87% in the first exchange to 4.95% in the fourth. The American students' use of OL words also decreased from 7.07% in the first exchange to 5.93% in the third exchange.

As can be seen, the total use of K1 and K2 words by the Saudi students increased slightly over the four letter exchanges. They used an average of 86.47% of K1 and K2 words in the first exchange and an average of 92.73% in the final exchange. Similarly, although the American students' use of K1 and K2 words dropped to 89.95% in the fourth exchange, their use of K1 and K2 words gradually increased in the second and third letter exchanges from 90.04% to 91.48% and 92.06% respectively.

To examine whether there were any statistically significant differences between the total use of K1 and K2 words across the four pen pal letter exchanges of the experimental and reference groups, the results were compared using the Friedman Two Way ANOVA test. The results indicated that there were no statistically significant differences in the total use of K1 and K2 words by the Saudi students in the experimental group across the four exchanges of pen pal letters, $X^2(2, n= 22) = 5.67, p = .129$). For the reference group the results indicated that there was a statistically significant difference in the total K1 and K2 words used by the American students across the four exchanges, $X^2(2, n= 22) = 9.52, p = .023$). Inspection of the median values showed a decrease in the use of K1 and K2 words from the first exchange of letters ($Md= 195.00$) to the fourth exchange ($Md=143.50$). A follow up pairwise

comparison with a Bonferroni correction for multiple comparisons indicated that the total use of K1 and K2 words was statistically significant as it decreased between the third exchange of letters (*Mean Rank*=2.82), and fourth exchange of letters by the reference group (*Mean Rank*= 1.77), $p = .003$, $z = -2.939$, with a medium effect size ($r = .44$).

5.3.3 Lexical diversity in pen-pal letter writing by the experimental and reference groups

The students' letters were also assessed in terms of their lexical diversity; that is, the variety of the vocabulary and the avoidance of word repetition in their writing. Table 5.15 below provides the results for the experimental and control groups.

Table 5.15: Vocab scores for the experimental and reference groups in the four letter exchanges

Groups	1st pen pal	2nd pen pal	3rd pen pal	4th pen pal
	<i>D score</i>	<i>D score</i>	<i>D score</i>	<i>D score</i>
Experimental	66.94	67.55	75.56	64.40
Reference	81.72	76.39	90.21	74.75

As Table 5.15 shows, the lexical diversity scores of the two groups over the four letter exchanges show that the American students started with a higher score (81.72) than the Saudi students (66.94). The lexical diversity scores of both the Saudi and the American students were slightly higher in the third letter exchange than in the first, second and fourth exchanges. The scores suggest a random difference in the lexical diversity for the Saudi students and the American students as there was no noticeable difference in the lexical diversity of the two groups across the four letter exchanges.

To examine whether there were any statistically significant differences between D scores across the four pen pal letter exchanges of the experimental and reference groups, the results were compared using the Friedman Two Way ANOVA test. The results indicated that there were no statistically significant differences in the D scores by the Saudi students in the

experimental group across the four exchanges of pen pal letters, $X^2(2, n= 22) = 7.36, p = .061$). For the reference group the results indicated that there was a statistically significant difference in the D scores by the American students across the four exchanges, $X^2(2, n= 22) = 17.29, p = .001$). Inspection of the median values showed a decrease in the D scores from the first exchange of letters ($Md= 81.825$) to the fourth exchange ($Md=75.220$).

A follow up pairwise comparison with a Bonferroni correction for multiple comparisons indicated that the lexical diversity statistically increased from second exchange of letters (*Mean Rank*=2.14) to the third exchange (*Mean Rank*= 3.41), $p= .006, z= -2.743$, with a medium effect size ($r=.41$). The results also showed that the lexical diversity statistically decreased from the third exchange of letters (*Mean Rank*=2.14) to the fourth letter exchange (*Mean Rank*= 1.91), $p= .001, z=-3.230$, with a medium effect size ($r=.48$).

5.3.4 Lexical diversity in the pre and post tests by the experimental and control groups

To ascertain whether there was any development in the use of vocabulary by the Saudi students in the experimental and control groups in the pre- and post- experiment tests, their lexical diversity was investigated by calculating the average of the D scores in the pre and the post writing tests. The results are presented in Table 5.16 below.

Table 5.16: Vocd scores for the experimental and control groups in the pre and post tests

Groups	Pre-test	Post- test
	<i>D score</i>	<i>D score</i>
Experimental	71.37	64.30
Control	72.79	62.52

As can be seen in Table 5.16, there was no noticeable development in the Vocd scores in the pre and post tests by the experimental group and the control group. The Saudi students in the experimental group had an average score of 71.37 in the pre test, which was relatively similar to the control group's score of 72.79, whilst in the post- experiment test, the Saudi students in the

experimental group had an average score of 64.30 compared with 62.52 by the control group.

The other comparison was conducted to investigate whether there were any statistically significant differences between the Saudi students in the experimental and control groups in the lexical diversity in the pre and post writing test. The Mann-Whitney U Test was used for the comparison between the two groups and the results are shown in Table 5.17

Table 5.17: Mann-Whitney U Test results of the lexical diversity

	Group	No.	Mean Rank	Sum of Ranks	Mann-Whitney U	P-value
D score pre-writing test	Experimental	22	21.45	472.00	219.000	.589
	Control	22	23.55	518.00		
D score post-writing test	Experimental	22	23.93	526.50	210.500	.460
	Control	22	21.07	463.50		

*The difference is significant at 0.05 level

The results of the Mann-Whitney U Test showed no statistically significant differences in the lexical diversity between the experimental and control group in the pre-writing test, $U=219.000$, $p= 0.589>0.05$, $z=-.540$. The results of the comparison between the experimental and control groups in the post-writing test also indicated no statistically significant differences in the lexical diversity, $U=210.500$ $p= 0.460>0.05$, $z=-.739$.

To examine whether there were any significant differences between the lexical diversity scores between the pre and post writing tests of the experimental and control groups, the results were compared using the non-parametric paired-sample Wilcoxon test. This test was used to compare the mean scores of each group separately between the two time points. These results are shown in Table 5.18 below.

Table 5.18: Paired-sample Wilcoxon test results of the lexical diversity

groups	Ranks	N	Mean Rank	Sum of Ranks	Z	P-value
Experimental pre and post	Negative	15	11.60	174.00	-1.542	.123
	Positive	7	11.29	79.00		
Control pre and post	Negative	17	12.18	207.00	-2.613*	.009
	Positive	5	9.20	46.00		

*the difference is significant at 0.05 level

A Wilcoxon signed rank test indicated that there was no significant difference in the lexical diversity in the post writing test, $Z=-1.542$, $p=0.123>0.05$. However, the results indicate that there was a significant reduction found in the lexical diversity between the pre and post writing test by the Saudi students in the control group, $Z=-2.13$, $p=0.009<0.05$. As for the effect size, the magnitude of the difference found was medium for the control group between the two times ($r = .39$).

5.4 The Role of Pen-Pal Letter Writing on the EFL Saudi Students' Writing Motivation

To examine the impact of the pen-pal writing activity on students' writing motivation, the results obtained from the pre and post questionnaire were compared between and within the groups. In total, four comparisons were conducted. First, a comparison of the pre questionnaire results was performed between the experimental and control groups. Second, the control and experimental groups were compared in terms of the questionnaire results obtained after the intervention. Then, a comparison was conducted between the results obtained before and after the experiment for the control group and then for the experimental group. The following sections present these results.

5.4.1 Writing motivation in the control and experimental groups at the start of the experiment

The questionnaire data obtained before the experiment were analysed to investigate whether there were any significant differences in motivation between the two groups before the experiment and to provide baseline data for the two groups. The results of the test are presented in Table 5.19

Table 5.19: Motivation scores of the experimental and control groups at the beginning of the experiment

Subscales	Groups	No.	Mean Rank	Sum of Ranks	Mann-Whitney U	p-value
Interest/enjoyment	Control	22	25.68	565.00	172.000	0.099
	Experimental	22	19.32	425.00		
Perceived Competence	Control	22	17.80	391.50	138.500*	0.015
	Experimental	22	27.20	598.50		
Effort/importance	Control	22	27.50	605.00	132.000*	0.010
	Experimental	22	17.50	385.00		
Pressure/tension	Control	22	25.66	564.50	172.500	0.101
	Experimental	22	19.34	425.50		
Perceived Choice	Control	22	22.39	492.50	239.500	0.953
	Experimental	22	22.61	497.50		
Value/usefulness	Control	22	26.20	576.50	160.500	0.055
	Experimental	22	18.80	413.50		
Overall	Control	22	24.55	540.00	197.000	0.291
	Experimental	22	20.45	450.00		

*The difference is significant at 0.05 level

The Mann-Whitney U Test showed a statistically significant difference between the control group and the experimental group in two subscales, perceived competence and effort/importance. In the perceived competence subscale, the absolute value of the calculated Mann-Whitney U Test was $U=138.500$ and the p-value was $0.015 < 0.05$, indicating that the differences are significant in favour of the control group. In the effort/importance subscale, the absolute value of the calculated Mann-Whitney U Test was $U=132.000$ and the p-value was $0.010 < 0.05$, revealing significant differences in favour of the experimental group.

The Mann-Whitney U Test indicated no significant differences in the other subscales: interest/enjoyment $U=172.000$ and p-value $0.099 > 0.05$, pressure/tension $U=172.500$, p-value $0.101 > 0.05$, perceived choice

U=239.500, p-value 0.953>0.05, and value/usefulness U=160.500, p-value 0.055>0.05. There were also no significant differences found when comparing the overall subscales, as shown in the absolute value of the calculated Mann-Whitney U Test at U=197.000 and p-value 0.291>0.05. Figure 5.1 presents the comparison of the results found between the two groups visually.

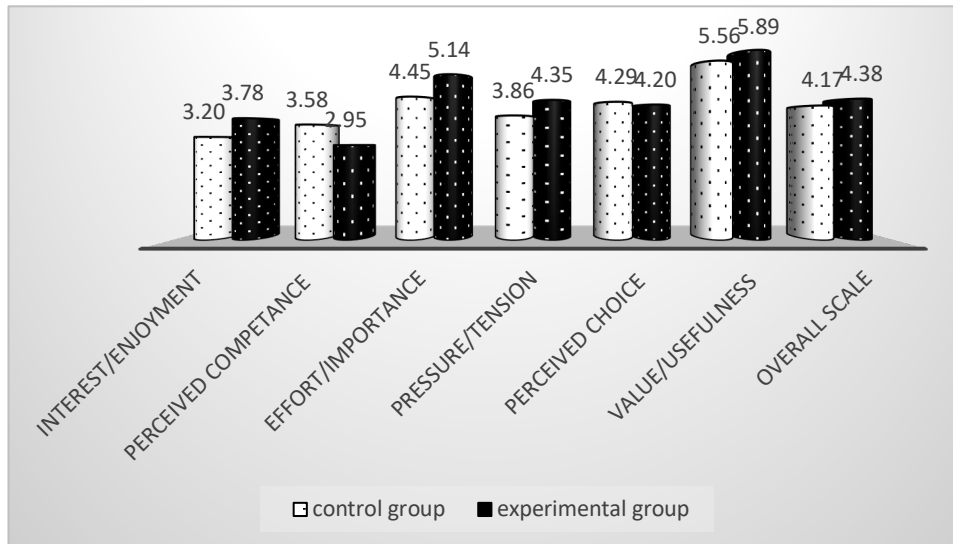


Figure 5.1: Motivation scores of the control group and the experimental group at the start of the experiment

The effect size was then calculated to measure the significant difference between the mean scores of the two samples in the two subscales of perceived competence and effort/importance. Calculating the effect size shows how big or small the difference between the two means is. The eta squared (η^2) was calculated as follows:

$r = Z / \text{square root of } N$ where N = total number of cases

and the effect size is divided into three levels:

1. Effect size is small if $0.01 < \eta^2 < 0.06$
2. Effect size is moderate if $0.06 < \eta^2 < 0.14$
3. Effect size is high if $\eta^2 > 0.14$

The results are presented in Table 5.20.

Table 5.20: Effect size results between the control group and the experimental group at the start of the experiment

Subscales	Z test	η^2	Effect size
Perceived Competence	-2.472	0.381	medium
Effort/importance	-1.310	0.197	small

As can be seen from the results shown in Table 5.20, the magnitude of the difference found for the students in the experimental and control groups was moderate in the subscale of perceived competence and small between the two groups in the subscale of effort/importance.

5.4.2 Writing motivation in the control and experimental groups at the end of the experiment

The data obtained from the post-IMI questionnaire were analysed to investigate whether there were any significant differences in the motivation between the two groups after the experiment. The Mann-Whitney U Test was used and the results are shown in Table 5.21.

Table 5.21: Motivation scores of the control group and the experimental group at the end of the experiment

Subscales	Group	No.	Mean Rank	Sum of Ranks	Mann-Whitney U	P-value
Interest/enjoyment	Control	22	14.14	311.00	58.000*	0.000
	Experimental	22	30.86	679.00		
Perceived Competence	Control	22	17.61	387.50	134.500*	0.011
	Experimental	22	27.39	602.50		
Effort/importance	Control	22	22.61	497.50	239.500	0.953
	Experimental	22	22.39	492.50		
Pressure/tension	Control	22	26.32	579.00	158.000*	0.048
	Experimental	22	18.68	411.00		
Perceived Choice	Control	22	16.59	365.00	112.000*	0.002
	Experimental	22	28.41	625.00		

Value/usefulness	Control	22	19.11	420.50	167.500	0.080
	Experimental	22	25.89	569.50		
Overall Scale	Control	22	15.68	345.00	92.000*	0.000
	Experimental	22	29.32	645.00		

*The difference is significant at 0.05 level

The results of the Mann-Whitney U Test showed statistically significant differences between the control group and the experimental group after the experiment in the following subscales: interest/enjoyment $U=58.000$ $p\text{-value } 0.000 > 0.05$, perceived competence $U=134.500$, $p\text{-value } 0.011 < 0.05$ and perceived choice $U=112.000$, $p\text{-value } 0.002 > 0.05$ in favour of the experimental group. Furthermore, the Mann-Whitney U Test showed a statistically significant difference between the groups in pressure/tension $U=158.000$, $p\text{-value } 0.048 > 0.05$ in favour of the control group. No statistically significant differences were found between the groups in effort/importance ($U=239.500$, $p\text{-value } 0.953 < 0.05$) or value/usefulness ($U=167.500$, $p\text{-value } 0.080 > 0.05$).

In the overall scale, the absolute value of the calculated Mann-Whitney U Test was $U=92.000$, $p\text{-value } 0.000 > 0.05$ in favour of the experimental group. It is important to note here that pressure/tension is a negative indicator of motivation whereas the other subscales are positive indicators, which explains why the students in the experimental group seemed to have higher scores in all the subscales except for pressure/tension. As the results clearly show, the differences were significant in favour of the experimental group. To summarise, Figure 5.2 presents these results visually.

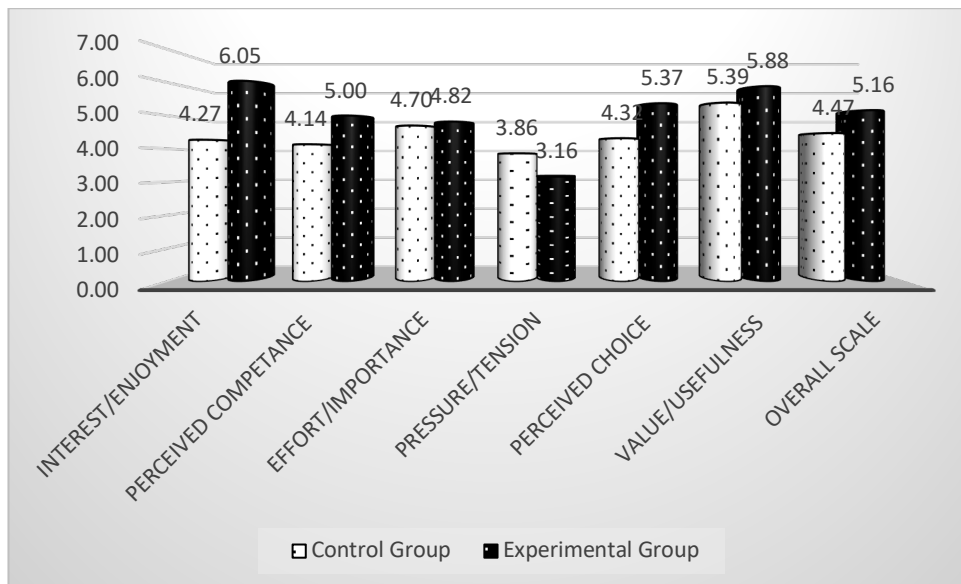


Figure 5.2: Motivation scores of the control group and the experimental group at the start of the experiment

The effect size was then calculated to measure the significant difference between the mean scores of the two samples. The η^2 was calculated as follows:

$r = Z / \text{square root of } N$ where N = total number of cases

and the effect size is divided into three levels:

1. Effect size is small if $0.01 < \eta^2 < 0.06$
2. Effect size is moderate if $0.06 < \eta^2 < 0.14$
3. Effect size is high if $\eta^2 > 0.14$

These results are presented in Table 5.22.

Table 5.22: Effect size results between the control group and the experimental group at the end of the experiment

Subscales	Z test	η^2	Effect size
Interest/enjoyment	-4.327	0.652	high
Perceived Competence	-2.530	0.381	high
Pressure/tension	-1.979	0.298	high

Perceived Choice	-3.057	0.461	high
Overall Scale	-3.522	0.531	high

As can be seen from the results of the post-IMI questionnaire, statistically significant differences were found between the control group and the experimental group. The calculated effect size of the overall scale between the two groups suggests a favourable impact on the students in the experimental group compared with the control group. The magnitude of the difference found for the students in the experimental group was large in the subscales of interest/enjoyment, perceived competence and perceived choice compared with the students in the control group. One subscale, pressure/tension, was found significant with a large effect size in favour of the control group. As explained earlier, unlike the other subscales, pressure/tension is a negative indicator of motivation. The results reflect an increase in the motivation of the experimental group on the mentioned subscales compared with the students in the control group.

5.4.3 Writing motivation in the control group at the start and end of the experiment

To examine whether there were any significant differences between the motivation scores at the beginning and at the end of the experiment for the students in the control group, the results were compared using the non-parametric paired-sample Wilcoxon test. This test was used to compare the mean scores of the control group in the pre and the post questionnaires. These results are shown in Table 5.23

Table 5.23: Paired-sample Wilcoxon test results of the pre- and post-IMI questionnaires for the control group

Subscales	Ranks	N	Mean Rank	Sum of Ranks	Z	P-value
Interest/enjoyment	Negative	4	5.63	22.50	-3.380*	.001
	Positive	18	12.81	230.50		
Perceived Competence	Negative	5	9.20	46.00	-2.420*	.016
	Positive	16	11.56	185.00		

Effort/importance	Negative	9	10.50	94.50	-1.041	.298
	Positive	13	12.19	158.50		
Pressure/tension	Negative	13	7.96	103.50	-0.343	.732
	Positive	6	14.42	86.50		
Perceived Choice	Negative	13	9.85	128.00	-0.049	.961
	Positive	9	13.89	125.00		
Value/usefulness	Negative	9	11.00	99.00	-0.598	.556
	Positive	9	8.00	72.00		
Overall	Negative	5	10.30	51.50	-2.436*	.015
	Positive	17	11.85	201.50		

*the difference is significant at 0.05 level

The results of the paired-sample Wilcoxon test showed that there were significant differences in favour of the post-IMI questionnaire in the two subscales of interest/enjoyment of $Z=-3.380$ at the 0.05 level of significance and a p-value $0.001<0.05$, and perceived competence with the absolute value of the calculated Wilcoxon test of $Z=-2.420$ at the 0.05 level of significance and a p-value $0.016<0.05$. It is important to note here that the Saudi students in the control group had a higher score on the perceived competence subscale than those in the experimental group at the start of the experiment.

Furthermore, the results of the paired-sample Wilcoxon test showed that there were no significant differences between the mean scores of the pre and the post questionnaires in the other subscales: effort/importance $Z=-1.041$ at the 0.05 level of significance and a p-value $0.298>0.05$, pressure/tension $Z=-0.343$ at the 0.05 level of significance and a p-value of $0.732>0.05$, perceived choice $Z=-0.049$ at the 0.05 level of significance and a p-value of $0.961>0.05$, and value/usefulness $Z=-0.598$ at the 0.05 level of significance and a p-value of $0.556>0.05$.

For the overall scale, there were differences at the significant level ($\alpha\leq 0.05$) between the mean scores of the control group in the pre- and the post-IMI questionnaires, with an absolute value in the calculated Wilcoxon test of $Z=-2.436$ at the 0.05 level of significance and a p-value of $0.015<0.05$, and the difference was in favour of the post test. Figure 5.3 presents the results.

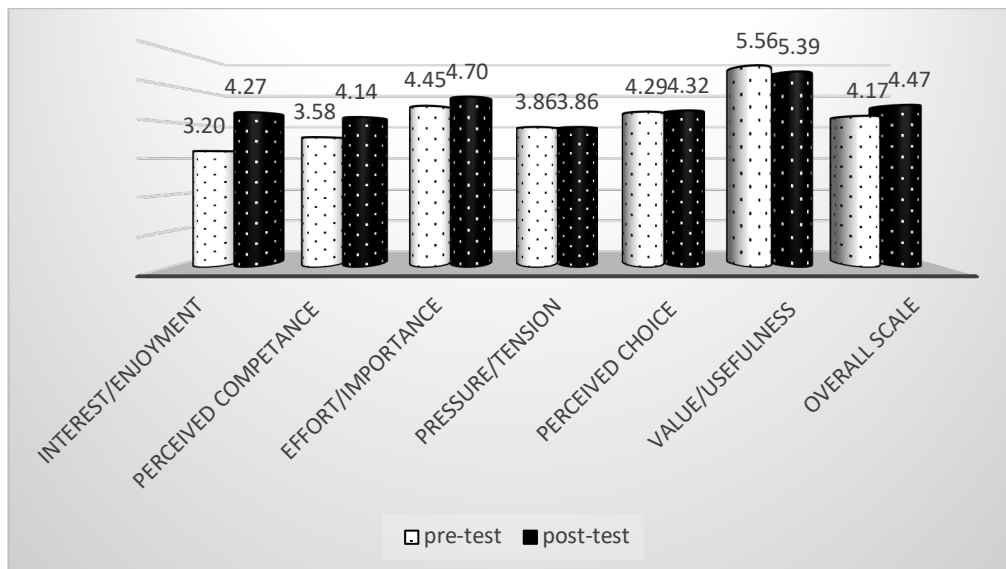


Figure 5.3: Comparison of the pre- and post-IMI questionnaires of the control group

As for the effect size, the magnitude of the difference found was high in the two subscales of interest/enjoyment and perceived competence. There were no significant differences found in the other subscales between the pre- and post-IMI questionnaires for the students in the control group. Table 5.24 presents the results

Table 5.24: Effect size between the pre- and post-IMI questionnaires for the control group

Subscales	Z test	η^2	Effect size
Interest/enjoyment	-3.380	0.510	high
Perceived Competence	-2.420	0.365	high
Overall Scale	-2.436	0.367	high

5.4.4 Writing motivation in the experimental group at the start and end of the intervention

The Saudi students in the experimental group started with lower competence in the pre-IMI questionnaire than the students in the control group, which made the differences found in the post-IMI questionnaire predictable between the two groups in this particular dimension. Conducting a comparison between the pre and post questionnaires for the students in the experimental group would therefore cancel out the differences found at the beginning

between the two groups. The comparison between the pre and post questionnaires for the students in the experimental group will provide a better understanding of the progress which the students in the experimental group made during the intervention. In order to examine whether there were any significant differences between the pre and post questionnaires of the experimental group, the results were compared using the paired-sample Wilcoxon test. The results are shown in Table 5.25.

Table 5.25: Wilcoxon signed-ranks test between the mean scores of the pre- and post-IMI questionnaires for the experimental group

Subscales	Ranks	N	Mean Rank	Sum of Ranks	Z	P-value
Interest/enjoyment	Negative	0	0.00	0.00	-4.110*	.000
	Positive	22	11.50	253.00		
Perceived Competence	Negative	0	0.00	0.00	-4.109*	.000
	Positive	22	11.50	253.00		
Effort/importance	Negative	10	11.90	119.00	1.464	.143
	Positive	8	6.50	52.00		
Pressure/tension	Negative	18	12.50	225.00	-3.201*	.001
	Positive	4	7.00	28.00		
Perceived Choice	Negative	1	4.00	4.00	-3.883*	.000
	Positive	20	11.35	227.00		
Value/usefulness	Negative	10	9.90	99.00	0.575	.565
	Positive	11	12.00	132.00		
Overall scale	Negative	1	9.50	9.50	-3.799*	.000
	Positive	21	11.60	243.50		

*The difference is significant at 0.05 level

The paired-sample Wilcoxon test results showed that there were significant differences between the mean scores in favour of the post-IMI questionnaire responses by the experimental group in the subscales interest/enjoyment with $Z=-4.110$ at the 0.05 level of significance and a p-value of $0.000 < 0.05$, perceived competence with $Z=-4.109$ at the 0.05 level of significance and a p-value of $0.000 < 0.05$, and perceived choice with $Z=-3.883$ at the 0.05 level of significance and a p-value of $0.000 < 0.05$. The results also

showed that the differences were in favour of the pre test in pressure/tension, with $Z=-3.201$ at the 0.05 level of significance and a p-value of $0.001<0.05$. No significant results were found in effort/importance, with $Z=1.464$ at the 0.05 level of significance and a p-value of $0.143>0.05$, and value/usefulness, with $Z=0.575$ at the 0.05 level of significance and a p-value of $0.565>0.05$.

For the overall scale, the absolute value of the Wilcoxon test was $Z=-6.584$ at the 0.05 level of significance and a p-value of $0.000<0.05$. As a result, the null hypothesis was rejected, meaning that there was a statistically significant difference at the significance level $\alpha\leq 0.05$ between the mean scores of the experimental group in the pre- and the post-IMI questionnaires, and the difference was in favour of the post questionnaire. Figure 5.4 shows the results.

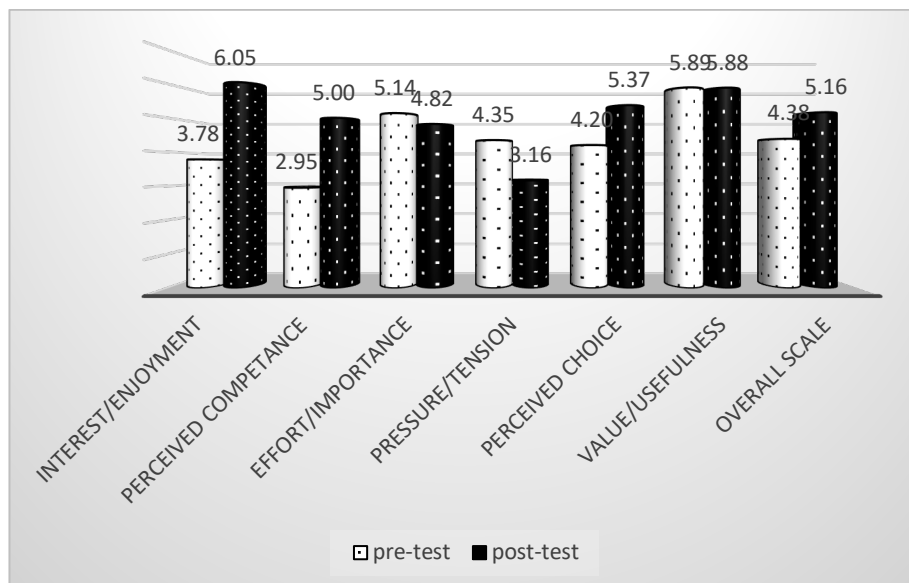


Figure 5.4: Comparison of the pre- and post-IMI questionnaire of the experimental group

The effect size calculated between the pre- and post-IMI questionnaires suggests a large effect size in three subscales, interest/enjoyment, perceived competence and perceived choice, which were in favour of the post-IMI questionnaire, but pressure/tension, which is a negative indicator of motivation, was in favour of the pre-IMI questionnaire. Table 5.26 presents the results.

Table 5.26: Effect size between pre- and post-IMI questionnaires for the experimental group

Subscales	Z test	η^2	Effect size
Interest/enjoyment	-4.110	0.620	high
Perceived Competence	-4.109	0.619	high
Pressure/tension	-3.201	0.483	high
Perceived Choice	-3.883	0.585	high
Overall Scale	-3.799	0.573	high

In regard to the results of the pre- and post-IMI questionnaires of the control group, it must be acknowledged that since they had a higher score in two subscales, perceived competence and interest/enjoyment, the improvement found in the post-IMI questionnaires of the experimental group cannot be attributed to the intervention at this stage. While maturation can explain the increase found in the two subscales of perceived competence and interest/enjoyment for the control groups, the degree of change between the experimental and control groups needs to be investigated further to understand the magnitude of the difference and decide whether or not an intervention impact was observed in the results of these two subscales. Table 5.27 shows the difference in the magnitude found between the two groups.

Table 5.27: Comparison of effect size results between the control and experimental group on the perceived competence and interest/enjoyment subscales

Subscales/group	Calculated effect size results between the pre and post questionnaires		Comparison results
	Z test	η^2	
Perceived competence: control group	-2.420	0.365	The difference in magnitude is in favour of the experimental group.
Perceived competence: experimental group	-4.109	0.619	
Interest/enjoyment: control group	-3.380	0.509	The difference in magnitude is in

Interest/enjoyment: experimental group	-4.110	0.619	favour of the experimental group.
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As Table 5.27 shows, the difference in the magnitude in perceived competence was noticeably larger for the experimental group compared with the control group. For the interest/enjoyment subscale, the difference was slightly larger in favour of the experimental group. It can therefore be concluded that the Saudi students in the experimental group showed better results in the perceived competence and interest/enjoyment subscales than the students in the control group.

5.4.5 The development of relatedness in the pen-pal letter writing of the experimental group

To examine the development of the students' relatedness in pen-pal letter writing, two data sources were used. The Saudi students in the experimental group answered additional subscale questions in the post-IMI questionnaire to investigate whether they had developed relatedness with their pen pals after engaging in pen-pal letter writing. In addition to the extra subscale, the nine interviewees were asked questions regarding their perceptions about their pen-pal correspondents. Using data source triangulation, the results were examined to understand whether the students in the experimental group developed relatedness in pen-pal letter writing.

As explained in the methodology chapter, the relatedness subscale in the questionnaire was only analysed descriptively because relatedness was not measured at the beginning of the intervention. The relatedness subscale contained eight questions and the construct measured the interpersonal interaction between the Saudi students and their American correspondents. Before running the descriptive analysis, the internal consistency reliability of the subscale was checked using the Cronbach's Alpha test. The result for the relatedness subscale was found to be acceptable at 0.76 (Field, 2009). Following this procedure, a descriptive statistical test was conducted to obtain the frequency and percentage of the students' responses in every item of the subscale. Table 5.28 shows the results.

Table 5.28: Relatedness scores of the experimental group

Subscale Items	Mean	SD	1 not at all true	2	3	4 somewhat true	5	6	7 very true
I felt really distant from the person I wrote to.	2.36	1.39	(36.4%)	(27.3%)	(9.1%)	(18.2%)	(9.1%)	(0%)	(0%)
I felt close to the person I wrote to.	5.09	1.60	(0%)	(0%)	(13.6%)	(40.9%)	(4.5%)	(4.5%)	(36.4%)
I really doubt that the person I wrote to and I would ever be friends.	2.50	1.47	(31.8%)	(27.3%)	(13.6%)	(18.2%)	(4.5%)	(4.5%)	(0%)
It is likely that the person I wrote to and I could become friends if we interacted a lot.	5.27	1.60	(0%)	(4.5%)	(9.1%)	(27.3%)	(4.5%)	(22.7%)	(31.8%)
I'd really prefer not to interact with the person I wrote to in the future.	5.41	1.26	(54.5%)	(18.2%)	(9.1%)	(9.1%)	(0%)	(9.1%)	(0%)
I'd like a chance to interact with the person I wrote to more often.	2.09	1.60	(0%)	(0%)	(0%)	(36.4%)	(13.6%)	(22.7%)	(27.3%)
I do not feel like I could really trust this person I wrote pen-pal letters to	3.13	.94	(4.5%)	(18.2%)	(40.9%)	(31.8%)	(4.5%)	(0%)	(0%)
I felt like I could really trust this person I wrote pen-pal letters to.	5.27	1.20	(0%)	(4.5%)	(0%)	(18.2%)	(31.8%)	(31.8%)	(13.6%)

N= 22 Likert scale values: not at all true (1), (2), (3), somewhat true (4), (5), (6), very true (7).

In response to the first two items in the questionnaire, 'I felt really distant from the person I wrote to' and 'I felt close to the person I wrote to', the majority of the students answered that they did not feel distant from the person to whom they wrote pen-pal letters as the answers were spread over the seven-point Likert scale; 36.4% of the students responded 'not at all true', and that they felt

close to their pen-pal correspondent as 'very true' (36.4%) or 'somewhat true' (40.9%).

The analysis of the answers to the questions 'I really doubt that the person I wrote to and I would ever be friends' showed that the majority of the students said that this was not at all true at (1) (31.8%), or (2) (27.3%) and 18.2% answered that it was somewhat true (4). In answer to the question 'It is likely that the person I wrote to and I could become friends if we interacted a lot', the majority indicated very true at either (7) (31.8%) or (6) (22.7%).

For 'I'd really prefer not to interact with the person I wrote to in the future', (54.5%) students indicated (1) not at all true. The majority's response was positive for 'I'd like a chance to interact with the person I wrote to more often', with very true (7) (27.3%), (6) (22.7%) and somewhat true (4) (36.4%).

For the last two items in the subscale 'I do not feel like I could really trust this person I wrote pen pal letters to', the students' answers were (3) (40.9%) and 31.8% answered (4) somewhat true. The majority's answers for 'I felt like I could really trust this person I wrote pen pal letters to' were (6) (31.8%) or (5) (31.8%), and 18.2% of the students answered somewhat true (4).

The interview data provided further information about the students' perceptions about their closeness to their pen pals. When the students were asked about how they felt about their pen pals, they indicated that they felt close as friends because they exchanged personal details about their lives, families and interests. The discovery of mutual interests and hobbies between the participants and their correspondents enabled them to develop their sense of friendship. They also shared their personal opinions about the topics which they were discussing. Below are comments from one of the high-level motivation students and one of the mid-level motivation students:

... yes, definitely. We have many things in common. I invited him to visit Saudi Arabia and he also did the same. I really wanted to exchange more letters, he is a very friendly and nice person. (Lana, high-motivation student)

Yes, Tom and I had so many things in common and we enjoyed writing to each other ... from our first exchange I found that we both love art, and that was exciting. (Reem, mid-motivation student)

When they were asked about their impression of the person they were writing to, they used adjectives such as 'nice', 'kind', 'funny' and 'ambitious'. All of the students referred to their pen pal correspondents by name, which further indicates a level of relatedness which was established during the exchanges of letters between them. In addition, when they were asked whether or not they wished for more interaction, all the students, at the different levels of motivation, indicated that they enjoyed writing letters to their correspondents and they wished for more exchanges of letters. Below is one participant's view of how she developed relatedness with her pen pal correspondent:

I was stressed about my first year in the university, and he gave me advice on how to cope with university and build a social life. I thought that was very nice of him. (Fai, low-motivation student)

As Fai's comment shows, during the pen-pal letter exchanges, she was able to share her overwhelming feelings of being a first-year student in university and felt more comfortable talking about it, especially knowing that her pen-pal correspondent was in his first year too.

5.5 The Saudi students' perceptions of the pen-pal letter writing experience

To answer this research question, the responses given in the interviews with the nine Saudi students (three with high-level, three with medium-level and three with low-level motivation) in the experimental group were analysed. Five themes were established deductively and other themes which emerged within these themes were identified inductively to provide a more detailed picture of the Saudi students' writing experiences and motivation. The predetermined themes were as follows:

- prior experience with pen-pal letter writing;
- challenges and difficulties in pen-pal letter writing;
- emotional response to pen-pal letter writing;
- perceived competence in pen-pal letter writing; and
- developing relatedness in pen-pal letter writing.

The inductive search of the interview responses helped to identify two sub-themes regarding the students' perceived value and usefulness of pen-pal letter writing, which were language learning and the writing process. Each theme will be discussed and compared between the students who showed high, medium and low levels of motivation in their questionnaire responses. Before presenting and discussing the results, Table 5.29 gives a summary of the codes found across all the participants.

Table 5.29: The Saudi students' perceptions of their pen-pal letter writing experience

Codes	High motivation students			Mid motivation students			Low motivation students		
	S1	S2	S3	S4	S5	S6	S7	S8	S9
Theme: Previous experience with pen-pal letter writing									
No experience of pen-pal letter writing	✓	✓	✓	✓	✓	✓	✓	✓	✓
Experience of writing letters online				✓				✓	
Writing letters in school	✓	✓			✓				
Writing using phone applications such as WhatsApp				✓					
Theme: Emotional response to pen-pal letter writing									
Feeling pressured or not	✓	✓		✓	✓	✓	✓	✓	✓
Enjoying a fun activity	✓	✓	✓	✓	✓	✓	✓	✓	✓
Enjoying fewer rules and guidelines	✓		✓	✓	✓			✓	
Comfortable writing to a same-age peer	✓	✓	✓	✓		✓	✓		✓
Theme: Challenges in pen-pal letter writing									
Time-consuming to write and revise	✓	✓		✓	✓	✓		✓	✓

Translating difficult words and phrases	✓	✓	✓		✓		✓	✓	✓
Converting from L1 to L2						✓	✓	✓	✓
Changing the topics of the letters								✓	✓
Theme: Emotional responses towards pen-pal correspondents and relatedness									
Desire for more interaction with pen-pal correspondent	✓	✓	✓	✓	✓	✓	✓	✓	✓
Positive impression about the pen-pal correspondent	✓	✓	✓	✓	✓	✓	✓	✓	✓
Developed friendship	✓	✓	✓	✓	✓	✓	✓	✓	✓
Theme: Usefulness of pen-pal letter writing									
Learning vocabulary	✓	✓	✓	✓	✓	✓	✓	✓	✓
Learning letter structure	✓	✓	✓	✓	✓	✓	✓	✓	✓
Using resources such as dictionaries	✓		✓		✓	✓	✓		✓
Using the letter as a model for writing	✓	✓	✓	✓	✓	✓	✓	✓	✓
Learning the process of writing a letter in English	✓		✓	✓		✓	✓	✓	
Talking to native speakers to improve language	✓	✓	✓	✓	✓	✓	✓	✓	✓
Theme: Developing competence or not									
Competence in relation to language proficiency	✓	✓	✓	✓	✓	✓	✓	✓	✓
Competence for good/bad communication	✓	✓	✓	✓	✓	✓	✓	✓	✓

5.5.1 The Saudi EFL students' prior experiences with pen-pal letter writing

In response to the first interview questions ('Have you ever written a letter in English before? If yes, who did you write it to? What was the purpose? Was it only once or several exchanges?'), students in all three groups replied that they had no prior experience of writing pen-pal letters and that they were not familiar with the term 'pen-pal letter writing', although some of them did have experience of letter writing in both English and Arabic. One student in the low-motivation group said that she had written letters online in Arabic, but not in English:

I have not written a letter in English before. I wrote letters online but in Arabic, and I thought that writing a letter in English would be the same. (Tolay, low-motivation student)

Two students in the high-motivation group commented that they were taught how to write letters in English as part of their schoolwork. One of them explained:

We used to write to an imaginary person as part of our school homework, but this was my first time writing to a real person ... I liked it very much and I enjoyed it even though it was my first experience, and I was not sure of how to write a real letter in English and whether if it is different from what I knew. (Joana, high-motivation student)

Also, one student in the mid-motivation group said that she used to write online to a friend she knew who was a native speaker of English, but it was in the form of chatting and not in a letter:

... it was online to a friend I met on a social media website. He was from Australia, and we used to communicate often and share funny videos and pictures ... It was in a form of texting not a real letter. This is my first time writing a real pen-pal letter. (Reem, mid-motivation student)

It was therefore established that the students in the three groups had no prior experience of writing pen-pal letters and that the current experiment was their first time of writing and exchanging letters with a real native speaker of English.

5.5.1 The Saudi EFL students' perceived value and usefulness of pen-pal letter writing

In terms of the perceived value of pen-pal letter writing and whether the experience was deemed useful for the participants, their answers were grouped into two sub-themes: language learning and the writing process. In response to the interview question 'Do you think pen-pal letter writing is useful? Why?', the majority of the answers were similar across the three groups of the students. They said that pen-pal letter writing was beneficial for learning new vocabulary and expressions in English. Their answers also showed that receiving and writing the pen-pal letters had encouraged them to use the dictionary and other online resources to understand some difficult words. In addition, pen-pal letter writing had helped them to become familiar with the structure of writing sentences and paragraphs in English:

I think it is useful. I was not sure at the beginning, but I feel it helped me with learning new words. I used the dictionary and online tools like google translate to understand some difficult words. I also searched online for some expressions I wanted to use in my letter but was not sure if it is familiar for a native person. (Norah, low-motivation student)

Another benefit related to language learning from pen-pal letter writing mentioned by students in the low, mid, and high-motivation groups was that writing their pen-pal letters gave them an opportunity to practise English with a native speaker. One high-motivated student said:

I also came across many new words in the letters. I feel I got a chance to develop my English language talking to a native speaker of English. It is not something available as I don't travel a lot and don't meet native speakers of English often. (Lana, high-motivation student)

In regard to the usefulness of pen-pal letter writing for the writing process, according to the students in all three groups pen-pal letter writing was found to be useful for the writing process. The American letters that they received were used as models for their own writing, specifically for language use, structure, and opening and closing of letters. The students reported feeling more confident about starting and ending their own letters after having received and analysed the American letters from their pen-pals. Overall, the students perceived the pen-pal letter writing experience as a valuable learning

tool that improved their writing skills. By using the American letters as models, they were able to learn about different writing styles and techniques, which they could then apply to their own writing. This experience also helped to build their confidence in writing letters in English, which may have been a challenging task for some students. Below are two participants' views of the usefulness of writing pen-pal letters:

... I feel that the pen-pal letters helped me to learn new vocabulary and expressions in English. I came across many expressions and new words in the letters I received I also learned how to write a letter in English. I did not know how to start and end a letter in English before. (Joana, high-motivation student)
When I received a letter, I looked carefully and tried to see the organisation of the ideas in the letter and did the same. Especially how to start and end a letter. I felt that was very useful. (Reem, mid-motivation student)

5.5.2 The Saudi EFL students' perceived challenges in pen-pal letter writing

The interviewees were asked if there were any difficulties or challenges that they had faced when writing their pen-pal letters. Their answers to the question 'Were there any difficulties/challenges during pen-pal letter writing? If yes, what were these challenges?' were related to composing a response in English, reading the letters which they received and translating. Students in the high- and mid-motivation groups said that it was challenging for them to read the letters which they received and to write their response in English. They explained that they spent time checking spelling and revising their letters. To understand the content of the letters, they translated some words from English into Arabic. One mid-motivation student said that

... the new words and writing my letter clearly were the main challenges. I spent time reading every letter I received carefully, then translated some difficult words. Then, I felt I could write my reply. I also spent time re-reading my letter and making sure that it was understandable and without mistakes. I checked the spelling and punctuation several times. (Alia, mid-motivation student)

In contrast to the high- and mid-motivation students who were translating words from English into Arabic, the low-motivation students in the study seemed to be preoccupied with translation from Arabic into English,

particularly when it came to writing. These students shared that they found it challenging to articulate their ideas from their native Arabic language into English, which affected their motivation and performance in the pen-pal letter writing task. This difficulty with language transfer may have contributed to the lower motivation levels observed among these students. They may have felt discouraged or frustrated by their inability to express themselves effectively in English and as a result, may have lacked the confidence and motivation to engage fully with the task. In contrast, the high- and mid-motivation students who were translating from English into Arabic may have found this process less challenging and may have been more motivated by the opportunity to improve their second-language skills. Fai explained:

I took a lot of time to write because my English is so bad, and I felt I struggled a lot to write. I knew what I wanted to say, but I struggled to articulate my ideas into English. It was time-consuming to read and understand what the letter was about and to reply to the questions. I had to use google to translate from Arabic into English. (Fai, low-motivation student)

In addition to the challenges related to language transfer, the low-motivation students in the study also reported facing difficulties related to their English language proficiency level. Specifically, these students felt that their lower proficiency levels made it difficult for them to write fluently, resulting in a longer time spent on writing. The perception of lower proficiency levels may have also contributed to feelings of frustration and discouragement among the low-motivation students as they may have felt that they were not able to meet the expectations of the task. One low-motivation student said:

For me, I think I struggled with pen-pal letter writing because my English proficiency is low. I feel I would have done better if my English was good. (Norah, low-motivation student)

Another issue raised by two of the students in the low-motivation group was concerned with the topics of the letters. Tolay said that it would be better for the communication if the topics were not fixed and if they were not changed in every exchange:

I did not like that we had to write about different topics every time. Sometimes we carried on a conversation that we had in the previous letter and then discussed the new topic. I found the fact that I had to discuss specific topics a bit annoying.

5.5.3 The Saudi EFL students' reported emotional responses to pen-pal letter writing

The interviewees were also asked about their perceptions of the pen-pal letter-writing experience and how they felt towards it. In regard to the question 'How did you feel about your pen-pal letter writing experience in class? Did you enjoy it?', the most frequent emotional response was one of enjoyment of pen-pal letter writing.

The high- and mid-motivation students explained that they enjoyed pen-pal letter writing because they felt a lot of freedom in writing compared with carrying out writing tasks at school:

... in class I don't enjoy writing because it is all about the instruction we get from the teacher. In pen-pal letter writing, I found writing easier while communicating with a real person.
(Lana, high-motivation student)

Reem similarly said that the nature of pen-pal letters as a communicative writing task made it more enjoyable than traditional tasks in the classroom. She also stated that her enjoyment of writing came from the fact that she was interacting with real people:

In the pen-pal letters, we were writing to a student just like us, I felt that was more comfortable compared to writing in class for the teacher. The topics we discussed were about our personal opinions so there was also freedom to express our ideas without worrying if they were right or wrong. I enjoyed finding out that we shared many views and interests. We were able to communicate, and I enjoyed sharing my opinions and also finding out what she had to say about them. (Reem, mid-motivation student)

A similar response was made by Alia:

I liked how we interacted with each other and felt it was fun and enjoyable. I felt it was better to write to someone of my own age. We were able to share a lot of ideas and talk about our daily life and personal experiences. (Alia, mid-motivation student)

The high- and mid-motivation students in the study had a more positive perspective on the pen-pal letter writing task. They regarded it as a social act that enabled them to engage with others and express their views. According to these students, the pen-pal exchange gave them an opportunity to improve

their English language skills while writing to a native speaker and building a relationship with someone they had never met before. They further explained that the exchange allowed them to get to know new people with mutual interests and learn about diverse cultural practices and perspectives:

I found it very enjoyable and unusual. We have never had a similar experience before and have never written to real people in class. Some of my friends in class were so nervous because they were scared of the experience, but I was one of the others who were so excited. I felt that it could be an opportunity for me to improve my English, because I developed my English texting a native friend online. (Reem, mid-motivation student)

Another emotional response was regarding feeling pressured. The interviewees in the high- and mid-motivation groups said that they felt less pressured writing their pen-pal letters and believed that it was more fun than carrying out other writing tasks in the classroom. Two interviewees said that they felt more comfortable writing to a student who was the same age as themselves. This may have helped to reduce any feelings of anxiety or pressure that they may have otherwise experienced when writing to an adult or authority figure. Additionally, the opportunity to connect with someone from a different cultural background may have added an element of excitement or novelty to the task, fostering positive emotional responses and engagement:

... I enjoyed it; it was fun. I did not feel the pressure of writing as when I write in our writing class. I knew that the letter would be sent to a student just like me. That made me feel less pressured while writing it. (Lana, high-motivation student)

Some students in the low-motivation group said that they also enjoyed writing pen-pal letters compared with writing when isolated in class; however, Norah felt that writing to an English speaker did put some pressure on her. She admitted that she had a fear of making mistakes in her writing which had affected her enjoyment of writing her pen-pal letters:

The fact that my pen-pal correspondent was a native speaker of English made me feel stressed because I was trying my best to write a good letter. (Norah, low-motivation student)

Fai also enjoyed the pen-pal letter exchange:

I enjoyed the pen-pal letter writing compared with how we usually do our writing activities in class ... I received questions about

myself and my opinion and I wanted to write more comfortably. It was a fun part getting to know each other and finding that we had similar interests. (Fai, low-motivation student)

5.5.4 The Saudi EFL students' perceived competence in pen-pal letter writing

The interviewees' answers to the question about their perceived competence during the pen-pal letter writing project ('Do you think you did better in pen-pal letter writing than most of the students? Why?') showed that the high- and mid-motivation students in the study felt that they had performed better than their peers in the class for several reasons. One of the main reasons was the confidence that they had gained in their English language abilities through the pen-pal letter writing task. These students emphasised that the writing exchange allowed them to practice their language skills in a meaningful context, building their confidence and proficiency levels. In addition to improved language skills, the high- and mid-motivation students also noted that they were able to perform better than their peers in the class because of the good communication they had established with their pen-pals. Specifically, these students were able to read and understand the questions and prompts provided by their pen-pals and respond with thoughtful and relevant answers. This level of communication demonstrated their language proficiency and engagement in the task, leading to better overall performance. One interviewee said:

I think I did well. We communicated very well in our pen-pal letters. We shared our ideas, enjoyed writing to each other and answered each other's questions. (Joana, high-motivation student)

In contrast to the high- and mid-motivation students who felt that they had performed well in the pen-pal letter writing task and had improved their English language skills and communication abilities, the interviewees in the low-motivation group had a different perspective. For the low-motivation students, a lack of confidence in their English language abilities was a significant barrier to performing well in the pen-pal exchange. These students believed that their English levels were not good enough compared to their peers in the class, which affected their motivation and engagement in the task. As a result, they did not feel that they had performed better than others in the class. Tolay expressed the following opinion:

... I think there are many students who did better than me. I would say I was in the middle. It took me more time than most to write my letter as I struggled with translating and understanding the content. (Tolay, low-motivation student).

5.6 Summary

In this chapter, I have presented the results of the Saudi EFL students' written communication, its development over one semester, and their writing motivation. The analysis of the metadiscourse markers showed that the experimental group used more interactional metadiscourse markers than the control group at the end of the intervention. The findings also showed the change in the vocabulary breadth of those in the experimental group after their involvement in receiving and writing pen-pal letters. Even so, there was no noticeable difference found in terms of the development of lexical diversity in the experimental group. Furthermore, the statistical analysis of the questionnaire responses revealed a significant difference for the students in the experimental group in their interest/enjoyment, perceived competence and perceived choice subscales. In addition, students' pressure/tension subscale significantly decreased, which is a negative indicator of intrinsic motivation. The students showed a significant improvement with a large effect size after the implementation of pen-pal letter writing. The analysis of the interview responses provided further details about the students' pen-pal letter writing experience. Overall, the students expressed enjoyment in the pen-pal activity and its usefulness for their English language learning and writing process. They also felt that writing the pen-pal letters had helped them to develop their writing competence and relatedness, as the communication with a real person had enabled them to work on their writing skills in a more engaging and motivating way.

Chapter 6 Discussion

6.1 Introduction

The current chapter discusses the findings of the study according to the research questions. It first summarises the findings related to the role of pen-pal letter writing on the development of the students' communicative writing ability and also considers the reasons for the study's specific findings and compares them with the findings of previous studies. It then discusses the role of pen-pal letter writing in the students' language development, specifically their vocabulary breadth and lexical diversity, and considers the reasons for the lack of such development over one semester. The chapter then proceeds with the findings on the impact of pen-pal letter writing activity on students' writing motivation, highlighting the important role that the activity plays in students' motivation, and then makes recommendations on how pen-pal letter writing could be implemented in language classrooms. The chapter will conclude with a consideration of the reasons for the challenges which the participants had faced and their feelings towards the pen-pal letter writing experience which they expressed during the interviews. Finally, it provides some suggestions on how to support students in overcoming their challenges.

As a reminder, the specific research questions which this study addresses are the following:

RQ1: What is the effect -if any-of a pen-pal writing intervention on the development of EFL Saudi students' communicative ability to interact with their audience? (measured by their use of metadiscourse markers);

RQ2: What is the effect of a pen-pal writing intervention on the development of EFL students' English language proficiency? (measured by their vocabulary breadth and lexical diversity);

RQ3: How does the pen-pal letter writing intervention interact with students' writing motivation?;

RQ4: What are the Saudi students' perceptions about the pen-pal writing experience?

6.2 The role of pen-pal letter writing in the development of EFL Saudi students' communicative ability to interact with their audience

One of the aims of this study was to understand the role of pen-pal letter writing in the development of Saudi EFL students' communicative ability. Focusing on the use of metadiscourse markers as the linguistic resources which writers use to communicate with their readers and to establish relationships, I adopted Hyland's (2005) interpersonal metadiscourse model to determine the participant students' communicative ability. More specifically, assuming a positive role of pen-pal letter writing on the development of written communicative ability, I predicted differences in the use of the markers at the end of the semester for the Saudi EFL students who had previous pen-pal letter writing experience and no differences for the Saudi EFL students who did not have such an experience. The results confirmed that the students with pen-pal letter writing experience had a noticeable difference in the use of both interactive and interactional markers after one semester involving four exchanges of letters. In contrast, the students who did not have such an experience did not show any significant improvement in their use of interactive or interactional markers over time. The results therefore suggest that pen-pal letter writing can have a positive impact on the development of students' communicative ability, especially their interaction with their audience. In the following section, I shall discuss the findings in detail.

6.2.1 Interactive metadiscourse markers

The total use of interactive metadiscourse markers was compared between the Saudi students in the experimental group and those in the control group at the pre- and post- experiment writing tests. The results of the post test showed a significant difference in the use of the total interactive metadiscourse markers by the students in the experimental group. More specifically, in this category, there was a significant development in the use of transitions by the experimental group between the pre-and post-writing test. This result was also similar to the results of the use of transition markers found in their pen-pal letters during the four exchanges. Throughout the semester, there was a significant increase in the total use of interactive metadiscourse markers by the Saudi students in the experimental group from the first, second,

and third exchange of letters. Although their use of transitions significantly dropped by the fourth exchange, their use of interactive markers was, however, different from that of their American correspondents who used fewer interactive markers, especially transitions, than the Saudi students in the experimental group.

6.2.1.1 The use of transitions

The total count of metadiscourse markers during the four exchanges of letters showed that the Saudi students significantly used more transitions than the American students. Despite the slight decrease indicated by the results of the frequency of markers obtained per 100 words, the statistical analysis showed that the students in the experimental group used significantly more transitions in the post writing test compared to the pre writing test. This was also different from the Saudi students in the control group who showed no significant difference between the pre-and post writing test in the use of transition markers. In addition, the results of the exchanged letters showed an increase in the use of transition markers. More specifically, in the second and third exchanges of letters, the Saudi students used significantly more transition markers. This finding suggests that when writing a letter to a real correspondent, the students made attempts to facilitate their readers' understanding of the content and tried to guide them by using specific transition markers and making their text more coherent. The finding confirms the results of a similar experimental study by Stanford and Siders (2011) who found noticeable differences between a group of students who wrote pen-pal letters to a fictitious person and students who wrote pen-pal letters to a real person. In that study, the students who wrote to a real person wrote longer and more complex sentences than the other group. The findings of that study also showed that the absence of a genuine audience during pen-pal letter writing resulted in a decrease of the total number of words written. Stanford and Siders (2011) also linked the absence of an authentic audience to the students' lack of motivation to write, although students' motivational factors were only obtained from their feedback after the experiment. A similar finding which linked students' writing to the absence of an authentic audience was made by Chen and Brown (2012). Utilising a task-based language teaching approach (TBLT) and seeking to bolster students' linguistic and communicative

competence through an authentic setting, they investigated the impact of providing students with a real audience and its influence on EFL students' writing. The students' perception of their writing progress and motivation was assessed using semi-structured interviews and was also triangulated with the students' web-based project work and observations of the participants. The analysis of the interview responses showed that the existence of a real correspondent during the writing task positively influenced students' writing as they were motivated to focus on sentence complexity and variety and also autonomously learned vocabulary to communicate with their reader effectively.

An explanation for the difference found in the use of transitions in pen pal letters between the Saudi students and their American correspondence could be related to gender differences in the employment of metadiscourse markers. For example, interactive metadiscourse markers, especially transitions, were examined by Alqahtani and Abdelhalim (2020) who found that there was a significant difference between male and female students in the use of transitions markers, with Saudi EFL female students employing more transitions than male students. The researchers attributed this to the psychological differences between males and females: they reported that women's communication style is characterised by a focus on facilitation, which was clearly reflected in the use of transitions to help to organise and arrange texts, and to establish logical connections. That finding is similar to that of the current study which had only Saudi females as participants.

Similar results were found in studies focused on Arab writers which concluded that the use of transitions was found to be more frequent by Arab L2 learners compared with English writers. Although the studies differ from the current study by their focus on academic writing, they linked the frequent use of transitions to the linguistic background of the writers. For instance, Zakaria and Abdul Malik (2018) carried out a textual analysis of 50 Arab students' academic writing and found that they employed more interactive markers and that the highest usage was of transition markers. Sultan (2011) compared the discussion sections of 70 linguistics research papers written by native speakers of Arabic and of English and found that the Arab writers used transitions much more frequently than the English native writers. In fact, transitions in Arabic were found to be approximately three times more than the

rest of the subcategories of interactive metadiscourse markers. More recently, Alharbi (2021) examined metadiscourse markers in 40 sections/chapters of research articles and master's dissertations in the field of applied linguistics composed by L2 writers, focusing on genre variations in the use of metadiscourse by L2 expert writers and by novice writers. The findings showed that transitions were the most used markers in both research articles and master's dissertations.

The frequency analysis of the most-used metadiscourse markers in the pen-pal letters in the current study yielded further results. The most-used interactive metadiscourse marker by the Saudi and the American students was transitions. The analysis of specific metadiscourse markers indicated that the most-frequent markers in the transition category were *also*, *and*, *because*, *but*, *however* and *while*. Transition markers were used more frequently as useful devices to serve different functions in the text. They were used by the students to help their audience to interpret the links between the ideas to establish similarities, show differences or establish causal links (Hyland, 2005).

Another possible reason for the frequent use of specific transition markers such as *also*, *and*, *because*, *but* and *however* could be their frequent occurrence in the English language as they all fall within the 1000 most frequently used words in English. In addition, pen-pal letter writing as a non-academic genre might have played a role in the frequent occurrence of transaction markers found by Farahani and Mohemmed (2018) who analysed the use and distribution of interactive and interactional metadiscourse markers in academic and non-academic writing. Although they noted that the authors of the analysed texts probably were native and non-native English speakers, they found that in the interactive category, the use of transitions was found more frequently than the other subcategories in non-academic genres. Moreover, the type of writing in which the students were engaged involved expressing their opinion regarding an issue. This is similar to the essays analysed by Zakaria and Abdul Malik (2018), which suggests that it is expected in this type of opinion-based essay that interactive markers including transitions are used more in order to help readers to comprehend the intended message.

6.2.2 Interactional metadiscourse markers

The results of the current study also showed that there was a significant increase in the use of interactional markers by the experimental group over time. The students with experience of writing pen-pal letters significantly used more interactional markers in the post test than the students without such an experience. The students in the experimental group had a significant development between the pre-test and the post-test in the total interactional markers used and in the separate interactional categories of boosters, self-mention, and hedges. Comparing the results with the control group, it can be seen that while the use of hedges increased significantly in the post test compared with the pre-test for the experimental group, it dropped significantly by the Saudi students in the control group in the post test.

During the four exchanges of letters there was also a noticeable change in the Saudi students' use of hedges, self-mentions, engagement markers, and attitude markers. However, there was no statistically significant difference in relation to the use of hedges between the four exchanges of letters. The results of the total use of hedges in the exchanges indicated that the American students used more hedges than the Saudi students. Furthermore, statistical analysis of the markers showed a difference in the use of engagement markers which increased significantly between the first, second, and third exchange of letters for both Saudi and American students. In addition, the results indicated a significant difference in the use of attitude during the exchanges of letters, specifically between the first and third exchange of letters by both Saudi and American students. Contrary to the letter exchanges results, the results of the pre and post writing showed no significant increase in the use of attitude. This could be attributable to the absence of a real audience during the pre and post tests which might have had an influence on the use of attitude markers. During the pre and post tests, the students were asked to write to an imaginary person and were aware that their letters would only be for teachers to mark, but not for the readers whom they addressed in the letters.

6.2.2.1 The use of hedges and boosters

Although there was no statistical difference found in the use of boosters, the frequency of the markers obtained per every exchange of letters showed

a gradual increase by both groups which signalled their efforts to establish a communication. However, the Saudi students still used fewer hedges than their American counterparts. This finding echoes that of Hinkel (2005) which showed that in comparison with L1 students, L2 Arabic students employed fewer hedges. Hinkel's (2005) study also compared the use of hedges in academic texts written by other L2 writers (such as people from China, Japan, Korea and Indonesia) and found that speakers of Arabic and Vietnamese employed significantly fewer hedges than the rest of the L2 writers. Hinkel (2005) attributed this finding to the fact that the Arabic language does not put a high value on hedges as a means of persuasion. Similarly, Btoosh and Taweel (2011) also found that hedges were used more by native speakers of English than Arab students in academic writing. These results are also in line with Kheryadi, Abdul Muin, and Ahmad Habibi Syahid's (2022) study, which found that that English and Arabic exhibit significant differences in the use of hedging devices in academic writing, with English using more adverbs and nouns, while Arabic relies more on modal verbs. These differences can possibly be attributed to the underlying linguistic and cultural disparities between these two languages. Therefore, understanding these differences is critical for effective communication in academic writing

Furthermore, the results of the current study showed that both the Saudi and the American students used boosters in their letter at a similar rate. Interestingly, both groups increased their use of boosters gradually from the first pen-pal letter to the last. A frequent use of boosters by Saudi Arab students was also identified by Hinkel (2002), who compared the use of boosters and hedges by different groups, including Arabic writers. When considering the function of boosters, which are used to close arguments by emphasising certainty, or as Hyland (2005, p. 62) argued, "play an important role in conveying commitment to text content and respect for readers", it could be suggested that although the Saudi students were cautious with their statements using hedges, they did show confidence in using boosters.

The comparison of the use of hedges and boosters by the Saudi students in the experimental group in the current study showed that they used more hedges than boosters. This could have resulted from the nature of pen-pal letters as a non-academic genre and the students' efforts to minimise

certainty in their judgments compared with academic writing, as indicated by Alghazo *et al.* (2021). Alghazo *et al.* (2021) found that Arab writers used fewer hedges and more boosters when involved in research and academic writing and attributed this finding to the nature of research and academic writing as opposed to non-academic writing which influenced students' desire to show sincerity and decisiveness in the content.

The specific markers in the category of hedges were *about*, *feel* and *sometimes* and were used similarly between the two groups, the Saudis in the experimental group and the American students, whereas *might* and *would* were used more by the American students. One of the reasons for the frequent use of these hedges could be that they are frequently used in non-academic genres as opposed to academic writing in which authors tend to show that they are confident about their propositions (Farahani & Mohemmed, 2018). *Sometimes* was specifically used more as an adverb of frequency by both groups. *Sometimes* functions as a hedge in spoken and written texts and was found to be less formal than other adverbs such as *occasionally* (Hinkel, 2005). This could be an explanation for the frequent use of *sometimes* as a specific metadiscourse marker in pen-pal letter writing considering the nature of the genre and its informality compared to academic writing.

6.2.2.2 The use of self-mention

Self-mention markers were used more by Saudi students in the experimental group than the American students as indicated by the frequency of the markers, and this use increased gradually in the second and third letter exchanges. The use of self-mentions reflects the extent to which the author's presence is explicit in the text (Hyland, 2005). In addition, the use of self-pronouns adds to the cohesion of the text (Hinkel, 2002). Thus, given the frequent use of self-mentions by the Saudi students, it seems that they felt confident in communicating with their pen pals and were actively engaged in exchanging messages with them. It could be also suggested that the frequent use of self-mention markers signalled the Saudi students' intention to project an impression of themselves as powerful individuals who can deliver their message confidently to their American friends. This finding is, however, in contrast to that of Sultan (2011) who investigated the use of interactive and interactional metadiscourse markers between Arabic and native English

speakers in academic writing and found that self-mention markers were used more frequently by the English writers than by the Arabic writers. However, since the students in the current study were engaged in an informal writing task rather than an academic task as in Sultan's (2011) study, the difference could be attributed to the type of genre that they were using. Further studies would therefore be necessary to establish differences in the use of specific interactional markers in different types of genre. In addition, to understand the functions of specific uses of metadiscourse markers in student writing, discourse-based interviews (Odell *et al.*, 1983) with students would be also important.

6.2.2.3 The use of engagement markers

Engagement markers were another frequently used metadiscourse marker by both the Saudi students in the experimental group and the American students, although specific markers such as *I* and *we* (inclusive) were used slightly less frequently by the Saudi students than by the American students. One possible explanation for more frequent use of *I* by the American students is that they tended to initiate a discussion about the topic for each exchange of letters. Their frequent use of *I* could also indicate that they felt more confident in initiating topics and asking their pen pals' opinions. In addition, the use of *we* (inclusive) was found frequently in the letters of both the Saudi and the American students and was possibly used to reduce the distance between them and to stress shared experiences and participation (Hyland, 2005). Both the Saudi and the American students were going through similar experiences in life; they were of the same age, in the first year of their studies, and shared similar interests, worries and lifestyles. It therefore seemed natural that they used the inclusive *we* frequently as it could help them to decrease the distance between them as individuals living in two different countries and speaking different languages. Thus, the frequent use of engagement markers could have resulted from the nature of pen-pal letters as a non-academic genre and the students' efforts to engage with their pen pals, as indicated by Alotaibi (2015). Alotaibi (2015) found an absence of the use of engagement markers when he examined 44 abstracts (English and Arabic) published in English research articles. Similarly, Sultan (2011) found that engagement markers were the least commonly used category when he examined seventy

discussion sections of linguistics research articles written by native speakers of English and Arabic. Further studies investigating a similar discourse and asking students' reasons for the use of specific discourse markers are needed to better understand such usages.

6.2.2.4 The use of attitude markers

As shown by the results, whilst there was no significant increase in the use of attitude in the pre-and post writing tests, the use of attitude markers by the Saudi and American students across the exchanges of letters increased significantly. More specifically, the results showed a significant increase by both groups from the first, second to the third exchange of letters. Attitude markers were used in the letters to indicate the students affective response to their pen pal correspondence. While composing, students in the two groups were expressive as they used different words to show their surprise, frustration, agreement and express the importance of a statement. As Hyland (2005, p. 180) explains that “[b]y signalling an assumption of shared attitude, values and reactions to material, writers both express a position and suck readers into a conspiracy of agreement so that it can often be difficult to dispute such judgment”.

The significant increase in the use of attitude markers by Saudi and American students across the four pen pal letter exchanges could be explained by the nature of letter writing as a non-academic genre. Students were engaged in a non-formal conversation with their partners and were asking each other questions about their lives, interests and opinions. This may be suggestive of the students' general comfort in explicitly expressing their personal attitude while communicating with their peers. It therefore seemed natural that the use of attitude markers was significant in the current study especially that the use of attitude markers is found extremely less frequently in academic writing (Lee & Deakin, 2016). This is because while engaged in academic writing, students tend to feel that expressing subjective position rather than objective may conflict with academic writing (Lee & Deakin, 2016).

The results of the study suggest that pen-pal letter writing could be a successful vehicle for interaction and the development of written communicative competence. The improvement found in the use of interactive

markers suggests that the Saudi students were considerate of their correspondents' needs and guided them through the texts by attempting to organise their letters coherently. In addition, by frequently using hedges, self-mentions, boosters, and attitude they seemed to have attempted to be careful when communicating their messages but also to express their points of view confidently and with some authority. Even so, although the results support the assumption that pen-pal letter writing with a real correspondent is beneficial for developing communicative competence, more studies would be needed to confirm this relationship.

6.3 The Role of Pen-Pal Letter Writing in the Development of EFL Students' English Language Proficiency

The vocabulary breadth which is the number of the words used and their distribution in the text, and lexical diversity which indicates the variations of the word types used were compared between the Saudi and the American students to investigate whether there was any development. The investigation of the lexical diversity during the four letter exchanges did not indicate any significant differences. Furthermore, the comparison between the Saudi students in the experimental group and control group during the pre- and post-experiment tests showed no difference in LD. The results of the current study regarding students' lexical diversity could be attributed to the specific genre of letter writing. Studies that were conducted on the relationship between EFL learners' lexical diversity and various writing genres revealed that compositions written on impersonal topics had notably higher lexical diversity compared to those on personal topics as in the study of Yu (2010). Considering the nature of pen pal letter writing, this might have had an impact on the results of students' lexical diversity. In addition, the connection between EFL learners' lexical diversity and various writing genres was also highlighted in the study by Sadeghi and Dilmaghani (2013). Their study revealed that there was a significant positive correlation between lexical diversity and writing in the argumentative genre only when analysed, and no such correlation was found in the comparative and narrative genres. Furthermore, other factors such as gender, language proficiency level, and background of the students might have an impact on the current study's results. This was indicated in the study of Yu (2010) who investigated the differences in lexical diversity between writing and

speaking tasks in the context of EFL learners. He found that the correlation between lexical diversity and overall quality of written compositions varied significantly across subgroups of the sample, such as gender, L1 background, test taking purpose, and writing prompts. Thus, to develop a full picture of the impact of pen-pal letter writing on students' vocabulary during social interaction, additional studies would be needed to investigate the extent to which other factors can contribute to students' lexical diversity.

On the other hand, although there was no statistically significant difference across the four exchanges of letters, the percentages of the vocabulary breadth utilising the students' vocabulary profile showed that the Saudi students' total use of K1 and K2 words increased from the first to the last exchange of letters. The results also showed an increase in the use of AWL words by the Saudi students in the fourth exchange compared with the first exchange. Moreover, the comparison between the Saudi students in the control group and the experimental group yielded further interesting results. The results showed a statistically significant difference in the use of K1 and K2 by the students in the experimental group. The percentages of the vocabulary breadth showed a noticeable difference in the use of K1, K2 and AWL words by the two groups. The Saudi students in the experimental group used more K1, K2 and AWL words in the post test than the students in the control group. These findings show the positive impact of pen-pal letter writing on the students' VB. The qualitative data from the nine interviews provided further support for this finding. The Saudi students reported in the interviews that they had used the letters from their American correspondents as models for their own use of the English language. They felt more comfortable with their writing when they copied new words, structures and expressions from their American pen pals' letters. They could also apply new words or sentence structures to their writing without the fear of making mistakes and this in turn encouraged them to use other resources such as online translators and dictionaries. The Saudi students were also motivated to receive the letters, to understand their content and to write back to their pen pals. The difference in their use of vocabulary over time could be attributed to the positive impact of the pen-pal letter writing activity and the social interaction with a real correspondent. The pen-pal letters were a writing activity which had a purpose and an authentic

context and that enabled the students to see the target language as a resource and to use it for communicating meanings authentically. This authentic communication seems to have further encouraged the students to learn new vocabulary and to improve their language in general.

An experimental study of social interaction and its influence on language ability by MacKenzie (2015) also confirmed a positive relationship. MacKenzie (2015) investigated the impact of students' interaction on their knowledge of the business vocabulary and found a significant increase in both the breadth and the depth of the business English vocabulary in the experimental group. The experimental group also developed a greater sense of motivation towards learning after being engaged in collaborative learning. Another study which showed a positive impact of communicative activity such as email writing on language development was carried out by Yasuda (2011), who explored how novice FL writers develop genre awareness and knowledge, linguistic knowledge and writing competence while engaged in a systematically designed genre-based writing task using both quantitative and qualitative data. Students' language development was measured quantitatively in terms of writing fluency, lexical diversity and lexical sophistication. Although the results showed that there was no significant difference in students' lexical diversity, their writing fluency had doubled by the end of the semester. In addition, their texts were found to be longer and more engaging for the readers because of the use of appropriate rhetorical choices. There was also a significant improvement in three analytic criteria between the beginning and the end of the semester: task fulfilment and appropriacy, cohesion and organisation, and grammatical control. The findings showed a development in the students' genre awareness and writing perception. The researcher concluded that communicative writing in genre-based tasks can improve students' communicative ability and language development.

Furthermore, the results of the current study are also in line with the findings of other studies which investigated pen-pal letter writing to a real audience and its impact on L2 students' language development (Barksdale *et al.*, 2007; Harmston *et al.*, 2001; Larrotta & Serrano, 2012; Liu, 2002). In Larrotta and Serrano's (2012) study, for example, students developed their English language skills through their interaction with competent peers who

were modelling authentic language use and motivating the students to write. Similarly, Barksdale *et al.* (2007) also found that communication through pen-pal letter writing greatly influenced students' literacy development. This line of research clearly shows that the emphasis on the importance of writing as a social communicative activity and its impact on writing development are increasing, with some studies confirming a positive impact. However, many of these studies, such as those of Barksdale *et al.* (2007), Larrotta and Serrano (2012) and Liu (2002), relied on qualitative data from students' interviews, teachers' observations and comparing students' written samples. Specific data analysis methods to measure the impact of pen-pal letter writing on language development are therefore recommended to better understand the impact of pen pal on language development.

6.4 The Role of Pen-Pal Letter Writing on EFL Saudi Students' Writing Motivation

The quantitative and qualitative analysis of the impact of pen pal letter writing on students' motivation showed further benefits of pen pal writing activity. The results from the pre- and post-IMI questionnaire indicated that the students with a pen pal writing experience found writing more motivating on several aspects than the students without such an experience. Specifically, the results of the comparisons showed an increased motivation in the students' perceived choice, and their assessment of pressure/tension decreased significantly at the end of the semester compared with the students in the control group. Additionally, while the results indicated no significant difference between the two groups in the two subscales of effort/importance and value/usefulness, the results showed a moderate effect on students' interest/enjoyment and perceived competence. The results of the interviews with students provided further results by indicating the students' positive feeling towards pen pal letter writing activity and its usefulness.

Students with low, mid, and high- motivation noted that despite the lack of prior experience with writing pen pal letters, they enjoyed such experience. They were excited to become friends with American students and write to them instead of an unknown reader, as they did in traditional writing classes. They specifically enjoyed exchanging their opinions about topics and receiving

letters from their pen pal friends. Writing pen pal letters was also more comfortable and enjoyable as they experienced more freedom compared to the traditional writing tasks, where they would receive many rules on how to write and which was rather stressful compared to pen pal letter writing. Thus, when assigned to write pen pal letters, they found themselves willingly engaged in the activity. It could be argued that pen pal letter writing provided students with the autonomy supportive environment which is usually described as a context that provides students with choice and minimises the feeling of pressure (Ryan & Deci, 2017). The activity provided them with freedom to choose how they wanted to communicate with their pen pal friends and thus became more meaningful to them.

Moreover, the communication with peers and classmates of the same age seemed to have also reduced the pressure and tension that students would usually experience when writing for their teacher. Students' perception of their feeling of competence was explained by the interviews. Students in the high and mid motivation groups mentioned that they felt they did better in writing the letters based on the successful communication they had with the Americans. They were confident that their English language ability allowed them to understand the letters and be involved in an enjoyable conversation. While SDT highlighted the importance of effective communication and interaction, and control over the environment in the development of competence (Ryan & Deci, 2017), Saudi students' feeling of competence more likely stemmed from their effective interaction with the American students and specifically their feeling of competence in the use of their language.

The descriptive analysis of the relatedness subscale further supported the benefit of pen pal letter writing on the Saudi students' development of interpersonal relationship with their American pen-pals. Saudi students' responses to the items in this subscale indicated that they felt close to their pen pal correspondence, developed friendship, and wished for more interaction. The qualitative results from the interview were also consistent with the students' responses to the questionnaire items. Students indicated that they were able to talk about their personal worries regarding their first year in college because their pen pal correspondences were also first year undergraduate students. In addition to sharing personal worries, sharing

mutual interests, music, and opinions about the letters' topics have also contributed to students' development of their feeling of relatedness. This finding corresponds to other studies that linked social interaction to the development of students' feeling of relatedness. For example, Mazer, Murphy, and Simmonds (2007) found that through social interaction students could discover mutual interests which could then lead to effective learning and high levels of motivation. Butz and Stupnisky (2017) also showed how students developed relatedness when being engaged in social interactions through online discussion. In addition to this, the present study's results support the results found by Rankin (1992), who found that the connectedness between the pen pal pairs increased during the semester which also had an influence on the students' enjoyment of the interaction during pen pal letter writing. Rankin (1992) explained that developing personal relations and attachment was very evident during the pen pal writing activity. The relatedness variable was also found to be the strongest predictor of students' learning outcomes in the study of Akbari et al. (2015) who highlighted the role of developing interpersonal relationships online through Facebook in students' engagement and successful learning. In addition, developing students' feeling of relatedness was also found a predictor of lower anxiety as in the study of Alamer and Almulhim (2021) who found that social support given to students greatly influenced their comfort level when engaging and practicing the language. In the current study, this clearly demonstrates that the social support given to students by their American correspondences greatly influenced their comfort level when engaging in writing pen pal letters as it creates a relaxed and safe environment for the students, enabling them to effectively participate and communicate.

However, an opposite relationship was found between how students perceived their language ability and their score on the IMI questionnaire during pen pal letter writing. The interviews with students revealed some reasons regarding students' low motivation. Although low motivated students indicated that they enjoyed pen pal letter writing, they explained that their weak ability to write and their perception about their language proficiency affected their enjoyment. While composing the letters, low motivated students were more concerned with articulating their ideas in English. Their English proficiency

level affected their ability to write fluently as well as the time spent on writing. They spent more time reading the letters and translating them from their L1 (Arabic) into L2 (English). Low motivated students in the experimental group also indicated that they did not feel that they did better than the others in the classroom because they believed that their English level was not as good as their classmates. They also expressed that writing to a speaker of English had put some pressure on them because of the American students' better English language ability. Furthermore, low-motivated students experienced fear of making mistakes in writing which subsequently affected their enjoyment and engagement with pen pal letter writing. The previous research on language learning has also identified language anxiety as one of the factors that could impact the effectiveness of learning and language performance (Nishitani & Matsuda, 2011; Noels et al., 2019). The current study's results support the findings of Alamer and Almulhim (2021) study, which revealed that Saudi students encounter four types of language anxiety that affected their motivation, and one of them was related to language proficiency. They explained that this is especially in the context of Saudi Arabia as tests play a crucial role in the educational setting which result in students' high anxiety. However, they explained in their study that students' feelings of enjoyment and interest allowed the students to experience less language anxiety, especially inside the classroom. Alrabai (2014) also identified several factors that could potentially negatively contribute to Saudi students' feeling of anxiety. These included the limited participation of learners in class discussions and decision-making processes, a competitive classroom environment that lacks collaboration among learners, excessively large class sizes, a pre-made EFL curriculum that prioritises quantity over quality, and strict school-imposed rules that limit learner freedom.

In relation to students' low motivation, the research in the field of Computer Mediated Communication (CMC) has indicated that incidents of failed interaction are common in CMC exchanges between learners (O'Dowd & Ritter, 2006). One of the reasons for failed communication is related to students' different levels of motivation to engage in the activity and their intercultural communicative competence (O'Dowd & Ritter, 2006). For example, Ware (2005) showed in her study that individual students'

intercultural competence level was an important factor that could influence students' motivation and the success of their communication. In her study, students' low level of intercultural competence affected their use of the time available to read and respond to their correspondents and eventually resulted in students' feeling of tension and lack of motivation to communicate. In the current study, despite the low motivated students' feeling of enjoyment communicating with their American peers, their lack of intercultural competence and their weak language ability might have influenced the success of the communication. This could have also affected their efficient use of the time available to respond to their American peers and resulted in the students' feeling of pressure and tension, as indicated by the students' interviews. The perceptions of the low motivated students about their experience of pen pal letter writing differed from students' with mid and high motivation. Thus, to develop a full picture of the impact of pen-pal letter writing on students' motivation during social interaction, additional studies would be needed to investigate the extent to which other factors can suppress the satisfaction of students' psychological needs of autonomy and competence and in turn affect the success of their interaction.

Based on the study's results, it can, therefore, be argued that pen pal letter writing could be highly influential in supporting students' need for autonomy and competence. The differences found on the SDT variables signal the students' substantial improvement in intrinsic motivation. The results are attributable to the communication with the real audience offered by pen pal letter writing. Studies that incorporated social interaction and communication to see its impact on intrinsic motivation and learning have shown positive results (Alberth, 2019; Akbari, Pilot & Simons, 2015; Awais Gulzar et al., 2021; Shi et al., 2014). Alberth's (2019) study aimed to investigate the incorporation of Facebook into a conventional writing class and the impact of social interaction on students' intrinsic motivation. The study used the Intrinsic Motivation Inventory (IMI) questionnaire to measure students' intrinsic motivation using the subscales of interest/enjoyment, pressure/tension, and perceived choice. The results indicated that all the mean scores of the students' intrinsic motivation were increased after the intervention. Similarly, Akbari, Pilot and Simons (2015) found that social interaction through Facebook

had an impact on Iranian students' intrinsic motivation. The study also adopted the IMI questionnaire to investigate students' autonomy, competence, and relatedness. The results showed that all the three variables were significantly improved after the intervention and the greatest effect size was for relatedness followed by competence. The study conducted by Shi *et al.* (2014) also found that students' intrinsic motivation was increased after engaging in a social learning environment called Topolor. The qualitative data from students' interviews and quantitative results indicated that students' feelings of autonomy, competence, and relatedness significantly improved after the experiment. More recently, Awais Gulzar *et al.* (2021) also investigated the impact of students' interaction through social media on their academic engagement and creativity and showed that students' intrinsic motivation was positively related to the students' engagement and learning.

6.5 Pen-Pal Letter Writing and L2 Writing Theory and Pedagogy

The study's findings in this chapter highlights the importance and the need for comprehensive understanding of the teaching and learning of writing, and provide support to shape the instructional practices in different ways. The awareness of the cognitive as well as the social factors is important for successful writing instruction and especially when teaching EFL students (Hyland, 2009). This is because writing is not a mastery of grammatical rules and sentence structure, but rather an activity that is connected to the social context.

In line with the genre pedagogies, students should acquire the resources that enable them to construct different types of texts, and use the language effectively in different contexts. In addition to acquiring different writing conventions, students should consider their audience, purpose of writing, and context. Teaching writing by linking text to context has two advantages as indicated by Hyland (2004). First, it actively demonstrates that the teaching materials are based on how language is utilised in a particular context. Teaching in this sense is "data-driven rather than intuition-driven" (Hyland, 2008, p. 12). Second, understanding genre in this sense does not mean that students are trained to reproduce similar discourse forms or neglect grammar,

instead it enables students to recognize how language can create distinct texts by understanding their purpose, audience, and their message. This is specifically important in the study's specific context considering how teachers are focusing on repetition and memorization of texts (Khan, 2011).

The observed ineffectiveness of the currently used teaching methods in Saudi Arabia and students' low English language achievements (Alamer and Almulhim, 2021; Alamri, 2011; Alharbi, 2019; Al-Seghayer, 2014; Khan, 2011) may be due to the heavy reliance on the process and product approaches of teaching writing. The heavy reliance on the product approach which is centred around learning by rote has reinforced students' practice of memorization. As a result, students memorise texts to pass exams rather than understand the purpose of their writing or use an appropriate language to convey meaning. A number of studies conducted in Saudi Arabia have shown that Saudi college students consider writing as a finished product that should be submitted for grades without paying little attention to the purpose of writing (Alghammas & Alhuwaydi, 2020; Al-Khairy, 2013).

On the other hand, the genre approach focuses on the different types or genres of writing, their structures, and language features, and helps students produce writing that conforms to those structures and features. While the process approach emphasises the individual writer's creativity and expression, the genre approach emphasises the importance of adapting to the expectations and conventions of the audience and readers. Therefore, combining these approaches can help students develop a deep understanding of how to write within a specific genre and communicate their ideas effectively while also developing their own unique voice and writing style. Process approaches can then be combined to help students develop an awareness of the writing process, purpose, and context (Hyland, 2004). In this sense writing approaches are not seen as contradictory as Badger and White (2000, pp. 157-158) explained:

writing involves knowledge about language (as in product and genre approaches), knowledge of the context in which writing happens and especially the purpose for the writing (as in genre approaches), and skills in using language (as in process approaches)

writing development happens by drawing out the learners' potential (as in process approaches) and by providing input to which the learners respond (as in product and genre approaches)

In light of the current study's results, it is of a great importance for educators and policy makers to steer away from relying on the teaching methods that reinforce memorization. In other words, communicative writing tasks that can encourage students to read, think, and write purposefully are recommended. In addition, planning effective strategies and incorporating technology in teaching that can develop students' writing ability, and allow for an interactive learning environment which can promote authentic use of the language. For example, designing email tasks that can be relevant to the writing course objectives and enable students to engage in an interesting, meaningful, and purposeful writing can be very effective as indicated in the studies of Li (2000), Sotillo (2000), and Stockwell and Harrington (2003). For instance, in the study of Li (2000), the analysis of the linguistic features of the participants showed that students who were assigned to email tasks that involve interacting with a specific audience tended to create more complex sentences and use a wider range of vocabulary. Similarly, the study found that when students are allowed to choose their own topics and content of their writing, they also tend to produce more complex sentences and use a richer and more diverse vocabulary. In other words, the study highlighted that such interactive and autonomous writing tasks that grant students a level of freedom and choice over their writing can have a positive impact on students' writing complexity and vocabulary richness.

Utilising specific interactive platforms that can allow for meaningful and purposeful writing such as blogs and wikis have also shown similar results as in the studies of Cequena and Gustilo (2014), Kuteeva (2011), and Wang (2015). For example, in the study of Kuteeva (2011) the use of wikis helped students to develop their writing and influenced students' ability to consider their audience. The textual analysis of students' writing showed that students demonstrated a greater understanding of how to use the language appropriately in terms of the use of grammar and organisation of their writing. Additionally, the use of engagement markers, self-mention, and attitude

markers in students' written essays showed an increased level of interaction between the students and their readers.

The current study's results also confirm the benefits of the communicative task such as pen pal letter writing on developing students' intrinsic motivation. The views of the constructivist learning theory are in line with the SDT's explanations of how one's feeling of autonomy, competence, and relatedness can be achieved through a supportive social environment. Unlike other motivational theories, SDT places a considerable attention on the social context and its influence on nurturing these three important human needs. From a social constructivist view, "learning is a necessary and universal aspect of the process of developing culturally organized, specifically human psychological function" (Vygotsky, 1978, p. 90). This actively demonstrates that learning can be accomplished when the learner internalises the social experience of interacting with others. Learning occurs as a result of the interaction with a knowledgeable peer as in the pen pal letters writing activity. The results of the current study showed that the task of pen pal letter writing provided students with a meaningful learning environment where their feeling of autonomy, competence, and relatedness could be supported. Thus, communicative tasks such as pen pal letter writing can be valuable in teaching writing especially novice writers who find writing classes challenging and demotivating. Pen pal letter writing can help students to personalise their learning by choosing topics that interest them and tailoring their writing to their pen pal's interests and cultural background which in return engages students in the writing process. Writing pen pal letters can encourage students to reflect on their own experiences, interests, and cultural background, as well as consider their audience's perspective. Therefore, students can develop a deeper understanding of themselves and their own cultural context, as well as of others. The current study's results showed that students' need for relatedness served as a premise for meaningful learning. Students were able to develop friendships with their American pen pals and share mutual interests. Previous research findings on designing learning activities and tasks which involve collaborative learning and social interaction in order to support students' psychological needs in writing classrooms showed positive results (Alamer & Al Khateeb, 2021; Alberth, 2019; Akbari *et al.*, 2015; Awais Gulzar

et al., 2021; Buts & Stupnisky, 2017; Challob, 2021; Khojah & Thomas, 2021; Shi *et al.* 2014; Sun & Gao, 2021; Zhou, 2016). For example, the incorporation of Facebook into a conventional writing class and the impact of social interaction on students' intrinsic motivation were investigated in Alberth (2019) study. The study utilised the Intrinsic Motivation Inventory (IMI) questionnaire to measure students' intrinsic motivation using the subscales of interest/enjoyment, pressure/tension, and perceived choice. The study's findings suggest that interactive writing through Facebook positively impacted the students' intrinsic motivation. Additionally, the qualitative data gathered from student interviews revealed that the intervention led to a more enjoyable, interesting, and fun learning experience, while also boosting students' confidence in their learning abilities. While the current teaching practice specifically in Saudi Arabia has a negative impact on students' feeling of confidence and motivation, engaging students in pen pal letter writing has shown to provide them with a context that maximise their feeling of choice and minimises the feeling of pressure. In other words, students were not only engaged in a relevant social environment to help them acquire the knowledge, but they were also empowered as constructors of the knowledge.

6.6 Summary

The chapter discussed and interpreted the main findings of the study according to the research questions. It first summarised the findings related to the role of pen-pal letter writing on the development of the students' communicative writing ability and also considered the reasons for the study's specific findings and compared them with the findings of previous studies. Section 6.3 discussed the results regarding the role of pen-pal letter writing in the development of EFL students' language ability which was measured by the vocabulary breadth and lexical diversity. It also discussed the qualitative data from the interviews which provided further support and explanations for this finding. Additionally, the impact of pen-pal letter writing on students' motivation was discussed in section 6.4. The qualitative and quantitative data from the IMI questionnaire and students' interviews which provided explanations for the students' motivation was discussed. Finally, section 6.5 discussed L2 writing theory and pedagogy in relation to the use of pen pal letter writing.

Chapter 7 Conclusion

7.1 Introduction

The study aimed to investigate the impact of pen-pal letter writing on students' ability to project an audience and to establish a relationship with their audience using metadiscourse markers, and also to examine the effect of pen-pal letter writing on students' language development and writing motivation. A quasi-experimental design was employed, using such data collection methods as pen-pal letters written during one semester, a motivation questionnaire and semi-structured interviews with selected students after the experiment. The study had three groups, experimental, control and reference groups, to establish the contribution of pen-pal letter writing to their written communicative competence and their writing motivation. The specific research questions which this study addresses are the following:

RQ1: What is the effect -if any-of a pen-pal writing intervention on the development of EFL Saudi students' communicative ability to interact with their audience? (measured by their use of metadiscourse markers);

RQ2: What is the effect of a pen-pal writing intervention on the development of EFL students' English language proficiency? (measured by their vocabulary breadth and lexical diversity);

RQ3: How does the pen-pal letter writing intervention interact with students' writing motivation?;

RQ4: What are the Saudi students' perceptions about the pen-pal writing experience?

The current chapter first briefly summarises the main key findings of the present study and then highlights the study contributions to theory, research and practice. It then discusses the study implications for EFL teachers teaching general writing to students. The chapter proceeds with the acknowledgement of the study limitations and then provides important recommendations for future researchers.

7.2 Summary of Key Findings

The study investigated the role of pen-pal letter writing in the development of Saudi EFL students' communicative ability through the use of metadiscourse markers. The results indicated that the students with pen-pal letter writing experience had a noticeable difference in the use of both interactive and interactional markers after one semester. In contrast, the students who did not have such experience did not make any significant improvement in the use of interactive or interactional markers over time. More specifically, students in the experimental group showed a significant difference in the use of specific markers after engaging in pen pal letter writing such as transitions, self-mention, engagement markers, and attitude markers. The results, thus, suggest that pen-pal letter writing can have an impact on the development of students' communicative ability, especially their interaction with their audience. The use of the interactional metadiscourse markers specifically changed for the Saudi students in the experimental group during the four exchanges of pen pal letters and during the post writing test which could signal the students' development of their awareness of the audience and the way they utilised the language to establish communication with their peers.

In addition, the study aimed to investigate the role of pen-pal letter writing in the development of EFL students' language ability which was measured by the vocabulary breadth and lexical diversity. The results of the analysis indicated that there were no differences in the lexical diversity between the Saudi students in the experimental group and control group; however the result of the vocabulary breadth indicated a difference for the Saudi students in the experiment group in the use of K1, K2, and AWL words in the post writing test and during pen-pal letter writing. The result suggests the positive impact of pen-pal letter writing on students' vocabulary breadth.

The study also attempted to investigate the impact of pen-pal letter writing on students' motivation. The results of the quantitative results obtained from the IMI questionnaire and the qualitative results of the students' interviews indicated that students in the experimental group had a significant increase in their interest/enjoyment, perceived choice, and perceived competence, while their pressure/tension which was a negative predictor of IM

had a significant decrease after the intervention. The Saudi students' perceptions about pen-pal letter writing provided a more detailed picture of students' writing experiences and motivation. The qualitative results supported the quantitative results and suggested the effectiveness of pen-pal letter writing on students' intrinsic motivation.

7.3 Contribution of the Study

The present study claims to have made a number of theoretical, methodological, and pedagogical contributions. First, the theoretical bases of the current study offered a more comprehensive understanding of EFL writing. By drawing on the social constructivism view of writing, the socio-cultural theory of learning, and the motivational theory of SDT, the study places a considerable attention on the influence of the social interaction provided by pen pal letter writing on the students' development of their communicative ability, language proficiency, and motivation. By focusing on the genre of letter writing, it has contributed to the ongoing research in ESP and its interest in using genre as a tool for understanding the different kinds of writing by non-native English speakers in academic contexts (Hyland, 2004). The current study therefore is proposing a new pedagogical model of L2 writing, where teaching of writing should be based on communicative activities with an explicit audience in mind. Thus, writing pedagogies might be greatly informed by the understanding of the connection between genre and writing tasks not only in Saudi context, but also in other contexts. Students can be provided with a chance to engage in a communicative environment beyond the limitations of classrooms where they use the target language competently. The study demonstrated that by providing students with a meaningful rhetorical context, their experience of genre writing and rhetorical writing choices can be developed. It is of a great importance to design communicative writing tasks that can be interesting, meaningful, and motivating. The current study showed that pen-pal letter writing as a genre-based writing activity was a useful task that could influence student's communicative ability, language development and their writing motivation. The combination of a specific genre of pen-pal writing with the classroom tasks allowed writing performance to become socially situated and impacted the students' language choice. In other words, the exchange of pen-pal letters with real friends allowed for authentic and

valuable reader-writer interaction with a real audience and which in turn produced important benefits for students' learning of writing. This was specifically beneficial considering the nature of pen pal letter writing task as a non-academic genre. In contrast to writing for academic purposes, this specific genre has shown to foster communication, social engagement and learning. The designed task of pen pal letter writing allowed for an exchange of personal information, interests, and controversial debates about specific topics which helped to generate a great deal of written interaction between the students while engaged in the process of composing the letters. In addition, the interaction with proficient users of the language provided by pen pal letters helped the students to develop specific writing conventions and influenced their language learning. The activity helped to mediate and scaffold Saudi EFL students' communicative ability and language development within an interactive and social environment. For the study's specific context, the results are encouraging to shift from the current heavy reliance on traditional English teaching methods that focus on the product and the process approaches of writing in Saudi context (Alqahtani, 2019; Al-Seghayer, 2011) to the approaches that emphasise writing as a social situated activity.

The present study has also made a contribution by attempting to examine metadiscourse markers as a central feature of communication used in pen-pal letter writing as a non-academic genre. While in recent years, the use of metadiscourse in writing has been the focus of many research studies (Alghazo et al., 2021; Alharbi, 2021; Btoosh and Taweel, 2011; Farahani and Mohemmed, 2018; Zakaria and Abdul Malik, 2018), most existing studies were in the context of academic writing. While some studies have compared the writer reader communication between native English speakers and EFL/ESL writers using metadiscourse markers and shed important light on such communication (Alharbi, 2021; Alshahrani, 2015; Alqahtani & Abdelhalim, 2020; Hinkle, 2005; Neary-Sundquist, 2013; Sultan, 2011), there has been a lack of studies that examined metadiscourse use in non-academic genre. More importantly, to the best of my knowledge, there is a lack of existing studies examining metadiscourse use in non-academic genres specifically in the Saudi context. The current study therefore helped to provide a picture of the types of

metadiscourse used which can be associated with the genre of non-academic writing such as pen pal letters.

In addition, the current study combined the theoretical understanding of pen-pal letter writing as a genre specific task, while also applying different analysis methods to investigate language development such as the use of vocabulary breadth. While previous studies on the use of pen-pal letter writing had linked social interaction when writing to real audience and its influence on L2 students' language development (Barksdale, Watson, and Park, 2007; Larrotta & Serrano, 2012; Liu, 2002), they did not adopt a specific measure to investigate the language development of the students. Thus, the current study has made a contribution to the previous findings with its focus on measuring the effects of pen-pal letter writing on students' language development by the data analysis methods implemented.

Moreover, the current study's results contribute to the understanding of the connection between pen pal letter writing as a communicative non-academic genre and the satisfaction of the three human needs of autonomy, competence, and relatedness. The adoption of the SDT specifically in the study helped to identify not only how students are motivated, but also the orientations behind their motivation. Unlike the other language motivational theories, being a psychological theory that focuses on addressing the triggers behind behaviours it has shown how specific writing tasks such as pen pal letter writing can promote students' development and facilitate learning. The current study confirmed that pen-pal letter writing can have the potential to develop students' intrinsic motivation, which has not been explored by previous pen-pal letter studies. Specifically, by using Deci and Ryan's (1985) self-determination theory framework, the study showed that pen-pal letter writing could be highly influential in supporting students' needs for autonomy and competence. While previous studies on the use of pen-pal letter writing in L1 and L2 contexts did not apply SDT to measure students' motivation, the impact of pen-pal writing on students' motivation was referred to by using qualitative data from teachers' observations and students' engagement in writing (Barksdale, Watson, and Park, 2007; Larrotta & Serrano, 2012; Stanford & Siders, 2001). In addition, the results of the current study contributes to the existing CMC research. While this line of research

investigates the impact of students' social interaction with real audience on their motivation in online platforms (Alberth, 2019; Akbari *et al.*, 2015; Awais Gulzar *et al.*, 2021; Shi *et al.* 2014), their focus on the role of audience in interaction is similar to the current study. However, while the previous CMC studies have investigated students' motivation in relation to specific activities that involved synchronous and asynchronous mode of communication, the current study's results differ by the unique audience design of the activity. The students in the current study were paired and remained the same during the four exchanges of letters. The specific design of one to one communication that required no internet connection or technology, had a positive influence on the students' abilities to establish interpersonal relationships with their correspondences and to increase their motivation.

The current study's results showed the potential of pen pal letter writing as a specific writing task to develop students' motivation by the satisfaction of the three human needs of autonomy, competence, and relatedness. In addition, the results contribute to the existing research regarding the usefulness of adopting SDT to investigate students' motivation in educational contexts such as in the studies of Akbari, Pilot, and Simons (2015); Buts and Stupnisky (2017); Dincer, Yesilyurt, and Takkac (2012); and Niemiec and Ryan (2009). This was important especially considering that more research on SDT is needed in the field of language education (Noel *et al.*, 2019). The study's findings extend support to the benefits of pen-pal letter writing on students' motivation, especially that it is widely acknowledged that Saudi EFL learners do not possess high levels of motivation which are likely have contributed to their low English language achievements, as indicated in the studies of Alamer and Almulhim (2021); Alamri (2011); Alharbi (2019); Al-Seghayer (2014); and Khan (2011). Also, this study's findings contributed to a wider knowledge by investigating students' motivation in the actual classroom in relation to teaching practices and how this impacted Saudi EFL language motivation. The available studies existing in the Saudi context have mainly focused on investigating motivation to identify the types and levels of language motivation among Saudi EFL learners with few attempts to explore the applications of motivation in the actual classroom (Alrabai, 2014).

Additionally, in the study's specific context, the results of the study contribute to writing pedagogies by introducing an innovative writing task to mitigate teaching limitations that exist in Saudi EFL classrooms. Pen-pal letter writing is not necessarily a new or innovative concept in general. However, in the Saudi Arabian context, the implementation of pen-pal letter writing could be considered innovative due to several reasons. Firstly, the current teaching methods in Saudi Arabian EFL classrooms often rely heavily on traditional approaches, such as a teacher-centred, lecture-style delivery, which limit the students' interaction. Secondly, there is often a lack of authentic language exposure, meaning students are primarily exposed to textbook language without much access to real-life language exposure where they can interact with proficient speakers. Thirdly, the current limited use of the internet and technology in Saudi teaching classrooms can be a barrier for effective language learning. This is specifically important as the use of technology can facilitate the use of a wide range of platforms that can enhance language proficiency, especially considering the benefit of online intercultural communication and the available digital writing platforms (Aljameel, 2022; Alqahtani & Issa, 2018). Therefore, the implementation of pen-pal letter writing in the Saudi Arabian context can be considered an innovative approach to improve writing practices by offering opportunities for students to interact with others from different cultural backgrounds, develop their audience awareness and writing competency. This writing task can also serve as a supplement to classroom instruction and can help bridge the gap between traditional and modern teaching methods. Overall, the study's findings contribute to the practice of teaching writing by highlighting the importance of incorporating innovative writing tasks that mitigate such limitations that exist in the context of different EFL classrooms.

7.4 Study Implications for English Language Teachers

Given the positive impact of pen-pal letter writing on the development of communicative ability, language competence and even motivation, the following recommendations for language teachers are proposed. The study's findings encourage incorporating pen-pal letter writing as a genre-based writing activity in ESL/EFL classrooms. More specifically, when teaching novice writers, exposing learners to different kinds of genres can be effective

in the development of students' communicative competence (Yasuda, 2011). Pen-pal letter writing can stimulate students to consider their audience and the specific context of writing; thus, helping them to see writing as a social act that has a purpose and which in turn influences the choices that writers make during writing (Hyland, 2004).

In addition, considering the development of the technologies, pen-pal letters can be a useful method in teaching writing to enable interactive writing in different contexts. As shown by previous studies such as Barksdale, Watson, and Park (2007), Larrotta and Serrano (2012), and Liu (2002), the use of pen-pal letters through the use of different platforms can facilitate bringing a communicative environment into the classroom, help students build more meaningful relationships with others, share their ideas with each other, help each other with their language issues and strive for the achievement of their mutual communicative goals in writing. This is specifically important as CMC platforms allow for the inclusion of multimedia content, and the use of these features can enhance the social and interactive aspects of communication. The use of multimedia content in CMC has been found to contribute to task engagement and motivation, as well as to enhance social presence, authenticity, and emotional expression in online communication (Alberth, 2019; Awais, 2021). This can also extend to develop students' motivation, as the current study also showed the influence of the educational environment that can foster the basic human needs of autonomy, competence, and relatedness. According to Deci et al., (1991, p.225), these manifestations of being intrinsically motivated result in "high quality learning and conceptual understanding as well as enhanced personal growth and adjustment". It is, therefore, recommended that teachers and educators provide students with intrinsic motivation and a supportive environment, especially in ESL/EFL challenging contexts. This has been confirmed by a handful of other studies that investigated the impact of writing activities with an element of the social interaction with an authentic audience, and their positive outcomes on students' learning motivation (Akbari et al. (2015); Alberth (2019); Awais Gulzar et al. (2021); Butz and Stupnisky (2017); Hadzidedic, and Dervishalidovic (2014); Mazer, Murphy, and Simmonds (2007). Therefore,

using pen-pal letter writing to develop students' learning motivation would be highly recommended.

The current study's findings could also specifically benefit the Saudi EFL education sector, especially considering its current severe limitations in terms of its heavy reliance on traditional teaching methods that are mainly focused on the audio-lingual and the grammar-translation approaches (Alharbi, 2019; Al-Seghayer, 2011; Alqahtani, 2019), and the lack of utilisation of internet and technology in teaching classrooms (Aljameel, 2022; Alqahtani & Issa, 2018). Thus, more effort is needed in designing writing tasks and developing writing curriculum, especially for university students. The education sector in Saudi Arabia should make use of different English teaching strategies to shift classes from being faculty centred to student centred which can have an influence on students' learning engagement, motivation, and the achievement of their educational objectives (Alamri, 2011).

7.5 Study Limitations and Recommendations

Although the study makes important contributions in enhancing our understanding of the development of students' writing and the benefits of a specific genre activity such as pen-pal writing, there are certain issues that might have influenced the results of the study and which should be acknowledged in order to overcome them in further research. The first is the small number of participants in the study in one academic institution in Saudi Arabia. In total, 44 students, with 22 in each group, participated in the study. While such a size is generally acceptable in an experiment, a large sample size would have been more representative of the Saudi college students' population. The study also used a quasi-experimental design, with fixed classes and fixed student numbers, and while this is a common design in social educational research (Bryman, 2016; Shadish *et al.*, 2002), there could have been other variables that could have influenced the study results. For example, Saudi students had different language proficiencies according to their Oxford results, and they could have different writing experiences in both experimental and control groups. While the current study focused on the motivation results for the experimental group to understand students' perception of pen-pal letter writing, there could be other factors that interfered in terms of their learning,

writing development, and motivation. Therefore, further studies focusing on larger student numbers could be conducted to further investigate the benefits of pen-pal writing. The study is also limited in the gender of the Saudi participants. Since in Saudi Arabia, schools and universities are segregated for male and female students, it was not possible to conduct the current study with both male and female students. While little is known how gender can influence one's writing, some research nevertheless has suggested that there are differences in the use of metadiscourse markers between male and female (Alqahtani & Abdelhalim, 2020). Thus, to better understand the role of gender in writing, more studies would be needed.

The study was also limited to four pen pal letter exchanges per one semester. The two institutions participating in the study had slightly different academic calendars. By the time of the fourth exchange of letters, the American students were approaching their final exams which made it impossible to have more exchanges of letters. While four pen pal letter exchanges are adequate to follow students' writing development per semester, the time frame could have been extended to one academic year. This could have provided a more detailed and valid picture of the developmental patterns of students' writing and identified specific gaps that students might have had in their writing skills. However, due to the time constraints of a PhD study, such a longitudinal design was impossible in the current study.

Furthermore, while the study used semi-structured interviews with students to better understand their perceptions about their pen-pal writing experience, it did not, however, validate their reasons for specific uses of metadiscourse or gather information about their awareness of metadiscourse markers as an important communicative resource. It was deemed that due to a rather limited students' language proficiency, this information would be challenging to obtain. However, this information is important to better understand the difficulties that students could experience in their writing and should be investigated in future studies. In addition, the interviews were only conducted with the experimental group to get their perceptions of pen pal letter writing experience. However, it would be useful also to interview students in the control group to obtain their perceptions of their experience in writing

classes and the difficulties that they face which can highlight some of the differences that could exist between the two activities.

In addition, to control students' writing for the same task purpose in four pen-pal letter exchanges, the students had to write letters according to specific task instructions. However, some students confessed that they were restricted to the topics that were assigned to them and preferred to choose their own topics. Thus, while the topics were purposefully chosen for the students due to the experimental nature of the research design, it would be worthwhile to design more authentic writing situations and investigate students' written communication in different situations, while still controlling for the type of genre that students have to write.

Finally, the study sought to understand the effects of pen-pal writing on the development of students' communicative ability and their language development and investigated these effects focusing on the use of metadiscourse markers, vocabulary breadth and lexical diversity. While these are important linguistic resources that writers utilise to interact with their audience, other language features and specific syntactic patterns could be also investigated to obtain a more comprehensive picture of students' writing development. In addressing the writers' language development, the current study focused on the micro-level textual features namely lexical diversity and vocabulary breadth due to the students' low English language proficiency level. Therefore, investigating the macro-level textual features such as text organisation in relation to the pen pal letter writing can also help to understand how writers' development is mediated by the interaction provided by communicative tasks such pen pal letter writing.

The study also found the positive effects of pen-pal letter writing on students' motivation. Specifically, the results indicated an increased motivation in the students' perceived choice, and that their assessment of pressure/tension decreased significantly at the end of the semester compared with the students in the control group. Also, while the results showed no significant difference between the experimental and control groups in the two subscales of effort/importance and value/usefulness, a moderate effect was found on students' interest/ enjoyment and perceived competence. The result

of the current study therefore calls for more research on EFL students' intrinsic motivation and its relation to specific communicative writing tasks such as pen-pal letter writing. Moreover, studies focusing on different educational environments and factors that can affect the satisfaction of the three basic human needs of autonomy, competence, and relatedness can be useful. Also, since the current study's qualitative findings revealed that high, mid, and low motivated students had different perceptions on pen-pal letter writing, more studies focusing on other factors that can affect students' intrinsic motivation in classrooms such as students' language ability and students' anxiety could be beneficial to understand this variation.

In addition, the study utilised the IMI questionnaire to investigate students' motivation. For the study's purpose, the items were all modified to suit the writing activity the students were engaged in. An example of the modification is the item 'I tried very hard on this activity', which was changed to 'I tried very hard on this pen-pal letter writing activity' for the students in the experimental group. In the other version for the students in the control group, it was modified to 'I tried very hard to write'. While it was crucial to change the wording of the questionnaire items to suit the writing activity for both experimental and control groups, it is important to note here that the different wording poses threats to a valid comparison of students' reported motivation levels, as the experimental group students commented on motivation when writing for an audience, and the control group students commented on writing in general.

Appendices

Appendix 1: Pre-Post IMI Questionnaires

Pre-IMI Questionnaire

Please choose as applicable.

Age:

- ☐ 18-25
☐ 25-29
☐ 30 above

Major:

What year are you in the program:

Please choose as applicable.

Q1: Have you written in English to someone using social media?

- ☐ **Yes:**
☐ **No:** Go to question 5
☐ **Not Sure**

Please tick as many as applicable.

Q2: What type of social media websites have you used for writing in English?

- ☐ Facebook
☐ Twitter
☐ Skype
☐ E-mail
☐ Others

Please choose as applicable.

Q3: How long have you communicated with that person?

- ☐ Very often
☐ Often
☐ Sometimes
☐ Rarely

<input type="checkbox"/>	Very rarely
--------------------------	-------------

Please tick as many as applicable.

Q4: What was the purpose of your communication?

<input type="checkbox"/>	Making friends
<input type="checkbox"/>	Learning English
<input type="checkbox"/>	Getting in touch with family.
<input type="checkbox"/>	Others specify

Please choose as applicable.

Q5: Have you written letters in English by mail?

<input type="checkbox"/>	Yes: Specify for whom did you write it. Tick as many as applicable <input type="checkbox"/> to my friends. <input type="checkbox"/> to my grandparents or other family members. <input type="checkbox"/> to an institution. <input type="checkbox"/> to a person I do not know. <input type="checkbox"/> other
<input type="checkbox"/>	No:
<input type="checkbox"/>	Not Sure

Q6: what is your definition of pen-pal writing? One or two sentences

<p>.....</p> <p>.....</p>

Please read each statement and indicate how true is it for you, using the following scale:

1 2 3 4 5 6 7
 not at all true somewhat true very true

Statement	Not at all true 1	2	3	Somewhat true 4	5	6	Very True 7
I enjoy writing very much							
I think I am pretty good at writing.							
I put a lot of effort into writing.							
I don't feel nervous at all while writing.							
I believe I have some choice about writing.							
I believe writing can be of some value to me.							
Writing activity is fun to do.							
When I write, I think about how much I enjoy it.							
I think I do pretty well in writing, compared to other students.							
I think that writing activity is useful for improving my English.							
I write because I have no choice.							
I think writing can help me to learn how to use the language correctly.							
Writing is an activity that I cannot do very well.							
I think writing is a boring activity.							
I can describe writing as very interesting.							
I am willing to write because writing has some value to me.							
I feel like I have to write.							

I do not put much energy into writing.							
Writing does not hold my attention at all.							
I try very hard to write.							
I think writing is an important activity.							
I'm very anxious while writing.							
I am satisfied with my performance at writing.							
I do not try very hard to do well in writing.							
I think writing is important because it can help me communicate with others.							
I do not really have a choice about writing.							
It is important to me to do well in writing.							
I write because I want to.							
I feel very tense while writing.							
I write because I have to.							
I think writing is quite enjoyable.							
After writing for a while, I feel pretty competent.							
I feel like it is not my own choice to write.							
I feel pressured while writing.							
I'm pretty skilled at writing							
I believe writing can be beneficial to me.							
I'm very relaxed while writing.							
Additional Comments:							

Post IMI Questionnaire

Please read each statement and indicate how true is it for you, using the following scale:

1 2 3 4 5 6 7
not at all true somewhat true very true

Statement	Not at all true 1	2	3	Some what true 4	5	6	Very True 7
I enjoyed writing pen-pal very much							
I think I am pretty good at writing pen-pal.							
I put a lot of effort into pen-pal activity.							
I did not feel nervous at all while writing pen-pal letters.							
I believe I had some choice about doing pen-pal writing activity.							
I believe pen-pal writing could be of some value to me.							
I felt really distant to the person I wrote to.							
Pen-pal writing is fun to do.							
I did not try very hard to do well at pen-pal writing activity.							
I felt very tense while writing pen-pal letters.							
I am satisfied with my performance at pen-pal pal writing.							
I felt like it was not my own choice to do pen-pal writing.							
Pen-pal writing was an activity that I could not do very well.							
I did pen-pal writing activity because I had no choice.							

I think I did pretty well in pen-pal writing, compared to other students.							
I tried very hard on this pen-pal writing activity .							
I think that pen-pal writing activity is useful to improve my English.							
I did not put much energy into pen-pal writing.							
Pen-pal writing did not hold my attention at all.							
After writing pen-pal letters for awhile, I felt pretty competent.							
I was very relaxed in writing pen-pal letters.							
I really doubt that the person I wrote to and I would ever be friends.							
I think pen-pal writing activity could help me to learn how to use English language correctly.							
I would describe pen-pal writing as very interesting.							
I was pretty skilled at pen-pal writing.							
I believe pen-pal writing activity could be beneficial to me.							
I felt like I had to do pen-pal writing activity.							
I thought pen-pal writing is a boring activity.							
I felt close to the person I wrote to.							
I did pen-pal writing activity because I had to.							
It is likely that the person I wrote to and I could become friends if we interacted a lot.							
It was important to me to do well at pen-pal writing activity.							

I think pen-pal writing is important because it can help me communicate with others.							
I'd really prefer not to interact with the person I wrote to in the future.							
I felt pressured while writing pen-pal letters.							
I did not really have a choice about doing pen-pal writing.							
I do not feel like I could really trust this person I wrote pen-pal letters to							
I think pen-pal writing is an important activity.							
While I was writing pen-pal, I was thinking about how much I enjoy it.							
I'm was anxious while writing pen-pal letters.							
I'd like a chance to interact with the person I wrote to more often.							
I would be willing to write pen-pal letters again because it has some value to me.							
I thought pen-pal writing was quite enjoyable.							
I did pen-pal writing activity because I wanted to.							
I felt like I could really trust this person I wrote pen pal letters to.							
Additional Comments:							

Appendix 2: Interview Questions for the Experimental Group

1. Have you ever written a letter in English before? If yes, who did you write it to? What was the purpose? Was It only once or several exchanges?
2. How did you feel about pen pal letter writing experience in class? Did you enjoy it? Why? why not?
3. Were there any difficulties/challenges during pen-pal letter writing?
4. Do you think you did better in pen-pal letter writing than most of the students? why?
5. Describe your experience of pen-pal letter writing? How was it? was there anything you liked or disliked in the experience?
6. Did you feel that your communication by pen pal writing was successful? Why? Why not?
7. Do you think pen pal writing is useful? Why?
8. Tell me about the person you wrote to. What do you think about him/her?
9. Do you wish to interact more with the person you wrote pen-pal letter to? why?

Appendix 3: Students' Consent Form

Information Page

Effects of Pen-Pal Letter Writing on EFL Saudi Students' Communicative Ability, Language Competence and Writing Motivation

Dear Student,

Rana Alzahrany is currently carrying out a research project on EFL students and academic writing at the Department of Education in University of York. I'm writing to ask your permission to take part in the study.

What would this mean for you?

The aim of this research is to investigate EFL college students writing and their motivation as well as the challenges they face in writing. To achieve this, you will be asked to complete two writing tests; one at the beginning of the semester and another at the end of the semester. During the semester, you'll write four pen-pal letters to college students in United states. Also, you will complete the motivation questionnaire at the beginning and at the end of the semester, and attend an interview at the end of the semester.

Anonymity

The data you provide (e.g. letters, test results, questionnaire, interview) will be stored by code number. Any information that identifies you will be stored separately from the data.

Storing and using your data

Data will be stored in a secure password protected computer. The data will be kept for three years after which time it will be destroyed. The data may be used for future analysis and shared for research or training purposes, but participants will not be identified individually. If you do not want your data to be included in any information shared as a result of this research, please do not sign this consent form.

You are free to withdraw from the study at any time during data collection and up to one week after the data is collected. After that time, identifying information will be destroyed and it will be impossible to withdraw as the data will be anonymous.

Information about confidentiality

The data that I collect may be used in an *anonymous* format in different ways. Please indicate on the consent form attached with a ☒ if you are happy for this anonymised data to be used in the ways listed.

We hope that you will agree to take part. If you have any questions about the study that you would like to ask before giving consent or after the data collection, please feel free to contact Rana Alzahrany by email (Ra1006@york.ac.uk), or the Chair of Ethics Committee via email education-research-administrator@york.ac.uk

If you are happy to participate, please complete the form attached and please return to your course instructor. You can withdraw your data at any point during data collection and up to one week after data is collected. You will also be given an opportunity to comment on the researcher' written record of the conducted interview. Your cooperation is highly appreciated.

Please keep this information sheet for your own records.

Thank you for taking the time to read this information.

Yours sincerely

Rana Alzahrany

Effects of Pen-Pal Letter Writing on EFL Saudi Students' Communicative Ability, Language Competence and Writing Motivation

Consent Form

Please initial each box if you are happy to take part in this research.

I confirm that I have read and understood the information given to me about the above named research project and I understand that this will involve me taking part as described above.

☐

I understand that the purpose of the research is to find the effective teaching practice regarding EFL college students writing performance and motivation. To achieve this, one key part of this research is for me as a student to participate in writing letters inside the classroom and participate in answering questionnaire and interview questions.

☐

I understand that data will be stored securely in a password protected computer and only Rana Alzahrany and her supervisor Dr Irena Kuzborska will have access to any identifiable data. I understand that my identity will be protected by use of a pseudonym.

☐

I understand that my data will not be identifiable and the data may be used

☐

in publications that are mainly read by university academics

☐

in presentations that are mainly attended by university academics

☐

in publications that are mainly read by the public.

☐

in presentations that are mainly attended by the public .

☐

freely available online.

☐

I understand that data will be kept for three years after which it will be destroyed.

☐

I understand that data could be used for future analysis or other purposes.

☐

I understand that I can withdraw my data at any point during data collection and up to one week after data is collected.

☐

Appendix 4: Students' writing sample

Pre writing test sample (experiment group)

Hello

I'm Manar I'm 18 years old. I study in Taibah University. For the phones problems, I'm not much addicted. I do not like using the phones for a long time because it cause a headache. So, I love spending sometime doing sports and doing my hobbies and not using the phone. I think that people need to find their hobbies and know what other things that they can enjoy and help themselves against this bad habit. You can play music or do exercises or read a book. Many hobbies that are healthy and better for people than using the phones that damage the brain and the communication.

Post writing test sample (experiment group)

Hello

How are you? My name is Manar and I'm 19 years old. Im studying at Taibah University in my first year. The college life here is wonderful, and I am enjoying my experience of college for the first time. Is your university study in your first year wonderful? And how do you deal with the stress?

For me, I deal with stress in many ways. First of all, I arrange my study time and set some free time every day to avoid stress. Also, I get with my friends and practice the activities I love and When I feel nervous I read the Quran. Another thing I do I go to my room to lie down a bit and try to calm down. What about you? where do you go when you feel tense?

I wish you success and success always

Your friend

Manar

Pre writing test (control group)

My name is Abeer. I am 18 years old. I am a student in taibah university. I see my self as a phone addicted because I use my phone more than 6 hours a day. Its very harmful in my opinion, I try to focus on my studying or do a hobby but I can't. solutions in my view is making control and make new activates for people and make people aware that its very harmful for the eyes and brain also your mood! Lastly I hope I can find a way that work with me to get rid of my addiction.

Post writing test (control group)

My name is Abeer . I am 18 years old . Stress is the illness of the century in my opinion also, a lot of studies agree that it cause several damages to our mental and physical health. I would deal with stress by taking a break or going out with friends and family. Stress can affect my work and the balance in my life so its a big problem that should be fixed . In short there is many ways I can manage stress. I listen to music or play sport. I also talk with my friend on the phone or dance. They help me relax and forget stress.

First pen pal letter exchange sample, Mark and Lana (high motivated student).

Dear Pen pal,

Hey! My name is Mark, I am a criminal justice major in college. I have two sisters and one brother. I live on the east coast of America. Right now it is somewhat cold and lots of snow. There are no leaves of the trees anymore, all of the branches are covered in snow. If you ask me this is my favorite time of the year, mainly because my birthday is near. But most importantly because I know the semester is coming to an end and I can return home to be with my family. There are many things to do here in America that I enjoy but one of my favorite things to do is to do my makeup. I like to get dolled up and take photos, it makes me feel pretty. To me, my person is a canvas because I view myself as a work of art. Makeup allows me to express my inner artist, lol. Lol is short for "Laugh out loud", we use this expression to show when we are laughing or joking. Every now and then you should do something just to make yourself smile. Another thing I love to do is eat! In America, there are tons of different foods and cultures so it makes your options endless. Where I come from, we are famous for cheesesteaks and I guarantee that I will not find another cheesesteak like the one back home. Thanksgiving break is near, I am excited because my mom makes all of our favorite dishes. This is a time when we come together as a family demonstrate how thankful we are for one another. On this day I eat baked mac and cheese, turkey ham, greens, candied yams, and lots of sweet potato pie.

Hope to hear from you soon,

Mark 😊

Hey!

My name is Lana . I am study in prep-year in collage. I have not started my major yet . I have 2 brothers. I live in Saudi Arabia. My favorite time in the year is winter because I like winter vibes . I will talk about many thing I enjoy to do . First, I love crochet. I crochet to my friends and family wonderful gift . It helps me to relieve my stress . Also, the most thing I enjoy is reading books . I love reading because I love to learn new thing and reading give me information and help my mind to grow up. I like biography books. My favorite part is go to library to buy book . I don't have problem to spend my life in the library . I always have book with me , if I found a quiet place I start read and escape by mind. Finally these my best activity .

**Looking forward to hearing from you,
Lana**

Second pen pal letter exchange sample, Mark and Lana (high motivated student).

Dear Lana,

As salaam Walaikum, inshallah everything is well when you receive this letter. If you must know I am of the Islam faith as I assume you are also. If so, would you be able to teach me more things about it.

It's nice to hear that you like to crotchet, it would have been nice if you could send me one of your pieces. I also enjoyed reading when I was younger. I like to travel, it is always great to see other places and new things. The best part of it all is meeting new people. I have never been out of the country yet but I am going to Ireland in May.

This will be a wonderful experience because I will see how people operate in different parts of the world as well as adapting to their everyday life while I am there. I have also been to Miami, I love it because the weather is nice and I enjoy the beach. Have you ever been to Mecca? Or any other place that was special to you? I always wanted to go and I will at some point in my life. Hope to hear from you soon!

Mark

Dear Mark,

Wa aalikum alsalam , alhamdulelah everything is good . I hope this letter find you well . yes, I am also Muslim . I am happy because you are a Muslim, and I would be happy to teach you more about Islam . Islam is the religion of peace. Islam urges to do good things and help people as the prophet Muhammed peace be upon him did . I have never been out of the country also. I just traveled to mecca last year .It was a wonderful experience . It was a quiet and beautiful place . In mecca you can see people from all over the world with same religion . and we together do many worship act such as praying and reading Qur'an . Do you want to learn about Arabic language ?. I hope to you enjoy in your journey to Ireland.

Hope to hear from you soon .

Lana

Third pen pal exchange sample, Mark and Lana (high motivated student).

Dear Lana,

As salaam walaikum! It is glad to hear that you are excited about teaching me, it actually made me smile. I would love to know more about the Arabic language and even how to learn some Surahs. What is your favorite one? Mine is Al-Nas. I recite Al-Fatiha the best out of all of them. However, being in America it is hard to stay garbed up, there is constant temptation to uncover. How do you cope with that? Is that something you have a problem with? Did you hear about the issue of fast food causing health problems if people eat it too much? I don't think they should ban fast food because then where would you get a quick bite to eat? Also, I eat McDonalds every day and nothing is wrong with me. McDonalds is a fast food place that sells foods like burgers, fries, chicken nuggets, and so much more yummy things. What types of fast foods are where you live? Hope to hear from you soon! You are truly an amazing person.

Dear Mark,

As salam walaikum ! I hope you are fine . Can I contact with you on social media if you don't mind? . My favorite Surah is Yossif I like it because it teach us patient . I live in Islamic country so all women wear Abaya . And we, as Muslim women are proud that we are veiled and wear hijab . As you know, hijab is duty for us as God commanded in the Qura'n. I know the conditions in America. But I believe that many Americans love Muslim and respect Muslims and all other religion . In my opinion fast food is bad for our health . First, it's high in fat and sodium . also, we must reduce the times we eat fast food like we can eat it once a week. For me I like to be healthy and eat homemade cook . We also have Mcdonalds in my city. And we have Shawarma restaurant it's famous in the Middle East Shawarma is prepared from thins cuts of meat or chicken as a wrap . Thank you, you also amazing . **Best wishes,**

Lana

Fourth pen pal letter exchange sample, Mark and Lana (high motivated student).

Dear Lana,

Walaikum as salaam! Everything is well as I wish fr them to be for you also. Yes we can contact each other on social media which ones do you have? I have an instagram and a twitter. Do you like chicken over rice (halal food)? I love it especially with the red and white sauce. But what are your dreams? I plan to finish school and then go to law school for 3 years and become a lawyer. I always had a passion for helping people and our criminal justice system in philadelphia is corrupt. Did you know that the United States has the highest incarceration population in the entire world? That's really shocking that's why I want to become a lawyer to change that and make it better. As I told you before, I am going to Ireland to study criminal justice in May and next year I will do an internship somewhere to boost my credentials. The more people you network with the better your chances will be in achieving your goals. What do you want to be in the future? I hope to hear from you soon! I really enjoy receiving your letters :)

xoxo,

Mark

Dear Mark

Hello, I hope this letter find you well . I have twitter you can contact with me on this account : (@xxx) . Yes I like chicken over rice . If you know we like rice a lot in Saudi Arabia. It is very essential in our meals especially lunch and dinner. In fact I don't like rice that much. I change it with oat or potatoes to get my carbs for the day. My dream is to be a Nutrition doctor . I want to study clinical nutrition . I like to help people and give them the treatment they need . Also, one of my dream is to travel to Italy . I want visit Rome , and see Pisa tower and the important thing is to try the Italian food and eat their pizza . I like the way you think. I wish you the best in your studying to achieve your goals , and I believe that you will be a successful person in future . I hope to contact with you again.

Take care,

Lana

First pen pal letter exchange sample, Tom and Reem (mid motivated student).

Dear Pen Pal,

My name is Tom, I am 18 years old and from the state on the east coast of America. I'm currently a college student and my major is nursing. What is your major? I enjoy a lot of different activities. I like volunteering, playing basketball, and my favorite is art. I am going to tell you about how art has been an impact on my life.

Since I was a little kid, I was always doing some form of art. Whether it was just doodling, coloring, or painting. It has always been a favorite hobby of mine. When I was in high school, I took all the art classes available. From art, painting and ceramics class, I learned so many new techniques. Not only do I enjoy art, but it also helps me relieve my stress. I am able to express so many different emotions with my art work. It is such a benefit to me. Whenever I am upset or stressed, I just pull out my drawing pad and a pencil and begin to draw. I can get lost in my art. It really helps me get away from reality for a moment. With taking all of those different art classes, I have gotten so much better, and I learned many different methods. I have also learned that my favorite form of art is painting.

Here is a little information about me. I would love to learn more about you! I hope to hear from you soon. I love making new friends.

Sincerely,

Tom

Dear Tom

My name is Reem, I'm 18 years of age, and from Saudi Arabia in Madinah. I'm also a university student, still in prep-year. I also enjoy playing basketball, I'm currently a part of a team in my university. And am not kidding I really enjoy art as well, but the biggest impact that has changed my life was when I travelled abroad to Australia.

My journey started in 2009 when I travelled to Australia. Can u just imagine going abroad to a country where they speak a different language and have different culture and not speak one word and know about it! At start it was very difficult to adjust because I did not only not know how to speak but I did not even know the ABC or even ask to go to the toilet. I got bullied hard and made fun off, but thank god to all of that because if I did not go through all of that I would not know how to stand up for myself and speak English fluently. And studying abroad away from my friends and family and all the people that I love was hard. But it made me very independent and am lucky to have experienced new things. Also learning the culture was amazing and meeting new people was amazing. And hopefully I would like to have the chance to travel abroad again, but this time I would really like to go to the USA, because It is my dream.

Second pen pal letter exchange sample, Tom and Reem (mid motivated student).

Dear Reem,

Wow! We have so much in common, that is so awesome! The trip you took sounds like it was very nice besides being bullied. I am so sorry that happened. We are very welcoming here, at least in my opinion. It would be such a challenge to go to a different country and not be able to speak anything. But, I agree being on your own will really help you to become independent. I am going to tell you about a special trip that I took.

This past summer I was able to travel to Las Vegas and California. I have family that lives out there and they pay for their nieces and nephews to come out for a little over a week, if they graduated college and have a plan for their future. I was so grateful to have this opportunity and it was all because of my hard work in high school. They took me to all the great sites in Las Vegas and California. They even have a sail boat and we sailed four hours to this beautiful island called Catalina Island. I got to do so many fun things while I was there. It is something I will always cherish. I wish to live there one day. If you come to America, where do you want to visit?

Tom

Dear Tom,

Your trip sounds very interesting and fun, hope you travel more and make new memories to cherish them. One of my amazing trips was in Turkey, I got on my first hot air balloon and got to travel to many different places, saw different sights and famous places such as Sultan Ahmed Mosque and the grand bazaar. And one of the most fascinating places was when I went to Cappadocia where I got the chance to go on my first hot air balloon and it was one of the most unforgettable experiences. And for me Turkey now is like my second home town because I travel there very often, and I have family and friends there so due to that I can speak little Turkish and understand a bit. You asked where I would like to travel in America, will first of all I want to visit New York and go to times square and then I would like to go to Hollywood and last but not least I would like to live in California because I think it is calm and a lot of famous stars live there, maybe I would get the chance to meet someone one day. And where would you like to travel someday??

Third pen pal letter exchange sample, Tom and Reem (mid motivated student).

Dear Reem,

That's awesome! You have been to so many places I am jealous! There is a few places I would love to visit someday. One being Hawaii, another being Australia (not sure where yet exactly), and definitely either St. Thomas or the US Virgin Islands.

Maybe one day I'll hit the lottery and have enough money to do all of this!

I am not sure if you have many if at all any fast food restaurants, but we have one to three sometimes more on each street basically. People eat fast food regularly because with a busy schedule, it is quick and easy to grab. With people eating it so often comes health issues. They believe the only way to get rid of this issue is to ban and close down all fast food restaurants. I don't agree. I think it is all about self-control and meal planning. For me personally I do not eat at fast food restaurants regularly. I think I go maybe two times a month. Just because some people that go every day and are getting health issues, doesn't mean they should close them down and ruin it for everyone. It's all about self-control. What is your opinion on this?

Tom

Dear Tom,

Hope you get the chance to go and visit all the places you want. For sure we have fast food places too, and we have a lot. I do agree that fast food is not healthy and it increases the health issue for the people, but banning it is not the answer because people should learn how to control their self. For sure everyone likes and loves fast food, it just has a different taste and feeling. People also sometimes get addicted to this kind of food. So due to that banning it is not the solution but learning to control our eating habits is the answer. So for me I agree with your opinion too.

Fourth pen pal letter exchange sample, Tom and Reem (mid motivated student).

Dear Reem,

What are your dreams and goals? Mine are to graduate college and get a bachelor's degree in Nursing. I wish to work in the ER, and then eventually in other parts of the hospital maybe even be a nurse for cancer patients. Some other goals of mine are to volunteer in hospitals and get put on the Dean's List for having really good grades. To accomplish this, I am going to work very hard in school as well as go to clinicals in the hospital. Let me know what yours are.

Tom

Dear Tom

I really hope that you achieve your dreams and more. And nothing comes easy, we all have to work hard. For me I would really like to be a successful architecture engineer. To achieve this, I really have to work hard in university and get really high marks. And I would really love to have the chance to travel around the world and see beautiful and different architectures and make big projects, and that's what is amazing about this career.

Reem

First pen pal letter exchange, Cristina and Tolay (low motivated student).

Dear Pen-pal

I am from a university in the United States. I am a double major in Business, Computer, Information Technology Education and Business Management. I am working at a work study job on my campus. A work study job is when you can earn money from the university. I enjoy being at my volunteer fire department helping with many different activities through the year. It ranges from monthly dinners to holiday fest. I am also a part of a Sorority. A sorority is a group of girls that bond over being sisters for life. I also enjoy watching Netflix and reading when I have free time, when my university is off for the weekend. Do you have any activates you enjoy?

Sincerely,

Cristina

Hello Cristina

I am Tolay. I'm 19 years old. I'm studying at the University of Taiba. It was nice reading your letter and get to know you. I enjoy being with my friends and family. I enjoy spending time with my best friend at home watching Netflix too. I am very sociable and like to meet people from different countries. I have some online friends and play with them online games. It's so much fun. I'm also happy with my studies now. I made good friends and enjoying university. I'm trying to engage more in volunteering in my university. It feel good to help others and make people happy. In addition, it give me experiences.

Sincerely,

Tolay

Second pen pal letter exchange, Cristina and Tolay (low motivated student).

Hello Tolay,

It was a great surprise to learning that you also enjoy Netflix. Do you have any favorite movies or television shows you enjoy the most? I do play videogames sometimes, but I get very easily distracted. I enjoy meeting new friends from around the world.

I usually travel to New Jersey to the beach very few years as a family vacation. I always looked forward to the long car ride. I always would notice new landmarks that I don't have around my home. While at the beach, I also looked forward to waking up at 5 a.m. to go looking for seashells and seeing the beautiful sunrise that I don't usually get to see. My family and I also go out on a boat to see the whales and dolphins. I also enjoy going to the board walk to see all the different foods, games, and scenery. Have you ever traveled to a place that you found very meaningful and rewarding?

Sincerely,

Cristina

Hello Cristina

I watch almost everything, and I don't prefer one show. For me, yes, one day I went to Jeddah with my family for the summer vacation. I learned how to swim there which was so exciting to me. I attended football matches with my family, and I watched for the first time my favorite team playing in front of me. I was very happy. I found the football stadium very big and wide and nothing like what I see on TV. I also visited a museum that has all the old and valuable things from money to clothes. Also, I went to the largest aquarium where the weird kinds of fish and I saw exotic fish for the first time in my life. It was one of the most beautiful travels in my life.

Last, I am very happy to communicate with you I wish to know about you more..

Greetings: Tolay.

Third pen pal letter exchange, Cristina and Tolay (low motivated student).

Hello Tolay,

I am the same way, it depends on what I am in the mood for shows or movies. Do you have any favorite books? That sounds amazing. I feel the same way when I went to my first baseball game with my dad. Did you have a favorite item at the museum? I went to a mall that had an aquarium before, I thought it was an amazing experience to have. Did you have a favorite fish you saw? I also enjoy writing to you too.

In past years eating fast food as increased greatly. My view point as an education major, is that maybe the fast food industry should have more healthy options then just unhealthy options. Yet, many people want to just ban it all together. What is your opinion on banning fast food? Do you think fast food is cause health issues?

Sincerely,

Cristina

Hello Cristina

Yes I love reading books and I prefer reading novels and stories. Yes, I liked the shape of the phones in the museum. Old phones were so interesting and fascinating. Yes, I saw the salmon fish. I've never seen how it really looks like and found that amazing.

I agree with what you said, fast food has spread recently, and eating fast food significantly is causing health problems such as obesity and poisoning and increase in cholesterol, but in my opinion they should not be banned. To be honest, I am one of the People who like fast food but I try to control this every time. So, it is good to have balance and that is all about it.

Tolay.

Fourth pen pal letter exchange, Cristina and Tolay (low motivated student).

Hello Tolay,

You are correct about having a balance of healthy food and fast food. I am one of the people who eat out at least once a week if not more. Do you have any favorite novels or stories?

What is your future dream and how are you going to achieve them? Mine has changed a few times now. When I started university, I want to become a physician assessment. Now I want to be a computer teacher. One of my biggest goals is to become a professor. I know I will be continuing on to a master's program at least.

If I am unable to become a professor, I would want to become a counselor at a high school or middle school. The way I am achieving them is going out into school districts and being a student teacher. My major goal is help change the future for students to want to be in school and apart of clubs or activities to help them in their own future.

Sincerely,

Cristina

Hi Cristina

I read almost everything. Mostly of it Arabic. I don't have favourite novel or story, but I enjoy reading all kinds of stories. My dream is to become a consultant in surgery. I have to study well to get a high degree in the masters and then become a doctor and then get a doctorate and become a consultant. I know that is very difficult, but I can do it .. If it is not I would like to help sick people from all over the world. It is one of the best things that anyone can do to humanity. Helping people who are needy and can not pay for treatments. It is one of my life dreams that I want to make true. Last, I love your dream and wish you the luck to make it real.

Tolay.

References

- Abduh, A., & Rosmaladewi, R. (2017). Taking the Lextutor on-line tool to examine students' vocabulary level in business English students. *World Transactions on Engineering and Technology Education*, 15(3).
- Ahmed, S. T. S., & Pawar, S. V. (2018). Communicative Competence in English as a Foreign Language: Its Meaning and the Pedagogical Considerations for its Development. *The Creative Launcher*, 2(6), 301–312.
- Akbari, E., Pilot, A., & Jan Simons, P. R.-. (2015). Autonomy, competence, and relatedness in foreign language learning through Facebook. *Computers in Human Behavior*, 48, 126–134.
- Akbarian, I., Farajollahi, F., & Jimenez Catalan, R. M. (2020). EFL learners' lexical availability: Exploring frequency, exposure, and vocabulary level. *System (Linköping)*, 91. <https://doi.org/10.1016/j.system.2020.102261>
- Al Asmari, A. A. (2015). Communicative Language Teaching in EFL University Context: Challenges for Teachers. *Journal of Language Teaching and Research*, 6(5), 976–984.
- Al Harbi, A. A. M. (2017). Evaluation Study for Secondary Stage EFL Textbook: EFL Teachers' Perspectives. *English Language Teaching*, 10(3), 26–39. <https://doi.org/10.5539/elt.v10n3p26>
- Al-Essa, A. (2010). *Higher Education in Saudi Arabia: A journey to find identity*. Beirut, Lebanon: Dar AlSakee.
- Al-Khairi, M. A. (2013). *English Language Teaching*, 6(6). <https://doi.org/10.5539/elt.v6n6p1>
- Al-Nofaie, H. (2022). Perceptions of ESP instructors regarding implementation of English as a lingua franca in the classrooms of Saudi universities. *Al-Balqa Journal for Research and Studies* البلقاء للبحوث والدراسات, 24(2).
- Al-Rasheed, M. (2018). *Muted modernists : the struggle over divine politics in Saudi Arabia*. Oxford University Press.
- Al-Rasheed, M. (2002). *A HISTORY OF SAUDI ARABIA*. Cambridge University Press. Retrieved from www.cambridge.org
- Al-Seghayer, K. (2014). The Four Most Common Constraints Affecting English Teaching in Saudi Arabia. *International Journal of English Linguistics*, 4(5).
- Al-Seghayer, K. (2011). *English teaching in Saudi Arabia: Status, issues, and challenges*. Riyadh: Hala Print Co.

- Al-Zubeiry, H. (2020). Coherence Problems in the English Writings of Saudi University Students. *مجلة علوم اللغات وادابها*, (25), 409–431. Retrieved from <https://www.researchgate.net/publication/344389536>
- Alamer, A., & Al Khateeb, A. (2021). Effects of using the WhatsApp application on language learners motivation: a controlled investigation using structural equation modelling. *Computer Assisted Language Learning*. <https://doi.org/10.1080/09588221.2021.1903042>
- Alamer, A., & Almulhim, F. (2021). The Interrelation Between Language Anxiety and Self-Determined Motivation; A Mixed Methods Approach Understanding motivational factors leading to L2 outcomes View project. *Frontiers in Education*. <https://doi.org/10.3389/feduc.2021.618655>
- Alamri, M. (2011). Higher Education in Saudi Arabia. *Journal of Higher Education Theory and Practice*, 11, 88–91.
- Alberth, A. (2019). Use of Facebook, students' intrinsic motivation to study writing, writing self-efficacy and writing performance. *Technology, Pedagogy and Education*, 28(1), 21–36.
- Aldegether, R. (2020). Saudi Arabia's Vision 2030: Approaches to Multicultural Education and Training. *International Journal of Innovation, Creativity and Change*. *Www.ijcc.Net*, 12(8), 92–109. Retrieved from www.ijcc.net
- Alenezi, S. (2022). The Effects of Writing in a Class Blog on Saudi EFL Students' Attitudes towards Writing in English. *Arab World English Journal (AWEJ)*, (2nd), 329–341. Retrieved from <https://osf.io/preprints/socarxiv/5ds9c/download>
- Alghammas, A., & Alhuwaydi, A. (2020). The Weaknesses of English Writing Skills among Undergraduate Saudi Students Majoring in English at Qassim University: A Perspective of English Faculty. *Asian ESP Journal*, 16(21), 297–308. <https://doi.org/10.2139/SSRN.3621267>
- Alghazo, S., Al Salem, M. N., & Alrashdan, I. (2021). Stance and engagement in English and Arabic research article abstracts. *System*, 103, 102681. <https://doi.org/10.1016/J.SYSTEM.2021.102681>
- Alharbi, S. H. (2021). An Investigation of Metadiscourse Features in Applied Linguistics Academic Research Articles and Master's Dissertations. *Advances in Language and Literary Studies*, 12(1), 46–54. <https://doi.org/10.7575/aiall.v.12n.1.p.46>
- Alharbi, Y. G. (2019). A Review of the Current Status of English as a Foreign Language (EFL) Education in Saudi Arabia. *Global Journal of Education and Training*, 2(1). Retrieved from www.gjetonline.com
- Ali Ansari, A. (2012). Teaching of English to Arab Students: Problems and Remedies. *Educational Research*, 3(6), 519–524. Retrieved from <http://www.interestjournals.org/ER>

- Ali, S. S., & Ramana, V. L. (2018). Academic writing challenges at Universities in Saudi Arabia and solutions. *International Journal of English Language and Humanities*, 4(10), 291–298.
- Aliyah Nur, N. (2015). ANALYZING VOCABULARY LEVEL OF THE STUDENTS' ESSAY WRITING AND ACADEMIC TEXTBOOK UTILIZING LEXTUTOR. *ETERNAL (English, Teaching, Learning and Research Journal)*, 1(1), 15–27.
<https://doi.org/10.24252/ETERNAL.V11.2015.A6>
- Aljameel, I. H. (2022). Computer-Assisted Language Learning in Saudi Arabia: Past, Present, and Future. *International Education Studies*, 15(4), 95–107. <https://doi.org/10.5539/ies.v15n4p95>
- Alkodimi, K. A., & Al-Ahdal, A. A. (2021). Strategies of Teaching Writing at Saudi Tertiary-Level Institutions: Reality and Expectations. *Arab World English Journal (AWEJ)*, 12, 399–413.
<https://doi.org/10.24093/awej/vol12no2.27>
- Alotaibi, H. (2015). Metadiscourse in Arabic and English Research Article Abstracts. *World Journal of English Language*, 5(2).
- Alqahtani, S. N., & Abdelhalim, S. M. (2020). Gender-based Study of Interactive Metadiscourse Markers in EFL Academic Writing. *Theory and Practice in Language Studies*, 10, 1315–1325.
- Alqahtani, S. M. (2019). Teaching English in Saudi Arabia. In *English as a foreign language in Saudi Arabia new insights into teaching and learning English* (pp. 120–137). Routledge.
- Alqahtani, S., & Issa, T. (2018). Barriers to the adoption of social networking sites in Saudi Arabia's higher education. *BEHAVIOUR & INFORMATION TECHNOLOGY*, 37(10), 1072–1082.
<https://doi.org/10.1080/0144929X.2018.1464600>
- Alrabai, F. (2016). Factors Underlying Low Achievement of Saudi EFL Learners. *International Journal of English Linguistics*, 6(3), 21–37.
<https://doi.org/10.5539/ijel.v6n3p21>
- Alrabai, F. (2014). Motivational Practices in English as a Foreign Language Classes in Saudi Arabia: Teachers Beliefs and Learners Perceptions. *AWEJ*, 5(1).
- Alrashidi, O., & Phan, H. (2015). Education context and english teaching and learning in the Kingdom Of Saudi Arabia: An overview. *English Language Teaching*, 8(5), 33–44. <https://doi.org/10.5539/ELT.V8N5P33>
- Alshahrani, A. A. S. (2015). A cross-linguistic analysis of interactive metadiscourse devices employment in native English and Arab ESL academic writings. *Theory and Practice in Language Studies*, 5(8), 1535.

- Alshammari, M. M. (2011). The Use Of The Mother Tongue In Saudi EFL Classrooms. *Journal of International Education Research (JIER)*, 7(4), 95–102. <https://doi.org/10.19030/JIER.V7I4.6055>
- Alshehri, A. (2022). Writing proficiency of Saudi EFL learners: Examining the impact of Lexical diversity. *Journal of Language and Linguistic Studies*, 18(1), 519–529.
- Alyousif, R., & Alsuhaibani, Z. (2021). English Language Learning Demotivating Factors for Saudi High School EFL Students. *English Language Teaching*, 14(8), 29–39. <https://doi.org/10.5539/elt.v14n8p29>
- Anthony, L. (2005). AntConc: Design and Development of a Freeware Corpus Analysis Toolkit for the Technical Writing Classroom. In *IEEE International Professional Communication Conference Proceedings*.
- Assulaimani, T. (2019). The future of teaching english in Saudi Arabia. *Universal Journal of Educational Research*. <https://doi.org/10.13189/ujer.2019.070801>
- Awais Gulzar, M., Ahmad, M., Muhammad, H. & Rasheed, I., Hassan, M., & Rasheed, M. I. (2021). How social media use is related to student engagement and creativity: investigating through the lens of intrinsic motivation. <https://doi.org/10.1080/0144929X.2021.1917660>
- Babni, A. (2019). Computer-Mediated Communication and Language Education: Focus on Written Communication. *Journal on English Language Teaching*, 9(1), 50–58.
- Badger, R., & White, G. (2000). A process genre approach to teaching writing. *ELT Journal*. <https://doi.org/10.1093/elt/54.2.153>
- Bakhtin, M. (1986). *Speech genre and other late essays*. Austin, TX: University of Texas press.
- Bardakci, M. (2016). Breadth and Depth of Vocabulary Knowledge and Their Effects on L2 Vocabulary Profiles. *English Language Teaching*, 9(4), 239. <https://doi.org/10.5539/elt.v9n4p239>
- Barkaoui, K. (2007). Teaching writing to second language learners: Insights from theory and research. *TESL Reporter*, 40(1), 35–48. Retrieved from <http://ojs-dev.byuh.edu/index.php/Issue1/article/download/1112/1064>
- Barksdale, M. A., Watson, C., & Park, E. S. (2007). Pen Pal Letter Exchanges: Taking First Steps Toward Developing Cultural Understandings. *The Reading Teacher*, 61(1), 58–68. <https://doi.org/10.1598/RT.61.1.6>
- Barnard, R., & Campbell, L. (2005). Sociocultural Theory and the Teaching of Process Writing: The Scaffolding of Learning in a University Context. *Department of General & Applied Linguistics University of Waikato*, 76–88.

- Barnett, M. A. (1989). Writing as a process. *The French Review*, 63(1), 31–44.
- Bawarshi, A. S., & Reiff, M. J. (2010). *Genre: An Introduction to History, Theory, Research, and Pedagogy*. Parlor Press.
- Bawarshi, A. (2000). The Genre Function. *College English*, 62(3), 335–360. <https://doi.org/10.2307/378935>
- Bhatia, V. K. (1993). *Analysing Genre: Language Use in Professional Settings. The Modern Language Journal* (Vol. 79). London: Longman. <https://doi.org/10.2307/329626>
- Blake, R. (2000). Computer mediated communication: A window on L2 Spanish interlanguage. *Language Learning & Technology*, 4(1), 111–125. Retrieved from <http://llt.msu.edu/vol4num1/blake/default.html>
- Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*. <https://doi.org/10.1191/1478088706qp063oa>
- Brinkmann, S., & Kvale, S. (2015). InterViews: Learning the Craft of Qualitative Research Interviewing. *InterViews*, 363–367. <https://doi.org/10.2/JQUERY.MIN.JS>
- Brown, J. D., & Rodgers, T. S. (2002). *Doing Second Language Research: An Introduction to the Theory and Practice of Second Language Research for Graduate/Master's Students in TESOL and Applied Linguistics, and Others*. OUP Oxford.
- Bryman, A. (2016). *Social Research Methods*. Oxford University Press.
- Bubas, G. (2001). Computer mediated communication theories and phenomena: Factors that influence collaboration over the Internet. In *3rd CARNet Users Conferences*, 24–26. Retrieved from www.foi.hr/~gbubas
- Butz, N. T., & Stupnisky, R. H. (2017). Improving student relatedness through an online discussion intervention: The application of self-determination theory in synchronous hybrid programs. *Computers and Education*, 114, 117–138. <https://doi.org/10.1016/j.compedu.2017.06.006>
- Challob, A. I. (2021). The effect of flipped learning on EFL students' writing performance, autonomy, and motivation. *Education and Information Technologies*. <https://doi.org/10.1007/s10639-021-10434-1>
- Chen, J. C., & Brown, K. L. (2012). The effects of authentic audience on English as a second language (ESL) writers: a task-based, computer-mediated approach. *Computer Assisted Language Learning*, 25(5), 435–454.
- Cheng, A. (2008). Analyzing genre exemplars in preparation for writing: The case of an L2 graduate student in the ESP genre-based instructional

- framework of academic literacy. *Applied Linguistics*, 29(1), 50–71.
<https://doi.org/10.1093/applin/amm021>
- Cheng, R. (2010). Computer-mediated scaffolding in L2 students' academic literacy development. *CALICO Journal*, 28(1), 74–98.
<https://doi.org/10.11139/CJ.28.1.74-98>
- Cobb, T. (2000). The compleat lexical tutor.
- Cobb, T. (2010). Learning about language and learners from computer programs, 22(1). Retrieved from <http://nflrc.hawaii.edu/rfl>
- Cohen, L., Manion, L., & Morrison, K. (2011). *Research Methods in Education. Research methods in education*.
https://doi.org/10.1111/j.1467-8527.2007.00388_4.x
- Collins, K. M. T., Hall, P., Onwuegbuzie, A. J., & Johnson, R. B. (2012). Securing a Place at the Table: A Review and Extension of Legitimation Criteria for the Conduct of Mixed Research.
<https://doi.org/10.1177/0002764211433799>
- Cormier, G. (2017). The language variable in educational research: an exploration of researcher positionality, translation, and interpretation. *International Journal of Research & Method in Education*, 41(3), 328–341.
- Creswell, J. W., & Poth, C. N. (2017). *Qualitative inquiry and research design: Choosing among five approaches*. Sage publications.
- Crismore, A., Markkanen, R., & Steffensen, M. S. (1993). Metadiscourse in Persuasive Writing: A Study of Texts Written by American and Finnish University Students. *Written Communication*.
- Daif-Allah, A. S., & Aljumah, F. H. (2020). English Language Teaching. *English Language Teaching*, 13(2). <https://doi.org/10.5539/elt.v13n2p63>
- Deci, E. L., & Ryan, R. (1990). A motivational approach to self: integration in personality. *Nebraska Symposium On Motivation*.
https://doi.org/10.1207/s15326985ep2603&4_6
- Deci, E. L., Ryan, R. M., Vallerand, R. J., & Pelletier, L. G. (1991). Motivation and Education: The Self-Determination Perspective. *Educational Psychologist*, 26(3–4), 325–346.
<https://doi.org/10.1080/00461520.1991.9653137>
- Deqi, Z. (2005). The process-oriented approach to ESL/EFL writing instruction and research. *CELEA Journal*, 28(5), 66–70.
- Dincer, A., Yesilyurt, S., & Takkac, M. (2012). The effects of autonomy-support engagement, achievement and competence in English speaking classrooms. *Procedia-Social and Behavioral Sciences*, 46, 3890–3894.
<https://doi.org/10.1016/j.sbspro.2012.06.167>

- Dörnyei, Z. (2007). Creating a motivating classroom environment. *International Handbook of English Language Teaching*, 719–731.
- Dörnyei, Z. (2007). *Research methods in applied Linguistics*. Oxford: Oxford University Press.
- Dudley-Evans, T. (1997). Genre models for the teaching of academic writing to second language speakers: Advantages and disadvantages. *Functional Approaches to Written Text: Classroom Applications*.
- Durán, P., Malvern, D., Richards, B., & Chipere, N. (2004). Developmental trends in lexical diversity. *Applied Linguistics*.
<https://doi.org/10.1093/applin/25.2.220>
- Fàbregues, S., & Molina-Azorín, J. F. (2017). Addressing quality in mixed methods research: a review and recommendations for a future agenda. *Quality and Quantity*, 51(6), 2847–2863. <https://doi.org/10.1007/S11135-016-0449-4>
- Fareh, S. (2010). Challenges of teaching English in the Arab world: Why can't EFL programs deliver as expected? *Procedia - Social and Behavioral Sciences*, 2(2), 3600–3604.
<https://doi.org/10.1016/J.SBSPRO.2010.03.559>
- Farooq, O., & Wahid, R. (2019). L1 and its effect on EFL writing: a descriptive framework. *Journal of Human and Social Sciences*, 24(24), 792–806.
- Fathy Abdelwahab, A. (2020). Enhancing Postgraduate English Majors' Academic Writing Skills and Self-Efficacy Using Metadiscourse Markers Enhancing Postgraduate English Majors' Academic Writing Skills and Self-Efficacy Using Metadiscourse Markers.
- Field, A. (2009). *Discovering Statistics Using SPSS: Book Plus Code for E Version of Text*. SAGE Publications, Limited. Retrieved from <https://books.google.co.uk/books?id=sGM7QQAACAAJ>
- Flower, L., & Hayes, J. R. (1981). A Cognitive Process Theory of Writing. *College Composition and Communication*, 32(4), 365.
<https://doi.org/10.2307/356600>
- Gramer, M. F., Lynn, S., Ward, C., McVeigh, J. (Education consultant), Bixby, J., Daise, D., ... Douglas, S. R. (2011). *Q: Skills for success. Reading and writing*. Oxford University Press.
- Grant, A. M., & Wall, T. D. (2009). The neglected science and art of quasi-experimentation: Why-to, when-to, and how-to advice for organizational researchers. *Organizational Research Methods*, 12(4), 653–686.
<https://doi.org/10.1177/1094428108320737>
- Gustilo, L. E., & Cequeña, M. B. (2014). Can weblogs reduce writing anxiety and facilitate improvement in writing skills? Knowledge Channel View

project Assessment practices of Teachers View project. *Asian Journal of English Language Studies (AJELS)*, 2. Retrieved from <https://www.researchgate.net/publication/304377238>

- Hall, A. (2007). Vygotsky Goes Online: Learning Design from a Socio-cultural Perspective. *Learning and Socio-Cultural Theory: Exploring Modern Vygotskian Perspectives International Workshop 2007*, 1(1). Retrieved from <https://ro.uow.edu.au/llrg/vol1/iss1/6>
- Halliday, M. A. K. (1994). *An Introduction to Functional Grammar*. Edward Arnold (2nd ed.). London, UK.
- Hamdan, A. K. (2015). Reforming higher education in Saudi Arabia: Reasons for optimism. In *Higher Education Revolutions in the Gulf: Globalization and institutional viability* (1st Edition, pp. 153–178). Taylor and Francis. <https://doi.org/10.4324/9780203796139-7/REFORMING-HIGHER-EDUCATION-SAUDI-ARABIA-AMANI-HAMDAN>
- Harmston, K. A., Strong, C. J., & Evans, D. D. (2001). International Pen-Pal Correspondence for Students with Language-Learning Disabilities. *Teaching Exceptional Children*, 33, 46–51.
- Hayes, A. F., & Krippendorff, K. (2007). Answering the Call for a Standard Reliability Measure for Coding Data. *Communication Methods and Measures*, 1(1), 77–89. <https://doi.org/10.1080/19312450709336664>
- Hendrickson, R., & Peterson-Hernandez, K. (2020). USING PEN PALS IN THE CLASSROOM TO MOTIVATE RELUCTANT WRITERS. *Texas Journal of Literacy Education* |, 8(2).
- Hendrickson, R., & Peterson-Hernandez, K. (2020). USING PEN PALS IN THE CLASSROOM TO MOTIVATE RELUCTANT WRITERS. *Texas Journal of Literacy Education* |, 8(2).
- Hinkel, E. (2005). Hedging, Inflating, and Persuading in L2 Academic Writing. *Applied Language Learning*, 15(2), 29–53.
- Hinkel, E. (2002). *Second Language Writers' Text: Linguistic and Rhetorical Features*. *ESL Applied Linguistics Professional Series*. <https://doi.org/10.1017/S0272263104233058>
- Hoshi, S. (2015). Beyond Classroom Discourse: Learning as Participation in Native Speaker-Learner and Learner-Learner Interactions; Beyond Classroom Discourse: Learning as Participation in Native Speaker-Learner and Learner-Learner Interactions. *Foreign Language Annals*, 48(4), 755–770. <https://doi.org/10.1111/flan.12165>
- Hyland, K. (2009). *Teaching and Researching Writing* (2nd editio). Person Education Limited.
- Hyland, K. (2005). *Metadiscourse: exploring interaction in writing*. London, UK: Bloomsbury Academic.

- Hyland, K. (2004). *Genre and second language writing*. University of Michigan Press.
- Hyland, K. (2002). Authority and invisibility: Authorial identity in academic writing. *Journal of Pragmatics*, 34(8), 1091–1112. [https://doi.org/10.1016/S0378-2166\(02\)00035-8](https://doi.org/10.1016/S0378-2166(02)00035-8)
- Hyland, K., & Tse, P. (2004). Metadiscourse in academic writing: A reappraisal. *Applied Linguistics*. <https://doi.org/10.1093/applin/25.2.156>
- Hymes, D. (2001). On Communicative Competence. *Linguistic Anthropology: A Reader*, 53–73.
- Hyon, S. (1996). Genre in Three Traditions: Implications for ESL. *TESOL Quarterly*. <https://doi.org/10.2307/3587930>
- Ibrahim, E. H. E., Muhamad, A. J., & Esa, Z. (2019). A Comparison of Lexical Richness in L2 Written Productions. *International Journal of Emerging Technologies in Learning (IJET)*, 14(20), 171–181.
- Jarvis, S. (2002). Short texts, best-fitting curves and new measures of lexical diversity. *Language Testing*, 19(1), 57–84. <https://doi.org/10.1191/0265532202lt220oa>
- Johansson, V. (2009). Lexical diversity and lexical density in speech and writing: a developmental perspective. *Working Papers in Linguistics*. <https://doi.org/10.7820/vli.v01.1.koizumi>
- Johns, A. M. (1986). The ESL Student and the Revision Process: Some Insights from Schema Theory. *Journal of Basic Writing*.
- Johns, A. M. (2008). Genre awareness for the novice academic student: An ongoing quest. *Language Teaching*. <https://doi.org/10.1017/S0261444807004892>
- Johnson, R. B., & Onwuegbuzie, A. J. (2004). Mixed Methods Research: A Research Paradigm Whose Time Has Come. *Educational Researcher*, 33(7), 14–26. <https://doi.org/10.3102/0013189X033007014>
- Kaya, F., & Sofu, H. (2020). Exploring Effects of Explicit Teaching of Metadiscourse Markers on EFL Students' Writing Proficiency. *The Reading Matrix: An International Online Journal*, 20(2).
- Khan, I. (2011). Learning difficulties in English: Diagnosis and pedagogy in Saudi Arabia. *Educational Research*, 2(7), 1248–1257.
- Kheryadi, Abdul Muin, & Ahmad Habibi Syahid. (2022). Hedges in English and Arabic Metadiscourse Utility in Academic Writing: A Contrastive Analysis. *Jurnal Al Bayan: Jurnal Jurusan Pendidikan Bahasa Arab*, 14(2), 308–323. <https://doi.org/10.24042/albayan.v14i2.12144>

- Khojah, M., & Thomas, M. (2021). Smartphone-mediated EFL Reading Tasks: A Study of Female Learners' Motivation and Behaviour in Three Saudi Arabian Classrooms. *AsianEFL Journal*, 25(2), 25. Retrieved from <http://researchonline.ljmu.ac.uk/>
- Kitade, K. (2006). The Negotiation Model in Asynchronous Computer-mediated Communication (CMC): Negotiation in Task-based Email Exchanges. *CALICO Journal*, 23(2), 319–348.
- Kopple, W. J. Vande. (1985). Some Exploratory Discourse on Metadiscourse. *College Composition and Communication*.
<https://doi.org/10.2307/357609>
- Kuteeva, M. (2011). Wikis and academic writing: Changing the writer–reader relationship. *English for Specific Purposes*, 30(1), 44–57.
- Larsari, V. N. (2011). Learners' communicative competence in English as a foreign language (EFL). *Journal of English and Literature*, 2(7), 161–165.
- Laufer, B., & Nation, P. (1995). Vocabulary size and use: Lexical richness in L2 written production. *Applied Linguistics*.
<https://doi.org/10.1093/applin/16.3.307>
- Lee, J., & Lyster, R. (2016). Interactional feedback in task-based synchronous computer-mediated communication provided by native speakers and nonnative speakers. *Language Learning & Technology*, 20(1), 133–153.
- Lee, J. J., & Deakin, L. (2016). Interactions in L1 and L2 undergraduate student writing: Interactional metadiscourse in successful and less-successful argumentative essays. *Journal of Second Language Writing*, 33, 21–34. <https://doi.org/10.1016/j.jslw.2016.06.004>
- Li, Y. (2000). Linguistic characteristics of ESL writing in task-based e-mail activities. *System*, 28(2), 229–245. [https://doi.org/10.1016/S0346-251X\(00\)00009-9](https://doi.org/10.1016/S0346-251X(00)00009-9)
- Lin, W.-C., & Yang, S. C. (2011). Exploring students' perceptions of integrating Wiki technology and peer feedback into English writing courses. *English Teaching: Practice and Critique*, 10(2), 88–103. Retrieved from <http://education.waikato.ac.nz/research/files/etpc/files/2011v10n2dial1.pdf>
- Lombard, M., Snyder-Duch, J., & Bracken, C. C. (2002). Content Analysis in Mass Communication: Assessment and Reporting of Inter-coder Reliability. *Human Communication Research*.
<https://doi.org/10.1093/hcr/28.4.587>
- Mackenzie, A. (2015). Using Collaborative Learning Tasks to Expand Vocabulary Knowledge. *International Journal of Arts & Sciences*, 8(6), 129–138.

- Mahalingappa, L., Hughes, E. M., & Polat, N. (2018). Developing preservice teachers' self-efficacy and knowledge through online experiences with English language learners. *LANGUAGE AND EDUCATION*, 32(2), 127–146.
- Malvern, D. D., Richards, B. J., Chipere, N., & Durán, P. (2004). *Lexical diversity and language development: Quantification and assessment*. Palgrave Macmillan. London. <https://doi.org/10.1057/9780230511804>
- Martin, J. R. (2009). Genre and language learning: A social semiotic perspective. *Linguistics and Education*, 20(1), 10–21. <https://doi.org/10.1016/J.LINGED.2009.01.003>
- Matsuda, P. K. (2003). Process and post-process: A discursive history. *Journal of Second Language Writing*, 12(1), 65–83.
- Mazer, J. P., Murphy, R. E., & Simonds, C. J. (2007). I'll see you on "facebook": The effects of computer-mediated teacher self-disclosure on student motivation, affective learning, and classroom climate. *Communication Education*, 56(1), 1–17. <https://doi.org/10.1080/03634520601009710>
- McCarthy, P. M., & Jarvis, S. (2010). MTLD, vocd-D, and HD-D: A validation study of sophisticated approaches to lexical diversity assessment. *Behavior Research Methods*. <https://doi.org/10.3758/BRM.42.2.381>
- McKee, G., Malvern, D., & Richards, B. (2000). Measuring vocabulary diversity using dedicated software. *Literary and Linguistic Computing*, 15, 323–338.
- Moskovsky, C., & Alrabai, F. (2009). Intrinsic Motivation in Saudi Learners of English as a Foreign Language. *The Open Applied Linguistics Journal*, 2(1), 1–10. <https://doi.org/10.2174/1874913500902010001>
- Mulken, M. van, & Hendriks, B. (2017). Effective communication modes in multilingual encounters: Comparing alternatives in Computer Mediated Communication (CMC). *Multilingua*, 36(1), 89–111.
- Nation, I. S. P. (2001). *Learning Vocabulary in Another Language*. Cambridge University Press. Retrieved from <https://books.google.co.uk/books?id=VpAELrIoAIAC>
- Nation, I. S. P., & Webb, S. A. (2011). *Researching and Analyzing Vocabulary*. Heinle, Cengage Learning.
- Neary-Sundquist, C. (2013). The Use OF Hedges in the Speech of ESL Learners. *ELIA*, 13, 149–174. <https://doi.org/10.12795/elia.2013.i13.05>
- Nguyen, L. V. (2008). Computer mediated communication and foreign language education: Pedagogical features. *International Journal of Instructional Technology and Distance Learning*, 5(12), 23–44. Retrieved from

https://www.academia.edu/207689/Computer_mediated_communication_and_foreign_language_education_Pedagogical_features

- Niemiec, C. P., & Ryan, R. M. (2009). Autonomy, competence, and relatedness in the classroom. *School Field*, 7(2), 133–144.
<https://doi.org/10.1177/1477878509104318>
- Nishitani, M., & Matsuda, T. (2011). Earlier title: US-China Education Review. *Education Review B*, 3, 438–446.
- Noels, K. A., Lou, N. M., Lascano, D. I. V., Chaffee, K. E., Dincer, A., Zhang, Y. S. D., & Zhang, X. (2019). Self-determination and motivated engagement in language learning. In *The Palgrave Handbook of Motivation for Language Learning* (pp. 95–115). Palgrave Macmillan.
https://doi.org/10.1007/978-3-030-28380-3_5
- Noels, K. A., Pelletier, L. G., Clément, R., & Vallerand, R. J. (2000). Why are you learning a second language? Motivational orientations and self-determination theory. *Language Learning*, 50(1), 57–85.
<https://doi.org/10.1111/0023-8333.00111>
- Norton-Meier, L., Drake, C., & Tidwell, M. (2009). Writing a Mathematics Community: A Pen Pal Inquiry Project on JSTOR. *Communities of Inquiry*, 86(4), 245–256.
- Nystrand, M. (1989). A Social-Interactive Model of Writing. *Written Communication*, 6(1), 66–85.
<https://doi.org/10.1177/0741088389006001005>
- O'Dowd, R. (2018). From telecollaboration to virtual exchange: state-of-the-art and the role of UNICollaboration in moving forward. *Journal of Virtual Exchange*, 1, 1–23. <https://doi.org/10.14705/RPNET.2018.JVE.1>
- Odell, L., Goswami, D., & Herrington, A. (1983). The discourse-based interview: A procedure for exploring tacit knowledge of writers in nonacademic settings. In *Research on Writing: Principles and Methods* (pp. 221–236). New York: Langman.
- Ohta, A. (1995). Applying Sociocultural Theory to an Analysis of Learner Discourse: Learner-Learner Collaborative Interaction in the Zone of Proximal Development. *Issues of Applied Linguistics*, 6, 93–121.
- Paltridge, B. (2001). *Genre and the Language Learning Classroom*. *Genre and the Language Learning Classroom*. University of Michigan Press.
<https://doi.org/10.3998/MPUB.23749>
- Pansiri, J. (2005). Pragmatism: A methodological approach to researching strategic alliances in tourism. *Tourism and Hospitality Planning & Development*, 2(3), 191–206.
- Park, Y. S., Konge, L., & Artino, A. R. (2020). The Positivism Paradigm of Research. . *Academic Medicine : Journal of the Association of American*

Medical Colleges, 95(5), 690–694.
<https://doi.org/10.1097/ACM.00000000000003093>

- Parvez, A., Akhtar, H., & Mohammad, A. (2013). Use of web 2.0 in Saudi Arabia Universities. *Journal of Information Dissemination and Technology*, 3(3), 158–166.
- Patton, A., Hirano, E., & Garrett, A. R. (2017). E-Pal Exchanges: A Way to Connect Preservice Teachers and English Language Learners. *ORTESOL Journal*, 34, 48–52.
- Plant, R. W., & Ryan, R. M. (1985). Intrinsic motivation and the effects of self-consciousness, self-awareness, and ego-involvement: An investigation of internally controlling styles. *Journal of Personality*, 53(3), 435–449.
<https://doi.org/10.1111/j.1467-6494.1985.tb00375.x>
- Quintero, L. M. (2011). Blogging: A way to foster EFL writing. *Colombian Applied Linguistics Journal*, (10), 7–49.
- Rahman, M. (2011). Genre-based writing instruction: Implications in ESP classroom. *English for Specific Purposes World*.
- Rajab, H. (2013). Developing speaking and writing skills of L1 Arabic EFL learners through teaching of IPA phonetic codes. *Theory and Practice in Language Studies*, 3(4), 653.
- Richards, Brian; Malvern, D. (2000). Measuring vocabulary richness in teenage learners of French.
- Ryan, R. M., Koestner, R., & Deci, E. L. (1991). Ego-involved persistence: When free-choice behavior is not intrinsically motivated. *Motivation and Emotion*, 15(3), 185–205. <https://doi.org/10.1007/BF00995170>
- Ryan, R. M., Mims, V., & Koestner, R. (1983). Relation of reward contingency and interpersonal context to intrinsic motivation: A review and test using cognitive evaluation theory. *Journal of Personality and Social Psychology*, 45(4), 736–750. <https://doi.org/10.1037/0022-3514.45.4.736>
- Ryan, R. M. (1982). Control and information in the intrapersonal sphere: An extension of cognitive evaluation theory. *Journal of Personality and Social Psychology*. <https://doi.org/10.1037/0022-3514.43.3.450>
- Ryan, R. M., Connell, J. P., & Plant, R. W. (1990). Emotions in nondirected text learning. *Learning and Individual Differences*.
[https://doi.org/10.1016/1041-6080\(90\)90014-8](https://doi.org/10.1016/1041-6080(90)90014-8)
- Ryan, R. M., & Deci, E. L. (2017). *Self-determination theory : basic psychological needs in motivation, development, and wellness*. Retrieved from https://books.google.com/books/about/Self_Determination_Theory.html?id=Bc_DDAAQBAJ

- Ryan, R. M., & Deci, E. L. (2000). Intrinsic and Extrinsic Motivations: Classic Definitions and New Directions. *Contemporary Educational Psychology*. <https://doi.org/10.1006/ceps.1999.1020>
- Sa'adeddin, M. A. A. M. (1989). Text development and Arabic-English negative interference. *Applied Linguistics*, 10(1), 36–51. <https://doi.org/10.1093/applin/10.1.36>
- Sadeghi, K., & Dilmaghani, S. K. (2013). The Relationship between Lexical Diversity and Genre in Iranian EFL Learners' Writings. *Journal of Language Teaching and Research*, 4(2), 328. <https://doi.org/https://doi.org/10.4304/jltr.4.2.328-334>
- Saleh, M. A. (1986). Development of higher education in Saudi Arabia. *Higher Education*. <https://doi.org/10.1007/BF00138089>
- Santos, T. (1992). Ideology in composition: L1 and ESL. *Journal of Second Language Writing*, 1(1), 1–15.
- Satar, H. M. (2015). Sustaining multimodal language learner interactions online. *Calico Journal*, 32(3), 480–507.
- Shadish, W., Cook, T., Campbell, T. (2005). Experiments and generalized causal inference. *Experimental and Quasi-Experimental Designs for Generalized Causal Inference*, 100(470), 1–81. <https://doi.org/10.1198/jasa.2005.s22>
- Sheldon, K. M., & Filak, V. (2008). Manipulating autonomy, competence, and relatedness support in a game-learning context: New evidence that all three needs matter. *British Journal of Social Psychology*, 47(2), 267–283. <https://doi.org/10.1348/014466607X238797>
- Shi, L., Cristea, A. I., Hadzidedic, S., & Dervishalidovic, N. (2014). Contextual gamification of social interaction - Towards increasing motivation in social e-learning. In *Lecture Notes in Computer Science (including subseries Lecture Notes in Artificial Intelligence and Lecture Notes in Bioinformatics)* (Vol. 8613 LNCS, pp. 116–122). Springer Verlag. https://doi.org/10.1007/978-3-319-09635-3_12
- Shiroyama, T. (2021). Task-Based Language Learning and Teaching using Synchronous and Asynchronous CMC. *English Usage and Style*, 38, 35–55. https://doi.org/10.34399/JASEUS.38.0_35
- Skinner, E., & Edge, K. (2002). Self-Determination, Coping, and Development. In *Handbook of Self-Determination Research* (pp. 297–337).
- Smith, F. (1982). *Writing and the writer*. Routledge.
- Soliman Nouraldeem, A., & Elyas, T. (2014). LEARNING ENGLISH IN SAUDI ARABIA: A SOCIO-CULTURAL PERSPECTIVE. *International Journal of English Language and Linguistics Research*.

- Sotillo, S. M. (2000). DISCOURSE FUNCTIONS AND SYNTACTIC COMPLEXITY IN SYNCHRONOUS AND ASYNCHRONOUS COMMUNICATION. *Language Learning & Technology*, 4(1), 82–119. Retrieved from <http://llt.msu.edu/vol4num1/sotillo/default.html>
- Spivey, N. N. (1997). The Constructivist Metaphor: Reading, Writing, and the Making of Meaning. *College Composition and Communication*. <https://doi.org/10.2307/358470>
- Stanford, P., & Siders, J. A. (2001). E-Pal Writing! *Teaching Exceptional Children*, 34(2), 21–24.
- Sultan, A. (2011). A contrastive study of metadiscourse in English and Arabic linguistics research articles. *Acta Linguistica*.
- Sun, Q., & Zhang, L. J. (2022). Understanding Novice and Experienced Teachers’ Cognitions and Practices for Sustainable Teacher Development: The Case of Form-Focused Instruction in English Language Teaching. *Sustainability* 2022, Vol. 14, Page 4711, 14(8), 1–17. <https://doi.org/10.3390/SU14084711>
- Sun, Y., & Gao, F. (2020). An investigation of the influence of intrinsic motivation on students’ intention to use mobile devices in language learning. *Educational Technology Research and Development*, 68(3), 1181–1198. <https://doi.org/10.1007/S11423-019-09733-9>
- Swales, J. M. (1990). *Genre Analysis. English in Academic and Research Settings*. Cambridge: Cambridge University Press.
- Teddlie, C., & Tashakkori, A. (2009). *Foundations of Mixed-methods Research: Integrating Quantitative and Qualitative Approaches in the Social and Behavioral Sciences*. CA: Sage Publications.
- Thorne, S. L., Black, R. W., & Sykes, J. M. (2010). Second Language Use, Socialization, and Learning in Internet Interest Communities and Online Gaming. *The Modern Language Journal*, 94(3), 853–876. Retrieved from www.internetworldstats.com
- Tovar Viera, R. (2017). Vocabulary knowledge in the production of written texts: a case study on EFL language learners. *Revista Tecnológica ESPOL*, 30(3).
- UNESCO. (2010). World Data on Education-Saudi Arabia. *Wde*, 31. Retrieved from <http://www.ibe.unesco.org/>
- Ur Rahman, M. M., & Alhaisoni, E. (2013). Teaching English in Saudi Arabia: Prospects and Challenges. *Academic Research International*, 4(1). Retrieved from www.savap.org.pk
- Vashegan Farahani, M., & Abdallah Mohemmed, A. I. (2018). Metadiscourse in Academic vs. Non-Academic Writing: A Comparative Corpus-driven

Inquiry. *Bulletin of the Transilvania University of Braşov, Series IV: Philology & Cultural Studies*, 11(1), 145–166.

- Vermeer, A. (2000). Coming to grips with lexical richness in spontaneous speech data. *Language Testing*, 17(1), 65–83.
<https://doi.org/10.1177/026553220001700103>
- Vurdien, R. (2012). Enhancing writing skills through blogs in an EFL class. *The EuroCALL Review*, 20(1), 156.
<https://doi.org/10.4995/EUROCAll.2012.16214>
- Vygotsky, L. (1978). *Mind in society : the development of higher psychological processes*. Harvard University Press.
- Walker-Dalhouse, D., Sanders, V., & Dalhouse, A. D. (2009). A university and middle-school partnership: Preservice teachers' attitudes toward ELL students. *Literacy Research and Instruction*, 48(4), 337–349.
<https://doi.org/10.1080/19388070802422423>
- Wang, Y. C. (2014). Promoting collaborative writing through wikis: a new approach for advancing innovative and active learning in an ESP context. *Computer Assisted Language Learning*, 28(6), 499–512.
<https://doi.org/10.1080/09588221.2014.881386>
- Ware, P. (2005). 'Missed' communication in online communication: Tensions in a German- American telecollaboration. *Language Learning & Technology*, 9(2), 64–89. Retrieved from
<http://ilt.msu.edu/vol9num2/ware/>
- White, R. V. (1988). Academic writing: Process and product. *Academic Writing: Process and Product*, 4–16.
- Wiseman, A. W., Sadaawi, A., & Alromi, N. H. (2008). EDUCATIONAL INDICATORS AND NATIONAL DEVELOPMENT IN SAUDI ARABIA. In *3 rd IEA International Research Conference* (pp. 1–20).
- Yaghoubi, A., & Ardestani, S. (2014). Explicit or implicit instruction of metadiscourse markers and writing skill improvement. *International Journal of Applied Linguistics and English Literature*, 3(4), 14–22.
<https://doi.org/10.7575/AIAC.IJALEL.V.3N.4P.14>
- Yasuda, S. (2011). Genre-based tasks in foreign language writing: Developing writers' genre awareness, linguistic knowledge, and writing competence. *Journal of Second Language Writing*.
<https://doi.org/10.1016/j.jslw.2011.03.001>
- YU, G. (2010). Lexical Diversity in Writing and Speaking Task Performances. *Applied Linguistics*, 31(2), 236–259.
<https://doi.org/https://doi.org/10.1093/applin/amp024>

- Yu, S., Jiang, L., & Zhou, N. (2020). The impact of L2 writing instructional approaches on student writing motivation and engagement. *Language Teaching Research*, 1–16. <https://doi.org/10.1177/1362168820957024>
- Zakaria, M., & Abdul Malik, F. (2018). Metadiscourse in Academic Writing of Pre-University Arab Students at the International Islamic University Malaysia (IIUM). *MATEC Web of Conferences*, 150. <https://doi.org/10.1051/MATECCONF/201815005086>
- Zamel, V. (1983). The composing processes of advanced ESL students: Six case studies. *TESOL Quarterly*, 17(2), 165–187. <https://doi.org/10.2307/3586647>
- Zhang, D. (2009). The Application of Blog in English Writing. *Journal of Cambridge Studies*, 4(1), 64–72.