



Graduate School of Education

**Investigating the Impact of Online Collaboration on Omani EFL Students'
Writing Performance and Revision Behaviours**

Submitted by
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Signature:

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Abstract

This study was conducted to explore how online collaboration among English as a foreign language (EFL) students might enhance their peer feedback and revision practices, with the ultimate aim of improving their writing. This research contributes to the ongoing debate about the impact of new technologies on students' writing practices as it examines the topic from the students' perspective – a viewpoint often neglected in many EFL settings.

A case study in the Omani context was employed to answer the research questions in light of the most recent trends in the educational system in Oman towards the integration of new technologies to provide students with collaborative learning environments. Using a mixed method design, this study was conducted with 23 participants in their usual classroom environment where the focus of teaching and learning is writing. The main participants were students, as they are the core recipients of the changes implemented by their institutions. Given the chosen mixed method approach, several methods were used namely, online and in-class observations, written texts analysis, focus groups, and semi-structured interviews. These methods of data collection provided the data needed to build a detailed case study in order to answer the research questions. Descriptive statistics were calculated for the quantitative data, and a thematic analysis was employed for the qualitative data.

Quantitative findings of the students' writing revealed that the online peer feedback resulted in improvement in the students' overall writing performance, compared with the first draft scoring. However, the students did not make a statistically significant improvement in all writing sub-skills when compared with their first draft. It improved the students' performance in the sub-skills: grammar and vocabulary while the results revealed a non-significant effect of the approach on the writing sub-skills: content and organisation. Although most of the students revealed an awareness of the significance of the content and the organisation of their texts, the observed online task showed that students focused mainly on surface-level mistakes in their revision.

In addition to changes in performance, the qualitative analysis revealed that online collaboration seems to have also developed the students' writing behaviour over each draft. The participants appreciated the online task, believing it was easy to reach, motivating, promoted technology literacy, enhanced the learning process, boosted critical thinking, and that it played a role in the

elimination of a previously passive experience of learning. However, they raised many concerns regarding the online collaborative task: experiencing difficulties with the use of the platform, lack of time, mistrust between students, and concerns about the absence of the teacher's involvement. These views reflect tensions when moving to an increasingly interactive approach and indicate how much impact the context has on the success of any pedagogic initiative.

The findings further indicated that scaffolding was mutual with both partners being capable of providing guided support to each other through giving and receiving feedback irrespective of their level of writing proficiency. The findings revealed that the opportunity given to the learners to express their revision behaviour was an invaluable experience that revealed their progress throughout the course.

The discussion foregrounds the significance of sociocultural theory; showing how classroom culture is as significant in explaining the findings as classroom practice. It emphasises the need to explicitly promote the value of collaboration and the skills to engage in it. The study is significant in offering insights into the way in which writing should be taught in an EFL context, as well as in offering further insights to better enhance the effectiveness of the implementation of technology in EFL writing courses. The findings have raised implications for policymakers as well as teachers, because the teacher's role changes when engaged in online collaborative platforms.

Table of Contents

Acknowledgements	2
Abstract	3
List of Abbreviations	11
Chapter 1: Introduction	12
1.1 Overview	12
1.2 Rationale for the Study.....	14
1.3 Research Questions.....	18
1.4 Significance of the Study.....	18
1.5 The Structure of the Thesis.....	20
Chapter 2: The Context of the Study	22
2.1 Introduction.....	22
2.2 The Education System in the Sultanate of Oman	22
2.3 Higher Education.....	24
2.4 English Language use in Oman	26
2.5 Educational Technology Policy in Oman.....	28
2.6 Salalah College of Technology (SCT).....	30
2.6.1 The English Language Centre.....	31
2.7 Summary	32
Chapter 3: Literature Review	34
3.1 Introduction.....	34
3.2 A Theoretical Framework	35
3.3 Models (Theories) of Writing Development.....	37
3.3.1 Cognitive Models of the Writing Process.....	38
3.3.1.1 Flower and Hayes (1980).....	38
3.3.1.2 Scardamalia and Bereiter (1987)	41
3.3.2 Sociocultural Theory of Writing	43
3.4 Pedagogical Approaches to Second-Language Writing.....	47
3.4.1 Writing as a Product.....	47
3.4.2 Writing as a Process	49
3.4.3 Genre-Based Approaches to Writing.....	52
3.4.4 Process Genre Approach	54
3.4.5 Summary	55
3.5 Collaborative Learning	55
3.6 Technology and L2 Writing Practice.....	59

3.7 Online Collaboration.....	62
3.7.1 Affordances of Online Collaboration.....	67
3.7.2 Online Collaboration Tools in Writing.....	72
3.7.2.1 Discussion Forums.....	75
3.7.2.2 Wiki.....	77
3.7.2.3 Blogs.....	79
3.8 Feedback.....	84
3.8.1 Peer Feedback.....	86
3.8.2 The Impact of Culture on Peer Feedback.....	90
3.8.3 Online Peer Feedback.....	92
3.9 Revision.....	95
3.10 The Impact of Peer Feedback on Revision.....	100
3.11 Mutual Scaffolding.....	101
3.12 Students' Perceptions of Online Collaboration.....	104
3.13. Summary.....	107
Chapter 4: Methodology.....	109
4.1 Introduction.....	109
4.2 Research Aims and Questions.....	109
4.3 Theoretical Framework.....	112
4.4 Research Paradigm.....	113
4.4.1 Ontology.....	116
4.4.2 Epistemology.....	118
4.4.3 Research Methodology.....	120
4.5 Case Study.....	124
4.6 Research Methods of Data Collection.....	128
4.6.1 Focus Groups.....	130
4.6.2 Observations.....	132
4.6.3 Written Texts Analysis.....	136
4.6.4 Semi-Structured Interviews.....	137
4.7 The Sampling Strategy.....	142
4.8 Background to the Participants.....	144
4.9 Pilot Study.....	147
4.10 Data Collection Procedures.....	149
4.11 Data Analysis.....	156
4.11.1 Qualitative Data.....	156
4.11.2 Quantitative Data.....	162
4.12 Ethical Considerations.....	163

4.13 Trustworthiness	166
4.13.1 Credibility.....	167
4.13.2 Transferability	170
4.13.3 Dependability	171
4.13.4 Confirmability	172
4.14 Summary	173
Chapter 5: Findings	174
5.1 Introduction.....	174
5.2 Cohort Perceptions.....	175
5.2.1 Introduction.....	175
5.2.2 Findings From the Focus Group Questions	176
5.2.2.1 Affordances of Online Collaboration	177
5.2.2.2 Limitations of Online Collaboration.....	180
5.2.2.3 Students' Readiness to Engage in Online Collaboration.....	181
5.2.3 Incidental Data From Observations.....	183
5.2.4 Conclusion.....	184
5.3 The Affordances and Limitations of Online Collaboration	187
5.3.1 Introduction.....	187
5.3.2 Affordances of the Online Collaboration	188
5.3.2.1 Enhancing the Learning Process	189
5.3.2.2 Improving Computer Literacy	191
5.3.2.3 Online Collaboration Motivates Students	194
5.3.2.4 Boosting Critical Thinking.....	196
5.3.2.5 Enhancing Interaction and Communication Beyond the Classroom.....	197
5.3.3 Challenges of the Online Collaboration	199
5.3.3.1 Difficulties with the use of the Platform	199
5.3.3.2 Lack of Time.....	201
5.3.3.3 Negative Responses to Peer Feedback.....	202
5.3.3.4 Absence of the Teacher's Involvement.....	204
5.3.4 Conclusion	206
5.4 Mutual Scaffolding.....	208
5.4.1 Peer Feedback as Mutual Scaffolding.....	210
5.4.1.1 Reading Peers' Work.....	210
5.4.1.2 Providing Peer Feedback.....	214
5.4.1.3 Receiving Peer Feedback	216
5.4.2 Scaffolding Behaviours.....	218
5.4.2.1 Pointing.....	219

5.4.2.2 Advising	222
5.4.2.3 Instructing	224
5.4.3 Responding Behaviours	227
5.5.3.1 The Nature of Students' Practical Response to Their Peers' Feedback	228
5.4.3.2 Students Concerns About the Nature of the Online Task.....	235
5.4.4 Conclusion.....	237
5.5 Students' Writing Performance.....	239
5.5.1 Introduction.....	239
5.5.2 Compare-Contrast Essay	241
5.5.3 Cause-Effect Essay.....	249
5.5.4 Compare-Contrast Essay vs. Cause-Effect Essay.....	256
5.5.5 Conclusion.....	258
5.6 Students' Revision Behaviour	260
5.6.1 Introduction.....	260
5.6.2 Students as the Audience.....	261
5.6.3 Students' Emotional Response to Peers' Feedback	264
5.6.4 The Use of the Learning Logs	271
5.6.5 Conclusion.....	276
5.7 Summary of the Chapter	278
Chapter 6: Discussion	281
6.1 Organisation of the Chapter: Overview	281
6.2 Introduction.....	282
6.3 Perceived Understanding of the Affordances of Online Collaboration	284
6.3.1 Online Collaboration Enhances the Learning Process	285
6.3.2 Writing for a Different Audience is Motivating	288
6.3.3 Online Collaboration Promoted the Students' Critical Thinking Skills	291
6.4 The Influence of Online Collaboration on EFL Students' Writing Performance	294
6.5 Factors That Hinder the Students' Online Collaboration	299
6.5.1 Mistrust Between Students	300
6.5.2 Lack of Technology Literacy	303
6.5.3 The Absence of the Teacher	305
6.6 The Influence of Online Collaboration on EFL Students' Revision Behaviour .	307
6.7 The Perceived Nature of the Scaffolding Behaviours.....	312
6.8 What it Means to Learn From Peers	318
6.9 Group Formation	322
6.10 Teachers' Role in the Online Activity.....	324
6.11 The Teaching of Writing	331

Chapter 7: Conclusion and Recommendations	337
7.1 Introduction.....	337
7.2 Overview of the Study and its Findings	337
7.3 Contribution to Knowledge	340
7.3.1 Theoretical Contribution	341
7.3.2 Pedagogical and Practical Contributions.....	345
7.4 Caveats and Limitations of the Study.....	350
7.5 Implications	353
7.5.1 Implications for Policymakers	353
7.5.2 Implications for Teachers	355
7.6 Recommendations for Future Research	356
7.7 Reflection on my own Learning	359
References.....	364
Appendices.....	386

List of Figures

- Figure 3.1 Principles for Supporting Online Collaborative Learning*
Figure 3.2 Stages to Promote Collaboration in an Online Learning Environment
Figure 3.3 Elements to be Considered Before Selecting any Tool in the Educational Realm
Figure 4.1 Data Collection Timeline
Figure 5.1 Strategies to Respond to Receiving Feedback
Figure 5.2 The Impact of Online Peer Feedback on Students' Revision Behaviour

List of Tables

- Table 2.1 General Education vs. Basic Education*
Table 2.2 The Programmes Offered in the Different SCT Departments
Table 3.1 Studies Regarding Online Collaboration via Discussion Forums in EFL Writing
Table 3.2 Studies Regarding Online Collaboration via Wikis in EFL Writing
Table 3.3 Studies Regarding Online Collaboration via Blogs in EFL Writing
Table 3.4 The Main Features of Discussion Forums, Wikis, and Blogs
Table 4.1 Research Methods Used to Answer the Research Questions
Table 4.2 Participants' Demographic Information Overview
Table 4.3 Incremental Design of Data Collection
Table 4.4 Elements of the Braun and Clarke Model (2006)
Table 5.1 Outline of the Sections of Analysis
Table 5.2 Coding Framework for All Comments Relating to the Focus Groups Students' Perception of Online Collaboration
Table 5.3 Questions Arising From Focus Groups' Responses
Table 5.4 Affordances of Online Collaboration
Table 5.5 Limitations of Online Collaboration
Table 5.6 Online Peer Feedback as Mutual Scaffolding
Table 5.7 Scaffolding Behaviour
Table 5.8 Comparison Essay Multiple Trait Scoring Rubric
Table 5.9 Participants' Overall Scores in Compare and Contrast Essay
Table 5.10 Kolmogorov-Smirnov Normality Test (N = 8)
Table 5.11 Wilcoxon Signed Ranks Test
Table 5.12 The Mean Difference
Table 5.13 Local vs. Global Scores of Participants in Comparison Essay
Table 5.14 Participants' Overall Scores in Compare and Contrast Essay
Table 5.15 Local vs. Global Scores of Participants in Cause-Effect Essay
Table 5.16 The Kolmogorov-Smirnov Tests of Normality (N = 8)
Table 5.17 Wilcoxon Signed Ranks Test
Table 5.18 Wilcoxon Signed Ranks Test
Table 5.19 The Impact of Online Peer Feedback on Students' Revision Behaviour

List of Appendices

- Appendix 1: Online Collaborative Writing Task 1
- Appendix 2: Online Collaborative Writing Task 2
- Appendix 3: Ethical Research Approval From the University of Exeter
- Appendix 4: Ethical Approval Form
- Appendix 5: Consent Form
- Appendix 6: Arabic Versions of Consent Forms
- Appendix 7: The Cohort Focus Groups Interview (English Version)
- Appendix 8: The Focus Groups Interview (Arabic Version)
- Appendix 9: Semi-Structured Interview (English Version)
- Appendix 10: Semi-Structured Interview (Arabic Version)
- Appendix 11: Interview Transcript (Arabic Version)
- Appendix 12: Interview Transcript (Translated into English)
- Appendix 13: Observation Schedule
- Appendix 14: Correction Codes
- Appendix 15: Example of Students' First Draft of Compare and Contrast Essay
- Appendix 16: Example of Peer Feedback
- Appendix 17: Example of Students' Second Draft
- Appendix 18: Initial Codes
- Appendix 19: Final Thematic Map

List of Abbreviations

- BERA British Education Research Association
- CALL Computer Assisted Language Learning
- CSCCL Computer Supported Collaborative Learning
- CMS Course Management System
- EFL English as a Foreign Language
- ELT English Language Teaching
- ESL English as a Second Language
- ICT Information Communications Technology
- L1 First Language
- L2 Second Language
- MOE Ministry of Education
- MOHE Ministry of Higher Education
- SCT Salalah College of Technology
- SPSS Statistical Package for the Social Sciences
- TAM Technology Acceptance Model
- TELL Technology Enhanced Language Learning
- ZPD Zone of Proximal Development

Chapter 1: Introduction

1.1 Overview

The use of Information and Communication Technology (ICT) in language learning has become a foundational delivery component in universities, whether they deliver distance, blended or face-to-face learning courses. In their immediate learning environments and their outside worlds, the current generation of students are surrounded by technological devices such as desktop computers, laptops, iPads, smartphones, and wireless networks. Accordingly, language-teaching institutions need to invest time, effort, and huge resources in order to cater for different learning styles (Al-Mahrooqi & Troudi, 2014). They also need to employ different teaching strategies that are commensurate with the rapid proliferation of technological revolutions to motivate learners and to respond effectively to their learning needs.

The integration of technology into second language (L2) teaching and learning may be a valuable approach to enhance language learning and allow students to develop their learning skills. The new technologies available to education have significantly enhanced Computer Assisted Language Learning (CALL) applications, which provide a range of educational programmes and software tutorials, including various exercises deemed necessary in the language learning context (Chang & Hung, 2019). Thus, many educational institutions have encouraged the integration of new technologies into the medium of instruction to create an appropriate environment for students to improve their language competencies (Tarun, 2019). Redesigning the curriculum through the adaptation of different technological tools is an attempt to fill the existing technological gap (Buabeng-Andoh, 2012).

Amongst the four skills: speaking, writing, listening, and reading, writing is considered by many researchers to be the most valuable to English language

learners because of its role in improving the academic performance of students (Fazel & Ahmadi, 2011; Ghoorchaei et al., 2010). Therefore, many higher education institutions, especially in the EFL context, emphasise the value and importance of writing abilities amongst their students as a tool for achieving academic success and a mode for revealing that accomplishment (Hyland & Hyland, 2006). Students are encouraged to generate real-life examples of writing to demonstrate their ability to understand different aspects. In doing so, online collaboration suggests an alternative method to the traditional method used for teaching writing. Online collaboration tools are web-based tools that help individuals collaborate and work together online, like through messaging, file sharing, and peer feedback (Tarun, 2019). This method helps students post their writings, obtain feedback from their colleagues, and receive recommendations for further improvement. Then, the students can discover and address the mistakes they make as they rewrite their essays after peer feedback is received. Thus, there is an opportunity to create authentic reading, writing, reviewing and editing experiences in an interactive setting.

In line with the rapid technological developments, Salalah College of Technology (SCT), as a prominent educational institution in Oman, has recognised the significance of incorporating technology when teaching writing. Therefore, the English Language Centre (ELC) at SCT, since 2012, has adopted a Moodle platform as a programme to promote the learning of English language (Alyafaei, 2018) and this is the context for this study. This programme emphasises the importance of offering more skill classes in which students are encouraged to use the available language laboratories to complete exercises using computers. In addition to that programme, study programmes involving online and blended learning approaches are becoming increasingly popular in

higher education (Stockleben et al., 2017). The outbreak a new strain of coronavirus (COVID-19) has challenged the education system across the world and forced educators to shift overnight to an online mode of teaching (Dhawan, 2020). Even those educational institutions that had been reluctant to change their traditional pedagogical approach had no option but to shift to online teaching and learning. Thus, it is essential to encourage students to collaborate and explore different perspectives as an important element in the design of university courses. Importantly, the development of more pedagogies and tools for collaboration across the universities can help to produce more employable students who are better equipped to deal with the contemporary industrial setting (Stockleben et al., 2017).

As a result of these new developments, the integration of technology in language learning is given much attention by the local authorities in the Sultanate of Oman, to the extent that increased state funding is being allocated for the provision of computers as well as the latest software for all governmental colleges (Saini & Al-Mamri, 2019). This national and institutional context has created an opportunity for this study to examine the effectiveness of online collaboration through new technologies on learning and teaching, with a particular focus on the EFL writing classroom. More elaboration on this issue is given in the following sections.

1.2 Rationale for the Study

In today's society, English language teachers encounter large class sizes in which, according to Al-Badwawi (2011), some students may not be engaged in the learning process and may not have opportunity for revision of the taught materials with teachers and peers (Razak & Saeed, 2014). Moreover, English

language teachers inevitably face the problem of limited class time. Therefore, there is a pressing need for innovative and exciting instructional techniques in order to provide the students with more flexible class time and to support them in actively participating in the writing process, so as to enhance their writing ability. Considering that the current generation of students are surrounded by several technological devices, teachers and policymakers are strongly supportive of the use of new technologies to further enhance the learning process (Li, 2017). Students' ability to think should be challenged, so they are better prepared to face and cope with the constantly changing world of science (Ebrahim, 2012). Online collaboration is fundamental to shifting the learning environment beyond the classrooms as learning is a constant process and does not stop at the end of the school day but continues outside the school environment. It allows students to gain access to learning resources via the web at any time. It also provides tremendous opportunities for exposure to the language by interaction with English speakers through writing outside the classroom as, otherwise, such opportunities are very rare (Fareh, 2010).

Despite these opportunities, Omani students still believe that classrooms are the only place where they can learn (Al-Handhali, 2009), while they have massive learning opportunities through the use of technology outside of the classrooms. Furthermore, the Omani English as a Foreign Language (EFL) learners are teacher-centred, reflecting perhaps their early school experience, and so they try to avoid self-study, thereby hampering their independent writing performance as well as other language skills (Al-Saadi & Samuel, 2011). This lack of independence in writing poses a problem for Omani learners. These writing issues have led the SCT to encourage its teachers of English as a Foreign Language (EFL) to make effective use of the facilities provided in the language

laboratories to teach the skill of writing. In a wider EFL context, there is a need to investigate how collaborative writing using a technological tool enables learners to improve their writing skills, as well as their learning experience.

From the literature review associated with the integration of technology in an EFL context, most of the studies performed in the field of educational technology in Oman are limited to identifying the attitudes of both teachers and students towards the use of technology. Despite the relative increase in the number of studies dealing with the field of educational technology and related issues, the Omani literature seems to lack research and studies in this specific field, and specifically on the nature of student contributions in online discussions, possibly due to the comparatively recent integration of online learning into educational practice in Oman.

To the best of my knowledge, no single study has been conducted to provide an in-depth analysis of the way in which students integrate peer feedback into their writing through revision, especially regarding how they use online peer feedback. An investigation into the impact of online collaboration tools on teaching and learning are still limited (Al-Aufi & Al-Azri, 2013). Also, students' voices seem absent from previously conducted research. The lack of relevant studies on this field calls for a study that explores the nature of students' collaboration practice, the impact this collaboration has on the writing they produce and one that examines students' perspectives and views regarding their experience of the use of online collaboration for the purpose of improving their writing. This research, therefore, attempts to fill this gap by answering the research questions stated in this chapter. This study seeks to employ a case study approach to introduce one of the online collaboration platforms, namely Moodle, to explore how it is utilised by Omani college EFL learners in their writing

and how this use changes or develops over time, in order to understand to what extent and when it will help students in writing performance and revision behaviours. The effectiveness of such platforms relies to a great extent on the questionable impact they have in improving students' achievement, in particular.

The impetus to conduct this study came from my professional experience at three levels in the Omani education system; as a teacher of English language (at elementary and secondary levels in the Ministry of Education), as an instructor (at Dhofar University), and as a lecturer (at the University of Technology and Applied Sciences). Throughout my experience, I have witnessed adverse reactions from the students towards using a new pedagogical tool, particularly when it is connected to technology. Students contend that integrating technology into their classes seems to be an evaluation procedure imposed on them by the college. Cosh (1999) argued that 'unless they are accepted by the staff, the only relevance of those schemes is likely to be to accountability' (p. 23). Unfortunately, the pre-designed syllabus contains topics which are distant from the students' lives and their voice and experience are totally marginalised. Therefore, I consider this study to represent a shift in my own thinking about the empowering of the students' voice and my role as an agent of change in my society.

Given the fact that the students' voice is marginalised, this research explores how Omani EFL students understand the affordances and limitations of online collaboration into their writing classes at Salalah College of Technology and aims to determine how effective that action is undertaken, as well as the nature of students' peer feedback and revision practices. Following on from this exploration, the secondary purpose is to investigate the impact of online collaboration on the students' writing and when and how it is helpful. Framed on the basis of sociocultural theory, the study used online discussion forums to

facilitate collaboration and interaction among students through encouraging peer feedback to help them in constructing their own meaning. Conducting this type of study in an EFL environment per se allowed students to present their voice regarding the effective use of online collaboration. Accordingly, listening to the students' voice will help teachers promote their teaching methods to better cater to the learners' needs. Moreover, the findings of this study will allow curriculum designers to determine how and when to apply online collaborative tasks in EFL curricula in Oman, effectively.

1.3 Research Questions

To achieve the aims of this study, the study design was created to address the following four primary research questions:

Q.1. What do students understand about the affordances and challenges of online collaboration in supporting EFL students' writing?

Q.2. To what extent does online peer feedback as a collaborative learning technique used in EFL writing classes impact students' writing performance (quality)?

Q.3. To what extent does online peer feedback as a collaborative learning technique impact students' revision behaviours?

Q.4. How does online peer feedback facilitate mutual scaffolding between EFL students (the reviewer and the receiver)?

1.4 Significance of the Study

This study aims to contribute to various aspects of research, practice, and curriculum review. It is the first in-depth investigation study conducted in the area of writing through the use of online collaboration in the different Omani

colleges of technology. Thus, this study aims to provide suggestions and recommendations for the field of writing, specifically the role of online collaboration in classroom writing practices, the nature of students' online collaboration in the writing classes, how this collaboration informs revisions to written text through being both a reader and a writer of student texts and curricula to develop these particular skills. The information gathered in the study may help teachers prepare more productive and enjoyable writing classes for their students. Furthermore, the study deals with an area of educational technology that is not well developed in Oman; it draws the teachers' attention to the values and challenges of using online collaboration in writing classes. Subsequently, the study proposes suggestions for the efficient integration of online collaboration into the teaching and learning of writing.

Prompted by the aspiration to address the above-mentioned issues, the present study does not, in itself, aim to evaluate the ways that technology is being used to teach writing. Rather, it seeks to deeply investigate and understand the impact of online collaboration on the students' writing through the lens of the students themselves, in order to achieve the ultimate aim, which is to make an effective use of technology with the aim to find an efficient way in which to teach writing. This knowledge eventually helps to provide information on how online collaboration is used in writing classes and taken up by students and which aspects need to be developed and reformed. It is hoped that this study will make a substantial contribution to the field of educational technology in the EFL context in general, and the use of online collaboration at the Omani tertiary level, in particular.

1.5 The Structure of the Thesis

This thesis consists of seven chapters as is detailed in the following:

Chapter 1, the first chapter presents a general overview of the present study. It introduces the purpose of the research, the academic and personal rationale, significance of the study, and the research questions.

In Chapter 2, the context of the study is discussed to familiarise the reader with the Omani education context by presenting an overview of the history of the educational system. The discussion provides insights about the value of English language learning in Oman as well as challenges facing Omani EFL learners. Finally, this chapter presents background information about the immediate context of this study and the ELC in particular to offer the reader the contextual dimensions that contribute to shaping the study.

Chapter 3 is devoted to reviewing the literature relevant to the theoretical framework that underpins the process of writing in the EFL context. It introduces some affordances of online collaboration, approaches to writing, and some programmes used in teaching writing. It also presents alternative views regarding the impact of online peer feedback collaboration on the students' writing. Finally, it discusses all these issues regarding online collaboration and students' writing in general and relates it specifically to the Omani context.

Chapter 4 is concerned with discussing the methodology. Firstly, it discusses the theoretical framework underpinning the study by giving a thorough explanation of the rationale and epistemological and ontological assumptions that guided the researcher's decision to use a qualitative approach. Secondly, it provides an explanation of the methods of data collection, data analysis, and details about the participants in the study. This chapter also provides the criteria of trustworthiness in relation to the methodology and methods of research.

Additionally, issues pertaining to the ethics of the current study are addressed. The chapter ends with a description of the researcher's role in the research.

Chapter 5 presents details of the data analysis process of the qualitative and quantitative strands derived from the methods used for this research. These consist of statistical analysis as well as the interpretation of the qualitative findings.

In Chapter 6, a discussion of the key findings from both the qualitative and quantitative data and linking it to the current context of the study and the relevant literature takes place.

Chapter 7 provides a summary of the findings and offers final conclusions and remarks. It also presents the implications of the study and its theoretical, pedagogical and methodological contributions to the knowledge of the topic area of this research. It ends with the researcher's personal reflections on the thesis journey.

Chapter 2: The Context of the Study

2.1 Introduction

This study takes place in the Omani context and in order to contextualise it, the previous educational experiences that the students have had are outlined by providing essential background information about the education system in Oman. According to Samovar et al. (2014), there is a solid link between culture and learning that is reflected in the way in which individuals prefer to learn and how they tend to process information. Thus, it is essential to provide background information about the study context and its characteristics to provide the contextual dimensions that contributed to forming the study.

To discuss the education system in Oman, I will first provide an insight to the Omani educational and social context with an overview to the historical development of the educational system and English language teaching (ELT), then I will present a brief overview about the status of English language learning in the national curriculum in Oman. The integration of technology into the Omani educational system will also be discussed. This will be followed by an overview of SCT in general and the ELC in particular. The following section describes the history of education in Oman and how it has changed since the 1970s.

2.2 The Education System in the Sultanate of Oman

Oman is an Arabic Middle Eastern country where education has progressed greatly in the past five decades. Education in Oman is strongly centralised, and the Ministry of Education (MOE) is in charge of all educational policies at the school level. The MOE coordinates all aspects of school education, including equipping schools with the necessary tools, providing material, developing unified curricula, and distributing textbooks (Al-Badwawi, 2011). The

MOE also determines the curriculum content, which it applies throughout the country.

Education in Oman has advanced through numerous but distinctive stages. Schools in Oman today do not resemble the schools that existed up to the second half of the 20th century. This change, however, does not imply that there were no other forms of education. Teaching comprised simple recitations of the Holy Quran, which took place under the shade of trees, mud-brick classrooms, or in mosques (MOE, 2020). Then, in 1970, when the late Sultan Qaboos came to the throne, the development of a structured education system commenced. The government began to consider the country's youth to grant them opportunities to confront the challenges of the modern world. Statistics have demonstrated tremendous advances in the diverse aspects of education. For instance, the number of schools, teachers, and students has increased dramatically over the past five decades. In 1970, only three boys' schools, with a total of 909 students and 30 teachers, followed a prescribed curriculum, (MOE, 2020). However, by the 2020-2021 academic year, the number of new schools had increased to 1,182, with a total of 676,943 students and 56,613 teachers (MOE, 2020).

The education system in Oman developed in two stages: general education and basic education. General education (1970–1998) comprised three levels: primary, preparatory and secondary. During this stage, English was a mandatory school subject from Grade 4 onwards. In basic education (1998–present), grades are divided into two levels: the basic education level, which spans for 10 years (Grades 1-10), and the post-basic education level, which lasts two years. Once students have completed basic education, they can begin post-

basic education (Grades 11-12). The following table indicates the two stages of the educational system in Oman since 1970.

Table 2.1
General Education vs. Basic Education

General Education	Ages	Years		Basic Education	Ages	Years
Primary	6–11	6		Cycle 1	6–9	4
Preparatory	12–14	3		Cycle 2	10–15	6
Secondary	15–18	3		Post-basic education	16–18	2

To implement the basic education programme effectively, teachers are regularly trained in the curriculum. Additional training workshops are held to familiarise teachers with the curriculum’s philosophy and concepts, such as the collaborative and student-centred learning. All teachers must be fully trained in the technology and materials used in the curriculum.

2.3 Higher Education

The Ministry of Higher Education, Research and Innovation (MOHE) and the Ministry of Health supervise most tertiary programmes. Together, the two ministries are in charge of the educational planning, administration, curriculum and textbook development. These ministries support the governmental colleges and universities, as well as offer these institutions the necessary technical and administrative support. The MOHE also offers scholarships and financial support for Omanis studying overseas in several academic fields (MOHE, 2020). The first government university in the Sultanate, Sultan Qaboos University, was established in 1986. In 2020, a second university, The University of Technology and Applied Sciences, was established by consolidating 13 colleges to establish

a new government university consisting of 7 colleges of technology, 5 colleges of applied sciences and a college of education.

The MOHE provides general educational policies and allows the local universities to establish their own programmes and internal organisations, which still must be approved by the ministry. Omani universities operate based on a credit system, and students are granted relative degrees upon the successful completion of their programmes within a designated time limit. Admission to tertiary education is competitive and challenging in Oman. To alleviate this issue, the government has allowed for the development of private universities. These universities must conform the MOHE's regulations, but they do not rely on government funding. They are primarily financed primarily through tuition fees. The last decade has witnessed the exponential growth of higher education in Oman. The higher education system expanded to include 70 public and private colleges and universities in the 2018-2019 academic year (MOHE, 2020).

During the 1990s, a move was taken to introduce English to be the medium of instruction in most public and private higher education institutions. This change was challenging for the students, as they were accustomed to learning in their native language: Arabic. The students also experienced a change in their learning environment. The 'transitional challenges of the Omani students include but are not limited to adjusting to new sociocultural and physical environment of learning (e.g., coeducation; multicultural teaching and academic community, etc.), new teaching methods and approaches (e.g., teacher-centred at school versus learner-centred at the university)' (Al Seyabi & Tuzlukova, 2014, p. 37). These changes create ongoing challenges for the students.

2.4 English Language use in Oman

In Oman, Arabic is the official language while English is used as an additional language. The English language is widely used in different sectors such as the economy, politics, health, media, and legislation (Alhassan, 2019). When His Majesty Sultan Qaboos bin Said assumed power in 1970, the government accepted English as the only official foreign language, allocating huge budgets and resources for its implementation through the education sector (Al-Issa & Al-Bulushi, 2012). This signified a major step in the development of English language education, given that it was not only introduced as a subject at public education but also as the language of instruction in some bilingual schools.

English in Oman is officially supported as a language that allows Oman and Omanis to effectively communicate with the outside world and is seen as central to the country's continued development (Al-Mahrooqi & Denman, 2016). Importantly, Omanis are becoming increasingly aware of the importance of English since they understand that it is the language that helps them in science and technology acquisition, pursuing higher education, travelling to non-Arabic and English-speaking countries, and finding a suitable job. Consequently, an increased number of students enrol in English language courses in different institutions in Oman and abroad, especially in the UK, which is a popular destination for them.

The actual reality, however, is far from this ideal as the levels of English proficiency across the country's population still remains far from satisfactory, regardless of the efforts being made in the Omani schools. It has also been found that Omani students suffer from various inadequacies in their English language proficiency, which, in turn, has had negative implications for Oman's national development (Al-Issa, 2020). Various students are still incapable of adequately

communicating in the English language even after being exposed to it for several years, given that the time devoted to the study is still not considered sufficient (Al-Mahrooqi & Denman, 2016). Facts and figures about English language teaching in Oman have shown that the vast majority of the students who leave Grade 12 and join different public and private higher education academic institutions lack the ability to use the English language effectively and appropriately in all four skills throughout the range of social, personal, school, and work situations required for daily living in a given society (Al-Issa & Al-Bulushi, 2012). One such barrier tends to be the fact that English is not normally used in everyday conversations of the Omani population. Its principal use is in formal settings, for instance, in medical, educational, and industrial sectors. Learners of the English language seldom get the opportunity to practise it outside the educational setup (Al-Mahrooqi & Denman, 2016).

Against this backdrop of rapid development, teaching has also changed dramatically over the past five decades. The Omani government decided to reform English language teaching since the 1990s to meet the present and future challenges and demands of the local and global market (Al-Kiyumi & Hammad, 2020). This has been materialised in the form of introducing the Basic Education System in 1998, which considers the English language as a salient part of schooling since the early stages of public education, for students as early as 6 years old. In addition, the Basic Education System stresses communicative language teaching and incorporates educational technology within English language teaching and the other subjects on the national curriculum (Al-Issa & Al-Bulushi, 2012).

As a result of this change, the number of English instruction hours has been increased. The decision to increase English language teaching across

schools was taken because the language is considered by the MOE as a source of national development and economic progress of the Sultanate (Ismail, 2011). English language teachers are recommended to focus on English as the language of instruction, thus minimising the use of Arabic as much as possible in the process. The fact that students spend five to seven 40-minute lessons per week studying English indicates that the language is receiving substantial attention in the country.

To alleviate this challenge at the tertiary level, The Foundation Year Programme is considered as a mediatory stage in between school and university study, that is designed and evaluated individually by each higher education institute, although it does not lead to any credit or an award upon successful completion (MOHE, 2020). Attention was primarily aimed to ease the transition towards using materials that are taught in English. At this stage, all instruction is conducted in English by mostly non-Omani academics who are unable to use the Arabic language to simplify the content. Thus, considerable demands are placed upon staff and students alike. It is worth noting that the students' level of English and their technology literacy are viewed as essential in their future careers. The next section sheds light on the educational technology policy in Oman.

2.5 Educational Technology Policy in Oman

The government has drawn impressive consideration to the significance of technology in all features of life, particularly education, and aims to promote the integration of modern technologies throughout the educational system. In this regard, the actual integration of technology in the Omani educational system took place at the beginning of the 21st century, when colleges and schools were provided with computers and an internet connection (Al Musawi & Abdelraheem,

2004). The government has provided substantial funding to numerous schemes which provide schools with computer labs and plan an up-to-date curriculum. Before the 2000s, teachers were commonly utilising simple audio-visual aids and multimedia equipment in their lessons (James, 2016). In spite of the fact that the introduction of technology in education is a recent phenomenon in Oman, there is a strong trend towards the integration of computers in all schools.

The government's plan to increase the use of CALL in education involves two steps. First, information technology (IT) has been introduced as a compulsory subject in all basic education schools. Therefore, basic education schools are equipped with Learning Resource Centres (LRCs). Computer literacy is emphasised in the curriculum, and schools are equipped with computers so students may learn how to use them in their daily work, such as writing assignments and research projects. In the LRCs, students can access information in various ways including books, videotapes, television, and computers.

Secondly, at the tertiary level, the government aims to focus on the quality of education by providing students with the knowledge and skills required in productive and innovative environments. Furthermore, many higher education institutions are currently implementing e-learning as part of their educational system. These institutions concentrate on building a learning environment that incorporates technology and develops the skills necessary to empower students. Hence, the MOHE has developed new strategies to adopt new technologies into the higher education system. To do so, many Omani universities have established a particular centre for offering technical support and training for staff and students alike. For example, all colleges of technology throughout the country have founded an Educational Technology Centre to assist members of

the faculty and students in using computers efficiently (SCT, 2020).

2.6 Salah College of Technology (SCT)

The SCT is the immediate context of this study and the place where the researcher has been working as an academic staff member since 2012. It is a leading provider of technical education in the country committed to building skilled human resources to meet the changing demands of education and the job market. Located in the southern region of the country, SCT was founded in 1979. The college started as a Vocational Training Centre in 1979 with only 89 students (SCT, 2020) but was afterwards transformed into the Technical Industrial College and expanded its capacity to 185 students. During the academic year of 2008-2009, the strength of the college increased to 2,638 students studying at the undergraduate level, with 163 full-time academic staff members and 36 administrative staff members. In 2020, the colleges of technology, the colleges of applied sciences and a college of education were merged under the University of Technology and Applied Sciences. Currently, the college comprises of three main departments: Business Studies, Engineering, and Information Technology (IT). The school follows a credit hour system, which allows for three levels of graduates: diploma, higher diploma, and bachelor. The students from the three departments are required to take English courses during their first year and clear all the English levels to join the courses of their assigned departments. The students study the English courses in the English Language Centre (ELC). There are 12 different programmes offered in these three departments, as shown in Table 2.2.

Table 2.2

The Programmes Offered in the Different SCT Departments

Department	Programme
Business Studies	<ul style="list-style-type: none"> - Human Resources Management - Accounting and Finance - Marketing and Office Management
Engineering	<ul style="list-style-type: none"> - Architecture Engineering - Engineering Quantity Surveying - Electrical and Power Engineering - Civil Engineering - Mechanical Engineering - Chemical Engineering
IT	<ul style="list-style-type: none"> - Networking Technology - Database Technology - Internet and E-Security and IT-Business

2.6.1 The English Language Centre

English courses offered at the English Language Centre (ELC) are designed to offer students with the required linguistic knowledge and skills. Students are divided into four levels according to their results in the placement test, beginning at a pre-elementary level and progressing to an advanced level. They are taught four basic skills: listening, speaking, reading, and writing. Although the ELC courses centre on language requirements, they also comprise subjects such as IT and mathematics, as well as study skills and time management, to facilitate students' adaptation and integration into their chosen departments. At the end of the programme, there is a Test of English as a Foreign Language (TOEFL), for which they will have been suitably prepared, to determine the students' levels of proficiency.

In line with the government policy to integrate technology into education, the ELC started implementing e-learning in 2012 in addition to the face-to-face method (Alyafaei, 2018). Thus, students can work on their writing assignments and additional language activities online through the Moodle platform.

2.7 Summary

This chapter has situated the study in the Omani sociocultural context, explaining the education system in the Sultanate of Oman. It provides an overview of the education in both the school and tertiary levels as well as the interconnection that exists between these two stages. It also highlights the different stages of the development of English language education in the Omani higher education and public-school systems from the outset of the modern Omani renaissance to the present day. It provides a brief summary of the status of English language education in the Sultanate of Oman.

The chapter also explains the Educational Technology Policy in Oman as well as the government initiatives to embrace technology across the different educational curriculums. It demonstrates that whilst teachers seem to receive well-organised professional development training in relation to how to integrate technology in teaching writing, students do not receive explicit pedagogic guidance in how to use technology in their classrooms. To address this, this study aims to offer guidance for both teachers and students in the Omani context, by observing current behaviours and identifying best practice, in terms of how students interact and collaborate when using online collaborative activities.

Lastly, the chapter sheds light on the immediate context of this study which is Salalah College of Technology. More particularly, the English Language Centre and its programmes are explained. Considering the curriculum's emphasis on process writing, and the initiatives to embrace technology, the Omani sociocultural context appears to be an appropriate context for exploring the literature gap identified in the introduction. The next chapter details this literature gap in more depth. This overview will help the reader better understand the

overall Omani educational context. In the following chapter I discuss the theoretical background underpinning the study and present the literature review.

Chapter 3: Literature Review

3.1 Introduction

In a world of increasing technologies, the integration of technological tools has inevitably become a vital element in the educational system as an attempt to keep up with the constant developments in technology. Accordingly, this study endeavours to investigate the change and impact of online collaboration on EFL students writing performance and revision behaviours at Salalah College of Technology in Oman, the nature of students' online interaction through peer feedback and finally their perceptions about the affordances and challenges of using online collaboration in learning the skill of writing.

In this chapter, the review of literature brings together a number of complex and interrelated issues relevant to the central concepts of the current study. The first part reviews four broad approaches to writing: product approach, process approach, genre-based approach, and process genre approach. The principal characteristics of the four approaches are discussed to elucidate the reasoning for the adoption of the process genre approach as the best approach to EFL writing. All of the above-mentioned approaches are informed by the sociocultural theory of learning (Hansen & Liu, 2005). Consequently, in an effort to demonstrate the relevance of Vygotsky's sociocultural model to second language (L2) writing and peer collaboration, an overview of the sociocultural theory of development, and its implications for L2 learning is given. Besides this, the cognitive models are discussed due to their significance in the writing process. The second part sheds light on the nature of collaborative learning in an EFL context. The third part addresses the significance of integrating technology in EFL writing courses. Then, the concept of online collaboration and its definition in relation to this study are highlighted followed by a thorough discussion on the

affordances and feasibility of online collaboration.

Then, the chapter presents the concept of feedback. As an integrated part of the writing process and composition course, feedback has been the source of a hot debate in the L2 writing research community (Hyland & Hyland, 2006). Having said that, some general comments are provided on the notion of peer feedback as well as discussing its relevance to the sociocultural theory, which include justifications for choosing an online collaboration approach as a particular method for this research. Following on from this, the notion of revision and its practices are highlighted along with the exploration of the nature of the change of peer feedback on students' revision behaviours within the online collaborative environment. Finally, students' perceptions of the affordances and challenges of online collaboration usage are discussed. There is a detailed review of previous studies that explored students' perceptions of online collaboration. The literature review discusses some crucial, relevant research studies and draws on research from the mainstream domain and the domain of EFL education.

3.2 A Theoretical Framework

Providing a clear-cut definition of writing is far from straightforward. Indeed, writing is generally viewed as a complex and recursive process requiring mastery of a combination of different skills (Alber-Morgan et al., 2007). It is a process of forming opinions and making choices, with various opinions about the directing forces governing the writer's thinking process, ranging from the writing purpose, topic, situation, audience to syntactic structures, and lexical access (Flower & Hayes, 1981). In the arena of writing, research draws on a complex and conflicting theoretical background (Jones, 2012). However, cognitive theory, linguistic theory, and sociocultural theory are the disciplines which constitute the

theoretical frameworks within which research studies of writing have been conducted (Myhill & Watson, 2011). Furthermore, there has been a tendency towards the all-inclusive world of 'interdisciplinary methodologies' through which a more holistic theoretical basis which includes the three theories are expected to be a more effective approach to writing pedagogy (Myhill & Watson, 2011). The theoretical framework for research into writing has mainly been shaped by these three theories and the current study is no exception. That is, the cognitive theories help understand processes that take place during the writing process, while the sociocultural theory provides an interpretation to the social interaction that occurs during the composition process. In addition, the linguistic theory is substantial as there is no doubt that writing in an L2 context is more complex and challenging. Keeping all of these theories in the back of the mind, the sociocultural theory is seen as valuable because it takes into consideration the social interaction between the learners during the composition process.

A considerable amount of literature has illustrated that writing is considered to be the most challenging skill to learn for most non-native learners (Al Asmari, 2013; Al Seyabi & Tuzlukova, 2014; Asrobi & Prasetyaningrum, 2017). Stapleton (2010) attributed such complexity due to the fact that the composition process in L2 is compounded as writers need extra steps to decode their thoughts into language before text finally appears on the page or screen.

Despite this fact, many researchers have addressed that writing is the most important skill for the academic performance and career enhancement of the learners (Fazel & Ahmadi, 2011; Ghoorchaei et al., 2010; Hyland, 2003). However, writing tends to be a much-neglected part of language programmes in both first and foreign languages (Badger & White, 2000). Writing has been viewed as a complicated cognitive task because it is an activity that demands careful

thought, discipline, and concentration as it is more than a simple direct production of what the brain knows or can do at a particular moment (White, 1987). Hence, writing is seen as an intricate task because a high proportion of writers have difficulty in setting their thoughts down on paper. Accordingly, placing more attention on writing skills and providing practical tools for teaching and learning them are recommended. From a pedagogical perspective, adopting different teaching methods widely affects the development of students' skills in writing. Therefore, different approaches have been adopted to teach writing in ESL/EFL classes. Descriptions of writing approaches, their strengths and drawbacks, and the role of feedback in relation to different writing approaches are included in this chapter. Before that, providing a summary of the main models of writing would provide a clear image of the cognitive and sociocultural issues underpinning the writing process. Each view offers a valuable perspective regarding the pedagogy of L2 teaching of writing. Therefore, this section offers an attempt to understand concepts on the basis of each theoretical tradition. The theoretical frameworks presented in the first section of this chapter include linguistic, cognitive, and sociocultural theories. They are linked to debates on teaching writing skills for EFL context. The following section sheds more light on cognitive and sociocultural models of writing as they are tremendously pertinent to understanding the development of the writing process.

3.3 Models (Theories) of Writing Development

While research on writing in both first and second language contexts has developed gradually over the last 40 years, the teaching of writing is only now beginning to gain the benefits of this research. Despite the vast amount of

research on writing in the second language, it still demonstrates a need for studies of many interrelated aspects of writing.

3.3.1 Cognitive Models of the Writing Process

Until the early 80s, there had been no attempt to conceptualise a cognitive model of the writing process, and therefore the understanding of the mental processes that occurred during writing was limited. This fact does not mean that there was a lack of investigation or concern with writing, as the study of writing has an old and rich tradition within rhetoric and education. This study concentrates on two influential models of writing processes, namely, the models introduced by Flower and Hayes (1981) and that of Scardamalia and Bereiter (1987). Although these two models were developed based on studies on first language writing, they are worth mentioning due to their significant implications on second language writing research as ‘an L1 model of writing proficiency is commonly used as the metric in examining L2 writing’ (Shaw & Weir, 2007, p. 35).

3.3.1.1 Flower and Hayes (1980)

Flower and Hayes (1980) introduced an influential model which can be credited for being one of the first to have raised questions regarding the understanding of the writing process and empirical research into these cognitive processes which continues until the present time. It has triggered great scholarly work in the field of writing. It also arose in reaction to widespread models of writing which divided the composing process into three stages: the Pre-writing, Writing, and Revision model (Rohman, 1965) or the Conception, Incubation, and Production model (Britton, 1975). Flower and Hayes (1981) contended that ‘the

problem with stage descriptions of writing is that they model the growth of the written product, not the inner process of the person producing it' (p. 367). Thus, they emphasise the process by which writers develop their ideas into a final written item.

Flower (1994) put forward that this model of writing placed considerable attention on what happens during each stage of the writing process and to achieve greater integration of cognitive processes with social factors. More explicitly, Flower and Hayes' (1980; 1981) model sees writing as a 'non-linear, exploratory, and generative process' and concentrates on what writers do when they compose, in order to determine the potential difficulties a writer may experience during the process. The model was derived from the use of 'think aloud' protocols in which research participants are encouraged to say what they are thinking as they commenced a piece of writing. It divides the composing process into three key components namely, the writing process, the task environment, and the writer's long-term memory. The writing process includes three components, planning, translating, and reviewing, managed by an internal monitor. The task environment consists of social factors and physical factors. The writer's long-term memory is an internal cognitive process that embraces the knowledge of topic, audience, and genre.

Nevertheless, the Flower and Hayes (1980) model has been subject to a number of essential critiques as it presents the cognitive abilities for each writer are uniform, whereas the processing preferences of the writers should be appreciated according to their individual abilities. Flower (1989) has been at the forefront in condemning what she calls its failure 'to account for how the situation in which the writer operates might shape composing, and it had little to say about the specific conventions, schemata, or commonplaces that might inform the

writer's "long-term memory" (p. 383). Flower and Hayes explicitly indicated that their model is a model of skilled writing. The adoption of this idea has led a growing number of researchers to take a critical stance towards this trend. According to language learning theories, individuals differ in their ways of learning techniques and strategies. Shaw and Weir (2007), for example, argued that it does not provide a distinction between skilled and unskilled writing and 'does not fully reflect the way in which writing varies according to the task' (p. 35). Another key drawback of this model was associated with its ambiguity about how text material could be constructed and what the linguistic constraints are (North, 1987). This model has also been criticised for its ignorance of collaborative writing (Hartley, 1991), and the writer's goal and different genres and audiences (Kemper, 1987).

As a result of the aforementioned criticisms, Hayes (1996) has redesigned a new model to avoid some of these demerits. Five arguments have been put forward in reaction to the criticisms to the old model: the emphasis on the central role of the working memory in writing, the inclusion of visual-spatial in conjunction with linguistic representation, the influence of motivation on writing processes, the emphasis on the structure of the model, and finally, the integration of the social environment into writing as an interactive dialogue between the writer and the audience. The three components of the old model: revision, planning, and translation have been replaced by text interpretation, reflection, and text production process, respectively. In the new model, there are two major components: the task environment component and the individual component. The task environment embraces every element outside of the writer which contributes to form the writing process. It contains two sub-components: the social component which includes the audience and the collaborators and the

physical component which includes the text that has been produced and the writing medium such as a word processor, etc. In addition, the individual component includes motivation and effect, cognitive processes, working memory and long-term memory. The individual component has had more attention afforded to it as 'writing depends on an appropriate combination of cognitive, effective, social, and physical conditions if it is to happen at all... writing is a generative activity requiring motivation, and it is an intellectual activity requiring cognitive processes and memory' (Hayes, 1996, p. 5). The main contribution of this model is that it stresses the importance of cognitive processes in text production and interpretation.

3.3.1.2 Scardamalia and Bereiter (1987)

Building on Flower and Hayes' (1980) model, Scardamalia and Bereiter (1987) presented another model that highlighted the differences in writing ability between skilled and less-skilled writers. They suggested two process models in order to account for the differences in processing complexity of skilled and unskilled writers. These two models are the following: 1) the 'knowledge-telling model', whose basic structure depends on the processes of retrieving content from memory concerning topical and genre cues; and 2) the 'knowledge-transforming model', which involves more reflective problem-solving analysis and goal-setting. The former model is exemplified by the chaining of ideas such that one idea generates the next just as a child might write again and again. The latter model is extremely pertinent as it puts forward the idea of multiple processing, which is revealed through writing tasks that vary in processing complexity. Key to this is the ability to shape text to a rhetorical purpose rather than simply linking ideas one after the other. Unlike the knowledge-telling model, the knowledge-

transforming model takes a different shape as it emphasises the significance of setting goals to be achieved over the composition process. It is entirely fair to say that this model helps teachers explain the challenges their students sometimes experience because of task complexity and lack of topic knowledge. Furthermore, the model places great emphasis on the significance of challenging writing tasks to develop the students' skills, as well as the importance of feedback and revision. Another argument in supporting this model is its emphasis on the ability to deal with both content and rhetorical problems in students' composition. If students, for instance, practice the kinds of writing tasks that develop knowledge-transforming skills, they are likely to be able to perform those skills more easily. This model puts forward the idea of multiple processing models in which more understanding of the writing process will take place. Although knowledge-transforming strategies are the acts of a skilled writer it is perhaps the case that writers of all ability still use knowledge-telling strategies as a starting point in their writing. Thus, effective pedagogy needs to address the move between these two models.

In spite of its many advantages, Scardamalia and Bereiter's theory has been the subject of a number of critiques and shortcomings which should be addressed. For example, the ways in which a writer develops a knowledge-transforming model of the writing process is not evident in this theory. From a teaching point of view, Scardamalia and Bereiter (1987) have not presented *how* or *when* a writer can make this cognitive transaction, and whether the writer needs to develop a stage of knowledge-transforming ability. In addition, the more complex writing process is limited to certain individuals and not similarly accessible to anyone who wishes to be an expert writer (Grabe & Kaplan, 1996).

Despite the fact of such valuable research done on L1 writing, it builds a valuable basis for research into L2 writing context as many L2 researchers have relied solely on L1 research. It is worth mentioning that some L1 models have had a substantial impact on L2 writing instruction as well as on the development of a theory of L2 writing. However, the challenge with applying L1 theories to L2 instruction is that L2 writing also involves the cognitively demanding task of generating meaningful text in a foreign language. As a result, it is justifiable that students in L2 contexts need more support and guidance during the writing task. To recap, the cognitive model has been criticised as it is 'too narrow in its understanding of context and was eclipsed by studies that attended to social, historical, and political contexts of writing' (Prior, 2006, p. 54). To better study writing strategy use in context, Cumming et al. (2002) report that adding more elements to the cognitive framework would be essential for the writers' goals in order to 'motivate and guide their task performance as well as other essential aspects of these activity structures and the contexts in which they are embedded' (p. 193). Thus, the subsequent section sheds light on the sociocultural theory of writing which stresses the importance of social aspects of human learning and development.

3.3.2 Sociocultural Theory of Writing

Researchers have increasingly acknowledged the significance of social aspects of human learning. Unlike the cognitive view, sociocultural perspectives of development argue that the learning process is a complex activity in which cognition and knowledge are social and are constructed within a social world (Alfred, 2002; Swain et al., 2002). The role of the reader is highly valued in shaping the writer's thinking and writing in what is called the sociocultural theory.

This theory is associated with the name of the Soviet developmental psychologist, Vygotsky (1978). It puts great emphasis on the social and cultural interaction in developing cognition or the process of learning. Consequently, language and the sociocultural context shape the learner's knowledge construction as they act and interact to construct new knowledge (Nassaji & Swain, 2000).

Vygotsky (1986) presented the sociocultural theory in which he described how human minds develop in relation to their interaction with their culture. The properties of the mind can be discovered by observing mental, physical, and linguistic activity because they are naturally related (Vygotsky, 1986). Vygotsky viewed consciousness as a process through which people systematise and realise higher mental functions such as voluntary attention, voluntary memory, physical behaviour, intention, and planning (Culatta, 2013). For him, consciousness and behaviour occur and exist together, thus they can be observed in the form of human behaviour. Vygotsky also stressed that the mind is realised in the act of discourse and mental activity and the operation of symbolic systems are determined by the sociocultural history of the person and his/her discourse with the society. Dörnyei (2001) stated, 'language and culture are bound up with each other and interrelated' (p. 14). Vygotsky (1978) posited that learning takes place at two different levels: first at the 'interpersonal level' and then at the 'intrapersonal level' (p. 57). Based on this, learning first occurs at a social and cultural level where learners learn from the people around them and develop their knowledge at a personal level. The implication of this is that learning is not simply an individual construct but shaped by these social interactions such that what is learned reflects social norms and values and might vary from one context to another. According to this theoretical framework, it would be valuable

to investigate the way through which students' work collaboratively in their writing tasks.

In brief, the sociocultural theory reveals that the person's written language development depends on a particular social, historical, and cultural setting (Zebroski, 1994). Myhill et al. (2008) argued that a sociocultural perspective views writing as a 'social communicative act' and 'meaning-making activity' (p. 27). Moreover, sociocultural approaches consider writing as 'chains of short- and long-term production, representation, reception and distribution', and writing is a dialogue and collaborative process between the writer and the reader (Prior, 2006, p. 58). Consequently, learning should take place through interaction and collaboration activities among learners. Thus, learners need involvement and guidance when they learn new genres and textual practices according to the needs of their social life. The sociocultural theory puts a great emphasis on the learners' response to the context as their response may vary when they internalise it in a unique means according to their own experiences and existing knowledge. Therefore, it can be seen that the sociocultural theory is both a social phenomenon but also includes individual characteristics as well (Tudge & Scrimsher, 2003). Accordingly, learners are highly encouraged to adapt their individual competences communicatively.

Nevertheless, it is worth questioning how the perception and understanding of students of the composition process would influence their writing. In this respect, Vygotsky (1978) argued that students' attention might be directed through language to significant features in the environment that will be taken in solving a problem in what Vygotsky called, the 'Zone of Proximal Development (ZPD)'. Vygotsky (1978) defined ZPD 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' (p. 86). In other words, ZPD is 'the framework, par excellence, which brings all of the pieces of the learning setting together – the teacher, the learner, their social and cultural history, their goals and motives, as well as the resources available to them, including those that are dialogically constructed together' (Aljaafreh & Lantolf, 1994, p. 468). In the ZPD, a student is supported by a more knowledgeable person to take part in activities that fall within his/her ZPD. In writing classes, it is not an easy task for teachers of writing to design or plan activities that fall within their students' ZPD. For example, it is challenging for teachers with more than 25 students to design certain writing activities for the individual needs to match the students' ZPDs. Therefore, the L2 writing teacher can encourage scaffolding between students in which the more knowledgeable students provide support and help to novice students. Aljaafreh and Lantolf (1994), for example, conducted two case studies on two Korean learners of English as a Second Language (ESL) where only the first student was given feedback within his ZPD. The results of the study illustrated that the given feedback for the first learner's writing improved his writing, whereas it did not change the writing for the second student. This result goes in a parallel line with the sociocultural theory which confirms that knowledge is constructed in social interactions within the learner's ZPD, and communication through a process of collaboration work.

It can be concluded that scaffolding is a process of helpful intervention discourse which directs the mind of the learner to key features of the environment, and which prompts them through successive steps of a problem (Vygotsky, 1978). Scaffolding demonstrates that writing is a social practice and texts are socially generated through which the learners learn about writing in a social

context. In this respect, the sociocultural theory has revealed that learners develop knowledge through social interaction with others socially, so it offers an ideal framework for the study of peer feedback and revision practices. This is extremely pertinent to achieve the ultimate goal of scaffolding which is to improve the student's writing quality.

3.4 Pedagogical Approaches to Second-Language Writing

Research on writing has led to the advancement of some approaches that address the nature of students' writing. These approaches vary on how they view the nature and focus of writing. There is no consensus on the focus of writing among educators, as the focus of writing could be on the product (text), the process (writer), the genre (audience and context), or collaboration, and each is discussed further in the following sections. Discussing the approaches to writing is essential in this study for two main reasons. Firstly, it helps investigate the relationship between different writing approaches and various feedback techniques with each approach. Secondly, the different approaches are interrelated and, in many cases, a clear-cut definition of each is very difficult to establish. Generally speaking, each of these approaches has its strengths and weaknesses, but together they complement each other.

3.4.1 Writing as a Product

Writing as a product has been one of the dominant modes of instruction in second-language writing since the 1960s (Raimes, 1991; Yan, 2005). This focus, as its name suggests, emphasises students' finished written products and concentrates on linguistic knowledge and the proper use of grammatical rules (Zamel, 1982). The primary concern of this approach is linguistic knowledge,

meaning, proper use of vocabulary, syntax, and cohesive devices (Yan, 2005). Susser (1994) demonstrated that this approach views writing 'as grammar instruction, with the emphasis on controlled composition, correction of the product, and correct form over expression of ideas' (p. 36). Therefore, teachers are requested to consider the proper use of grammatical rules, vocabulary, and mechanics when seeking to improve the students' writing. Students are encouraged to imitate models delivered by teachers or textbooks. Free writing, which takes place at the end of the process, aims to improve students' understanding of the earlier assigned tasks and is performed by the restricted notion of writing that includes grammatical proficiency and accuracy of surface-level features (Zamel, 1982; 1987).

A product approach puts great emphasis on the teacher-centred approach as the teacher has the authority in the classroom environment. The role of the teachers in this approach is considered to be of a paramount significance as the examiners of the linguistic knowledge (Mangelsdorf & Schlumberger, 1992). Teachers are interested in the written products rather than other aspects, such as content and meaning, because they focus on accuracy more than fluency (Raimes, 1991; Susser, 1994). Classroom time assigned for writing is usually allocated to drills and exercises on mechanics or grammar. Therefore, the assignments always ask students to write about their personal experiences, such as what they did on their last holiday (Williams, 2003). Then, the teachers provide their feedback on students' writing on structure and lexis. The teachers put great weight on students' structural errors by either directly providing the correct form of a structure on students' scripts or indirectly guiding students by underlining the incorrect forms and leaving it to students to look them up and to correct their mistakes and learn from them. Teachers strive to help the student structure their

work in line with previously available standards and refine the mental models (Oshima & Hogue, 2006). Therefore, most EFL teachers prefer this approach as it promotes a traditional rubric which can help understand underlying elements and improve reading competence by focusing on specific structures and vocabulary (Shin, 2013).

In spite of its popularity among EFL teachers, a product approach has been criticised for many aspects. For instance, it neglects cognitive processes of writing which learners go through during the composition, and the students' awareness to the audience of their writing and to the purpose and the context of their writing (Hyland, 2003). Additionally, teachers are the only source of feedback that the students receive and students can be seen as passive recipients of feedback (Zamel, 1983). As a consequence, a product approach does not view the nature of writing as a social activity which requires interaction among the students themselves and their teachers. Hyland (2003) raised a fundamental issue which revealed that the product approach restricts students' creativity as it relies on imitation. Although this approach provides well-established frameworks which can ultimately create an end-product, it can lead to short-term growth and achievements, without long-term benefits (Raimes, 1991). This leads to low motivation and difficulties in generating new ideas and can restrict the composition skills of the students (Graham & Perin, 2007). As a reaction to these limitations, the process approach to teaching writing has come into existence.

3.4.2 Writing as a Process

Reviewing the effectiveness of the product approach has illustrated the need for developing writing as a process, not as a product. Accordingly, this need

has led to a shift towards what is called the process approach to second-language composition writing. Process writing views writing as 'a complicated cognitive process' which 'involves multiple stages: prewriting, drafting, revising and editing' (Deji, 2005, p. 67). This focus emphasises the phases of the writing process, as well as the way in which writers create, edit, and revise ideas to produce a text (Zamel, 1983).

Susser (1994) pointed out that the two key features of process-writing pedagogies are awareness and intervention. First, writing as a process helps students increase their awareness of the complex manner in which meaning is created, rather than being transcribed as pre-formulated ideas. This feature stresses the significance of generating and refining one's ideas through cyclical and interdependent pre-writing, drafting, revising, and editing procedures that involve organising ideas, determining purpose, considering the audience, selecting vocabulary, and judging format (Zamel, 1982). Further, because students' texts are no longer treated as finished products, teachers also become involved in the composing process at several points. For instance, teachers are expected to establish a non-directive, facilitating role by encouraging students to come up with ideas, compose and improve their writing in a supportive and co-operative environment (Hyland, 2003). In other words, as Zamel (1983) pointed out, 'intervening throughout the process sets up a dynamic relationship which gives writers the opportunity to tell their readers what they mean to say before these writers are told what they ought to have done' (p. 182).

As a cognitive process, the focus of the process approach is to develop the students' planning, writing, and reviewing. Flower and Hayes (1981) observed that the composing process is dynamic and recursive, with considerable interplay among the different components of planning, writing, and revising. This is done

through a number of feedback tools such as face-to-face feedback, peer feedback, and audiotaped feedback (Hyland, 2003). Revision is an essential element in the process approach (Myhill & Jones, 2007) as it allows students to make changes to their writing over the composition process. Revision is not separate one-off activities but is embedded in planning, drafting, and redrafting (Flower & Hayes, 1981). One of the main revision methods followed is peer feedback due to the significance of peer feedback in supporting students to revise and improve their writing. Students evaluate their peers' writing and offer comments and suggestions. Hyland (2003) argued that feedback enhances students' critical thinking and evaluation. However, it is worth noting that students might not trust their peers' feedback, especially when the level of their English is low. Therefore, teachers need to deal with and solve this issue from the very beginning of the composition process.

Process approaches to writing have been criticised because of their emphasis on isolated individual writers and cognitive and decontextualised dimensions of writing skills by those who hold more socially-oriented views of writing (Hyland, 2003). Another fundamental criticism of this approach is that it is time-consuming, especially with large classes as the students need a long time to go through all the stages of the writing process (Harmer, 2005). Therefore, teachers are likely to find difficulties to work with students through the different stages of the writing due to time pressure constraints. Additionally, this approach pays a great deal of attention to the development of students' writing strategies rather than the text itself (Hyland, 2004). It also does not provide students with enough input that enables them to write successfully, and it ignores the context in which writing occurs (Badger & White, 2000). Despite the above-mentioned

shortcomings, the process approach is still widely adopted and used in many educational contexts.

3.4.3 Genre-Based Approaches to Writing

Genre-based approaches to writing were developed in reaction to the criticism identified in the process approach (Badger & White, 2000). There is still no consensus among educators on a definition for the genre-based approach to writing; however, Hyland (2003) described it as 'a socially informed theory of language offering an authoritative pedagogy grounded in research on texts and contexts, strongly committed to empowering students to participate effectively in target situations' (p. 23). It is theoretically underpinned by Vygotsky's (1978) notion of the collaborative nature of learning between the teachers and students as the teachers' role is instrumental in the sense that they encourage students to transfer regularly from modelling target genres to joint text construction by the writing of several drafts until they can construct text independently (Hyland, 2003). Writing occurs by studying and imitating the texts that the teachers provide to their students and the genre approach to writing could be viewed as an extension of product approaches as both approaches regard writing as mainly linguistic (Badger & White, 2000).

Advocates of the genre-based writing approach claimed that the purpose of this approach is to allow the student to write in distinctive contexts by using various linguistic and rhetorical options (Hyland, 2003). Therefore, devoting time and effort to concentrate on the understanding of the compound variables in text composition, rather than on the production of a single writing process or personal language and voice, would better prepare students to perform writing tasks in academic essay writing classrooms (Johns, 1995).

The fundamental aim of feedback in the genre approach is to draw students' attention to genre conventions as they are associated with the community. Thus, feedback should focus on all of the aspects of writing, from structure and organisation to content and presentation. However, it is not necessary to tackle all of these aspects in each draft. Group discussions can be used to draw wider attention to most of these aspects and this may benefit all students because as their writing involves the same terminology and text features (Hyland, 2004). Besides this, Marshall (1991) argued that feedback can emphasise genre knowledge and community conventions in students' writing using computer-generated feedback that applies specific schemata to help teachers provide feedback on students' written reports. In this respect, it is crucial for teachers to have or design an appropriate checklist which is used to provide feedback on students' writing, as well as to monitor students' peer feedback in order to evaluate the accomplishment of different aspects of the writing task.

However, some limitations have been addressed in the genre approach by several scholars. Byram (2004), for instance, contended that this approach devalues the necessary writing skills and neglects the fact that learners may have sufficient knowledge to accomplish their task. The same approach is also said to overemphasise the role of conventions and text features. It is also argued that the genre approach might undermine students' independence in writing. They might always be waiting to be instructed and informed of what to write and how to write (Kay & Dudley-Evans, 1998). This is believed to be the outcome of the explicit nature of the genre approach and genre-based pedagogies that can suppress the creativity of students and deprive them of the ability to freely express themselves.

According to some researchers, genre-based instruction has reinforced merely dominant discourses since students are encouraged to produce an existing disciplinary discourse (Benesch, 2001; Coe, 2002). The genre approach lessens the students' creativity and does not allow them to express their own ideas freely as the teacher is responsible for selecting the models and thus, students become passive writers (Badger & White, 2000).

3.4.4 Process Genre Approach

A brief review of the aforementioned approaches to writing reveals that these approaches are interrelated and that it is not easy to make a clear-cut definition of each approach. Also, each approach has its shortcomings and limitations. Hence, teachers may not choose one approach to follow, but they might instead combine two or three approaches as the three approaches are complementary towards each other (Badger & White, 2000). They put forward the idea of incorporating the insights of the mentioned three approaches in order to overcome the drawback of these same approaches. As the focus on writing has changed from a product-based approach to a genre-based approach, the incorporation of the three approaches can be done by starting with one approach and then adapting it as the writing situation demands. This widespread method is called the 'process genre approach' (Badger & White, 2000, p. 157). The process genre approach puts great emphasis on the knowledge about language (as in the product and genre approaches), the skills in using language (as in the process approach) and finally the purpose for the writing (as in the genre approach). The integration of the three approaches to EFL writing helps the learners gain the skills from each approach, transfer them to different learning modes, and encourages them to achieve better writing performance (Pasand &

Haghi, 2013). Thus, it is significant for the students to rely on the three approaches in order to become competent writers (Walker & White, 2013). Peer feedback activities are encouraged as they involve interaction amongst students which is essential in the teaching practice in the process-based approach.

Furthermore, the social context of the writing has been emphasised in the process genre writing as it views writing as a set of social, linguistic, and cognitive processes that are culturally instilled in the students by incorporating four elements of form, the writer, content, and the reader (Raimes, 1991). It is essential to make learners aware that they write in a social context to achieve a particular purpose before proceeding to a process of multiple drafts and ending it with a finished product (Nordin, 2017).

3.4.5 Summary

This section examined the existing approaches to teaching EFL writing. Different approaches to teaching EFL writing which included the product approach, process approach, genre approach, and process genre approach were elaborated on. The discussion also involved the implementation of these approaches in some previous studies. This review has been very useful to reveal the reasoning for the adoption of the process genre as the most appropriate approaches to draw on in teaching EFL writing using online collaboration. The next section sheds light on collaborative learning as an essential technique in any language learning context.

3.5 Collaborative Learning

As previously mentioned, collaborative learning is built upon the principles of the sociocultural theory which asserts that learning occurs when learners

interact with each other in an environment that encourages collaboration and interaction. In this respect, the learning process takes the form of sharing information and taking roles in collaborative activities (Vygotsky, 1978). In the process of sharing and negotiating meaning, it is assumed that students construct their own knowledge where they should be actively participating in activities with peers in order to construct their own understanding through social interaction. It is pivotal to mention that collaborative learning is basically defined as working together to achieve a common goal, such as solving a problem (Roschelle & Teasley, 1995). In any educational circle, collaborative learning provides a promising learning environment which supports students to interact and cooperate in achieving the given tasks (Coelho et al., 2016). It is, therefore, essential to comprehend the theoretical basis of collaborative activities to help better understand this type of discussion. Collaborative learning is ontologically rooted to the sociocultural theory where students work collaboratively to discuss ideas, form questions, explore solutions, complete tasks, and reflect upon their thinking and experiences (Storch, 2017). It allows students to develop ways of learning together, emphasises learner-driven approaches such as peer learning, and supports students' projects that often require a team approach (Luna Scott, 2015). Additionally, Johnson and Johnson (1999) argued that positive social interdependence can help learners achieve better than they do in competitive and individualistic settings.

Collaborative learning has arisen as a significant concept within the realm of language education. Therefore, students at the tertiary level are being encouraged by their institutions to work and learn collaboratively (Dearden, 2018). Vygotsky (1986) indicated that individual learners working alone have different developmental capabilities when compared with individual learners

collaborating with others. This supports the view that collaborative learning is a process of shared meaning construction as well as meaning negotiation. The meaning-making is not assumed to be an expression of mental representations of the individual participants but is an interactional achievement (Stahl et al., 2006). This is because of the fact that different students bring a wide variety of expertise and experiences into the task. The sharing of expertise comes together and helps the learners achieve much more than when working individually which results in a better quality essay. Fung (2010) confirmed this standpoint by stating that, ‘... the pooling of diverse abilities provides interdependence for learners to co-construct knowledge and improve their writing skills to a greater extent than what they could achieve individually’ (p. 23).

Due to the rapid advancement of technology, it is assumed that technology can change the way writing is taught through facilitating and providing collaborative learning environment for learners. Such practice has been increasingly supported in the EFL context as a reaction to the collaborative potential of Web 2.0 tools (Kessler et al., 2012). In this context, the Computer Supported Collaborative Learning (CSCL) theory, which explains the collaborative acts of students while using computer devices, is considered a valuable pedagogical application of theories of learning (Stahl et al., 2006). CSCL is considered as “a field of study centrally concerned with meaning and the practices of meaning-making in the context of joint activity, and the ways in which these practices are mediated through designed artefacts” (Koschmann, 2002, p. 17). Learning can take place through social interaction over computers. The software provides a space for interaction and support for pedagogical activities. For example, Salmon (2013) argued that new skills, innovative knowledge and solutions may arise through collaborative e-learning activities, where learners

acquire new knowledge in association with colleagues and peers. This view suggests that technology can enable students to increase their collaboration beyond the classroom walls to other settings. In this respect, some researchers call for a more collaborative writing approach which has gained much attention in second language learning contexts during the last three decades. It is a production of text through collaboration between more than one writer (Li, 2017). A number of researchers have emphasised the significance of collaboration among students throughout the writing process (Jones, 2007; Sun & Chang, 2012). These researchers have confirmed the mutual accountability of each student over the production of the text. Many studies on collaborative writing have shown positive results (Boch, 2007; Keys, 1994; Storch, 2012; Swain & Lapkin, 1998; Yang, 2014). This approach allows students to promote reflective thinking while they are engaged in sharing their ideas with their peers.

Viewing this from a sociocultural perspective and CSCL, collaborative writing offers a cognitive and social classroom activity in which peers construct collective knowledge through scaffolding for each other (Wells et al., 1990). In addition, collaborative writing contributes to the enhancing of the students' awareness (Storch, 2012), the development and enhancing of their reflective thinking skills (Keys, 1994), and the provision of more attention to language forms and discourse (Swain & Lapkin, 1998). Regarding this, Ede and Lunsford (1990) pointed out three distinct characteristics of collaborative writing: functional interaction throughout the writing process, joint responsibility for producing the text, and the completion of a single written product. It is evident here that this collaborative learning approach involves a coordinated effort among individuals to complete a task together throughout the entire writing process (Storch, 2013). Technology provides connectivity and enables unprecedented collaborative

learning settings. In what follows, a short discussion about the use of technology in writing is highlighted.

3.6 Technology and L2 Writing Practice

In a world of increasing technology, a range of technologies are available for use in language learning and teaching. The field of educational technology has witnessed a radical move from Computer-Assisted Language Learning to Technology-Enhanced Language Learning (TELL) (Li, 2017; Walker & White, 2013). TELL can be described as the study of the technological applications in language teaching and learning (Golshana & Tafazolib, 2014). In other words, it is the integration of technologies that support both teachers and students in the teaching/learning process. It is a broader term than CALL as it includes other tools like mobile phones and iPads instead of computers only. The use of technology has extended to include new technologies like interactive whiteboards and tablets instead of merely focusing on computers (Jack & Higgins, 2019). It aims at finding practical ways of using technology for teaching and learning the target language. One of the main differences between CALL and TELL is that technology is not only viewed as assisting language learning platforms but as part of the environment in which language exists and is used (Walker & White, 2013). TELL provides a new context as well as new tools for learning and teaching a language. It has advanced in conjunction with the advancement of facilities offered by new technologies. Li (2017) emphasised the significance of new technologies in education, particularly in language learning and teaching. In this vein, there is unanimous consensus among researchers about the fact that TELL is not a methodology in itself, but it is rather a useful tool in the context of second-language teaching and learning (Lam, 2000; Warschauer, 2005). In spite

of the debate about the use of the term CALL itself, I have referred to the discipline as CALL, in the current study, because this term remains a common referent in the predominant journals in the field (Motteram, 2013).

The rapid pace of online language teaching and learning has imposed new demands on teachers and students alike, making it challenging to know exactly what to include when training teachers and students to use classroom technology (Hampel & Stickler, 2005). In addition, Reinders (2009) raised several concerns about the role of both the teachers and students in the technology environment. They are required to have both pedagogical and extensive technical skills to use technology efficiently. The new role of students is also complicated, as it requires expertise and abilities that they may not initially possess. Therefore, students need to go through training programmes to be familiar with the use of new technologies as the emphasis is not only on the use of the technological tool, but it is rather on the interaction and collaboration through technology.

In a world that is increasingly dominated by technologies, innovative teachers are always striving to find effective ways to keep their students motivated and interested in the process of learning the target language. They are seeking instructional designs that go beyond traditional lecture memorisation methodologies (Brandon & All, 2010) and employ technological tools to motivate students and provide more authentic language learning experiences (Erbaugh et al., 2016). In the past years, there was a shift from the interaction with the computer towards interaction with others through computers or other technological tools. It is a natural step, therefore, to make use of peer collaboration through technological communication channels. It is evident that technology plays a relevant role in the teaching and learning of a language, and different tools have arisen in the past few years with the development of new

technologies (Li, 2017). Technology could enhance the quality of learning and teaching if used appropriately (Groves et al., 2009). In terms of writing, technology has provided unprecedented opportunities and challenges for learning the skills of writing. Thus, it is undoubtedly that the successful integration of technology in the educational field allows establishing an encouraging atmosphere for writing to flourish (Hughes & Burke, 2014).

Many empirical studies that have investigated the effectiveness of using technology in the classroom have consistently indicated its positive impacts on students' writing skills in terms of quantity and quality (Al-Mansour & Al-Shorman, 2012; Borokhovski et al., 2016; Fidaoui et al., 2010; Wollscheid et al., 2016; Zheng & Warschauer, 2017). Fidaoui et al. (2010), for example, reported that CALL provided students with a dynamic atmosphere to produce high-quality work. In addition, the research study by Al-Mansour and Al-Shorman (2012) has examined the effect of CALL on Saudi students' writing skills and found out that using computer-assisted English language instruction alongside with the traditional teaching method, has positively contributed to the students' writing achievement.

Another interesting study conducted by Zaini and Mazdayasna (2015) examined the application and effect of technology in writing classrooms on EFL learners in Iran. The results suggested that students who used computers in their writing outperformed their counterparts who used the traditional approach of writing relevant articles, tense, plural forms, and spelling. Moreover, the students created paragraphs of higher quality. The result was consistent with the findings of past studies by Jafarian et al. (2012), which concluded that the attainment of computer users was significantly higher than non-users in an Iranian university. This substantial difference in favour of computer users was evident from the

impact CALL has made on promoting students' knowledge and competence. Generally speaking, it can be noted that technology has provided an alternative tool to the traditional methods in teaching second-language writing. This tool may overcome some deficiencies of conventional methods of teaching writing due to its role in giving feedback, explanations, and suggestions about students' mistakes, as well as providing better opportunities for interaction and collaboration.

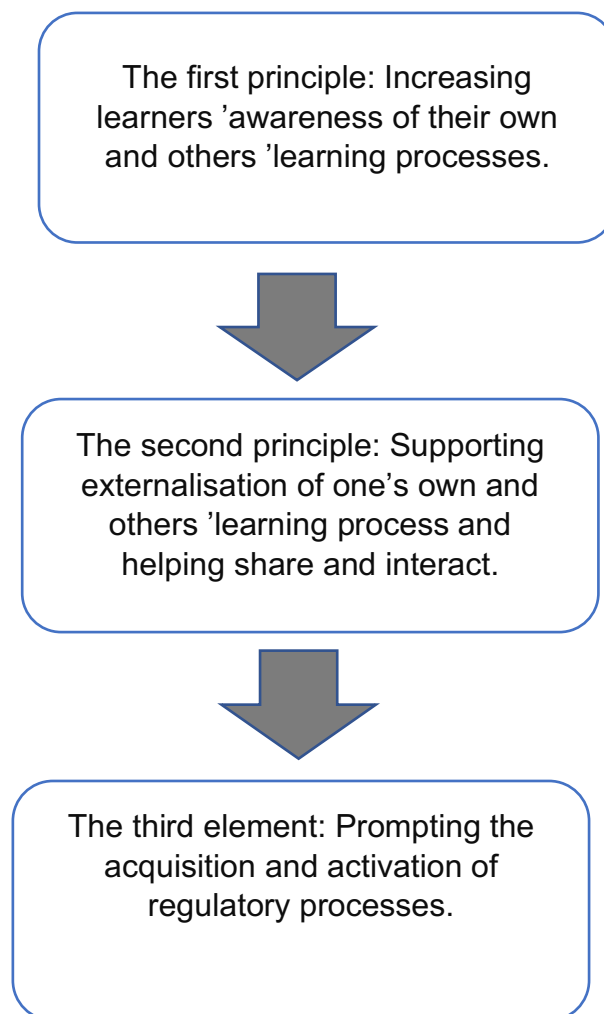
3.7 Online Collaboration

The concept of online collaboration has arisen in an age of information technology (IT) when a revolution has been proclaimed in the field of education with the introduction of the Internet in school classrooms. It is considered by many researchers to be a collaborative activity in which students interact together to achieve the task's goals. In the writing classrooms, it is used as an instructional strategy in order to improve students' learning and writing skills. With regard to this, it seems necessary to understand what is meant by the concept 'collaboration' in this study. Hathorn and Ingram (2002) defined collaboration as 'the interdependence of the group participants as they share unique ideas and experiences' (p. 33). For the purpose of this study, online collaboration was defined as the act of learners working together through online collaborative platforms to help each other in improving their writings. As a collaborative learning activity, it has many objectives which include building students' belonging and engagement so they work together better for mutual benefits, encouraging a sense of joint responsibility where learners care about each other's success as well as their own, and creating a feeling of social support (Masika & Jones, 2016). These goals all together help learners develop higher self-esteem and self-

confidence as well as a noticeable improved academic achievement. Technology plays a significant role in achieving these goals if the learners make a successful use of the affordances of online collaboration. To achieve this, Järvelä et al. (2015) provided three design principles for supporting online collaborative learning as illustrated in Figure 3.1

Figure 3.1

Principles for Supporting Online Collaborative Learning (Source: Järvelä et al., 2015)



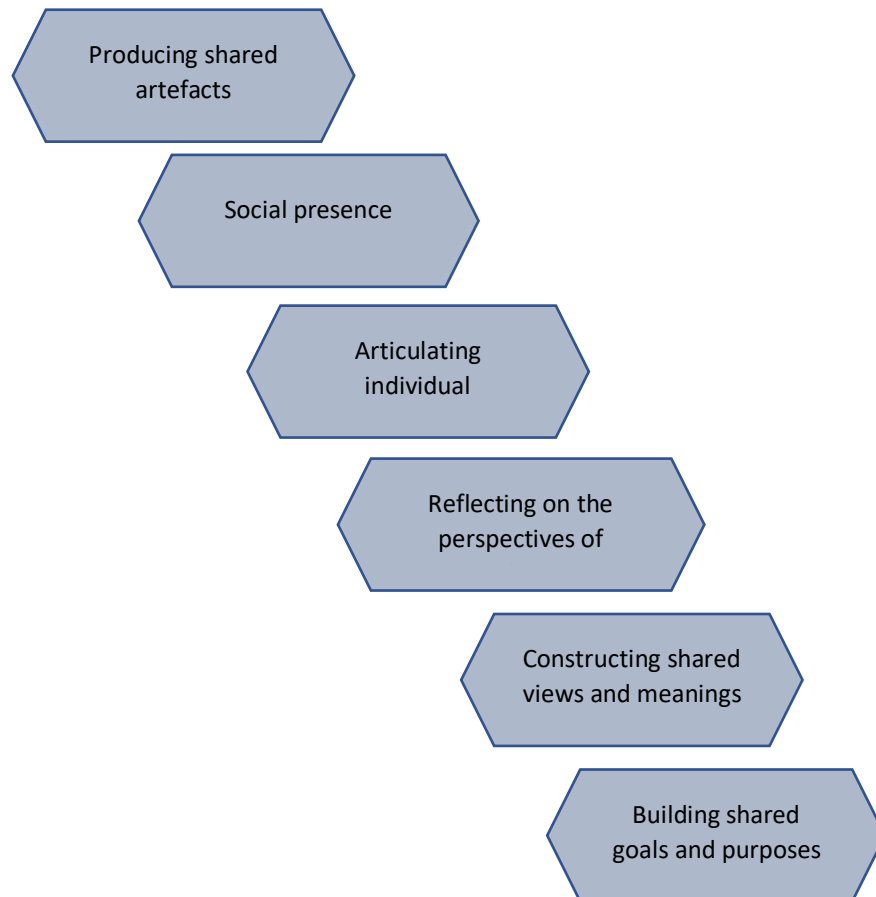
Online collaboration is intimately connected with the sociocultural theory which is ontologically rooted in the assumption that the learning process takes place when learners interact with each other. It is an instructional strategy that can be applied to writing classrooms to enhance students' learning as a whole

and writing skills per se. Indeed, it helps establish an online collaborative learning environment in which learners work collaboratively to achieve the tasks in question. Online collaboration is therefore by nature genuinely vital since it essentially seeks to relate language issues to the broader sociocultural sphere and views social relations as problematic in regard to language-related issues. It puts great emphasis on the student-centred approach in which students have to take more responsibility for their learning; explicit instructions and guidance must be provided to facilitate all the aspects of the learning process (Zheng & Warschauer, 2015). This approach has come into light as a reaction to the traditional teacher-centred approach in which teachers are the sole authority in the classroom, which has resulted in a lack of motivation and weak communication skills on the part of the learners (Owens et al., 2017). It is assumed that online collaboration may provide vast rooms for promoting peer interaction, in which learners' initiative can be cultivated, and writing skills can be further enhanced.

Online collaboration usually takes place when interaction among students trigger learning mechanisms, but there is no guarantee that the expected interactions would occur in the first place. A primary concern, when developing such activities, is how to increase the probability that some types of interaction would occur. Murphy (2004) suggested a framework that consists of six stages to promote collaboration and interaction in an online learning environment as seen in Figure 3.2.

Figure 3.2

Stages to Promote Collaboration in an Online Learning Environment (Source: Murphy, 2004)



A significant point in Murphy's framework is the transformation from interaction to collaboration, which occurs when students share a goal and work together towards achieving that goal. This is accomplished by sharing experiences and knowledge.

Another key factor in understanding how learning is produced within the interaction is inter-subjectivity where learning is constituted of interactions between members of the class (Stahl et al., 2006). In this case, it can be understood that the nature of online collaboration supports inter-subjective meaning-making in which the students often exchange online messages with

each other (De Wever et al., 2006). This situation offers two broad options, either synchronously, where students communicate with each other or the tutor in real time via discussion software; or asynchronously, where students can communicate and work together from anywhere at any time. Many researchers consider that online communication brings significant changes to the social dimension of learning, and accordingly, claims have been made that this approach can empower students and make writing classes more collaborative.

In recent years, asynchronous text-based discussions have gained a great deal of attention as it presents several distinct advantages (Saeed & Ghazali, 2017). For example, students get more opportunities to interact with each other, and they also have more time to reflect, think, and search for extra information before contributing to the discussion. In addition, the communication elements are written and/or recorded which give the researcher a clear view into the collaboration process because a transcript of these messages can be used to judge both the individual and group collaborative processes at work (De Wever et al., 2006). So, all of the exchanges of information between students are stored in the discussion transcripts which can be used by students for reflection purposes, or they can serve as data for research (De Wever et al., 2006). However, the shape of the interaction in a social context should concern educators in terms of the quality of both the interaction spaces and what is achieved within them (Wegerif, 2013). It is assumed that the interaction and collaboration among students will afford support to the language learning. To determine the appropriateness of the use of online collaboration in the EFL context, it is significant to understand its potential affordances on the learners. Therefore, in what follows, some of the major affordances of online collaboration in the L2 writing context are given.

3.7.1 Affordances of Online Collaboration

The term affordance is not easy to define, as researchers have looked at it from different standpoints. Gibson, for example, was the first researcher to present this term in the field of ecological psychology (Thoms & Poole, 2017). He introduced the affordance theory, which assumes that the term referred to the possible actions that can be taken on the environment and that depends upon our perception of the environment. It claimed that people's interactions with the environment depend upon their perceptions of its affordance to them (Gibson, 1979). It is pertinent to elucidate that the affordances may be real, whether they are known in the environment or not, or they may be 'perceived' affordances, which are related to perceptual capabilities. This distinction determines their usability (Norman, 1999). It is the type of action that an item appears to be able to perform, for example, a door with a handle suggests the door can be pulled outwards, whereas a plate implies the person should push the door (Gaver, 1991). Similarly, the affordances of the online collaboration tools for learning are ultimately dependent on the views and perceptions of learners. So how learners understand the possible uses of tools in the context of learning may vary to those of the educator (Lee & McLoughlin, 2008). This is a pivotal point to consider when thinking about research because the number of possible affordances is great and may be very different for each learner. It is argued that the perception of potential action within an environment generates the experience of presence and embodiment in that environment, so online collaboration affordances create a sense of presence and embodiment in a shared space (Rettie, 2005).

In the educational field, Norman (1999) came up with a substantial definition by stating that affordances are 'the perceived and actual properties of the thing, primarily those fundamental properties that determine just how the thing

could possibly be used' (p. 9). He was the first one to present the term in the fields of graphic design and human-computer interaction. It is essential to provide a precise definition of affordances of technology to understand how to use technology effectively to boost learning and teaching (Conole & Dyke, 2004). However, Turner (2005) reported that the interpretation of affordance is more complicated than Gibson's original definition to explain action possibilities in the age of the Internet. It is more about the association between the user and object (Doering et al., 2008). In this respect, the idea that has been put forth by Lai et al. (2007), claimed that it is 'not the technology itself but the interaction between technology and pedagogical practice that affords possibilities for better learning' (p. 335), seems valid. The emphasis, thus, should be on the uses of technology, not on the technology itself.

Therefore, the role of students is also substantial in contributing to the affordances they perceive. This aspect is particularly emphasised as some students might not have sufficient awareness of the affordances of new tools in language learning. This lack of awareness could be attributed to the training programmes they receive, in that, they learn how to use the tools but not why they are using them. The users, therefore, should develop their technological and pedagogical knowledge to make appropriate use of technology in their classes (Levy & Stockwell, 2013; Mouza et al., 2014; Stickler & Hampel, 2015). In contrast, it is highly important to select the right tools to use in order to accomplish the pedagogical purposes (Johnson & Golombek, 2016). Therefore, identifying the affordances of different tools is a crucial part to expand our understanding of them and how they can be conveniently used in the EFL context. Regarding this, it is argued that developing the learners' personal knowledge about technology would allow them to bring new insights into the learning process.

There have been several studies in the literature reporting the pedagogical affordances of online collaboration among learners. Most of these studies have illustrated a number of favourable impacts on the use of online collaboration in the EFL context. Strobl (2014), for instance, conducted a study to explore the effect of online collaboration on academic writing in a foreign language context. The study also compared between collaborative and individual writing processes and products via a mixed methods approach. The findings have revealed that collaboration has led to a higher level of text accuracy. Furthermore, collaborative texts score significantly higher on appropriate content selection and organisation. The researcher attributed the results of this study to the in-depth discussions during the planning phase. Another interesting study by Weller et al. (2005) explored the integration of Internet technologies into a course at the Open University in the UK. The findings demonstrated a positive experience of the students when working collaboratively through different technological tools. Additionally, the results indicated that each technology supported one of the learning phases. Moreover, Kong (2003) reported that developing a learning environment for students that matches the needs of the subject matter could help them interact within complicated classroom settings.

In their study, Hauck and Youngs (2008) suggested that each technology has educational affordances and supports different levels of interaction and collaboration. They asserted that the Internet allows students to access foreign languages and cultures, find authentic information, and establish contact with target language learners and native speakers through online communication. Besides this, students can combine different modes of communication in one single environment. Challob et al. (2016) pointed out that blended learning which combines in-class and online instruction was also beneficial for the students as

there was more interaction both in class and out of class, thus enhancing the students' learning experience. DiGiovanni and Nagaswami (2001) suggested that technology encourages learners to react spontaneously, comment on their opinions, and write at their own pace. Furthermore, online collaboration tools, like discussion forums, wikis, and blogs, make learners feel that their writing would be read by more than just their colleagues or teachers (Tuzi, 2004). Accordingly, it promotes a sense of accountability in students' minds, as they realise that the visibility aspect of technology exposes those who are not contributing to the class (Sengupta, 2001).

As writing is a social activity, it is essential to have a sense of the audience if learners are to become competent writers who can understand who they write for and the purpose they have in writing. Accordingly, learners are expected to compose texts that are not just an exercise in writing activities but achieve real communication with readers. The presence of potential online readers gives the learners a sense of audience in the writing process (Miceli et al., 2010). They should bear in their minds the interests, needs, and language level of their readers in the writing process. Therefore, it is really important to provide an environment that allows collaboration to enhance the sense of the audience among learners in the writing process. Moreover, online collaboration can support a high level of thinking by providing learners with authentic learning tasks, complex tasks within collaborative learning contexts (Lin & Tsai, 2008; Valdez, 2005) which are an essential skill in today's world of technology. Learners can develop higher-order thinking skills by interacting with others through exchanging information and making meaning and order in their minds. As well as this, online collaboration tools like discussion forums have created much interest in educators and motivated learners to take part in the designated task (Godwin-

Jones, 2003). Therefore, the feedback and comments provided by the learners on each other's writings lead to an overall improvement to the quality of writing (Miceli et al., 2010). Furthermore, online collaboration tools enable the learners to write freely whenever they want and take responsibility for their writing. Finally, online collaboration encourages the learners to use the foreign language in a comfortable way, and also helps them learn about the target culture which is impossible to learn from their traditional classroom setting, alone (Ducate & Lomicka, 2008).

However, there have been challenges associated with the use of the online collaboration in the educational context. First of all, protecting the identities and security of students appears to be an important issue in online collaborative tasks (Trammell & Ferdig, 2004). Therefore, personal information such as the students' names, addresses, and telephone numbers should not be posted online (Ray, 2006). This issue is of great importance in conservative societies like Oman. Another limitation which should be taken into consideration is the access to the Internet as the interaction and collaboration required needs access for students via the Internet (Ray, 2006). This may not be such an issue for students at schools and universities which have computer labs. The readiness of the institution in terms of providing the technology needed – which includes software, hardware and connectivity such as Wi-Fi – is essential for a successful integration of technology. However, some students might suffer from a lack of access to the Internet outside the educational environment which might hinder the students' interaction beyond the classroom.

Another concern related to teaching profession is the willingness to use technology. According to Cosh (1999), teachers should not perceive integrating technology into their classrooms as a burden imposed on them by their

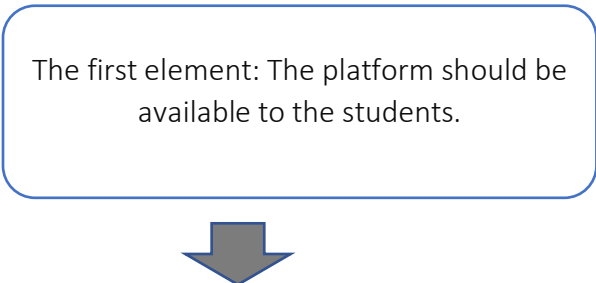
institutions; instead, the process should be a part of sustained changes to pedagogical practice. They should understand that the affordances of such changes and learn how these affordances can best be utilized in the classroom. Therefore, they should cope with technology integration in the classroom as well as familiarising themselves with the continuous innovations in technology.

Of note is how pedagogical affordances consistently arise during the use of appropriate activities that promote the pedagogy. Therefore, it is essential to understand and consider how technology enhances learning activities and how the learners experience different technologies (Sharpe & Beetham, 2007). The next section sheds some light on the major main online collaboration tools which are being utilised in the writing classrooms.

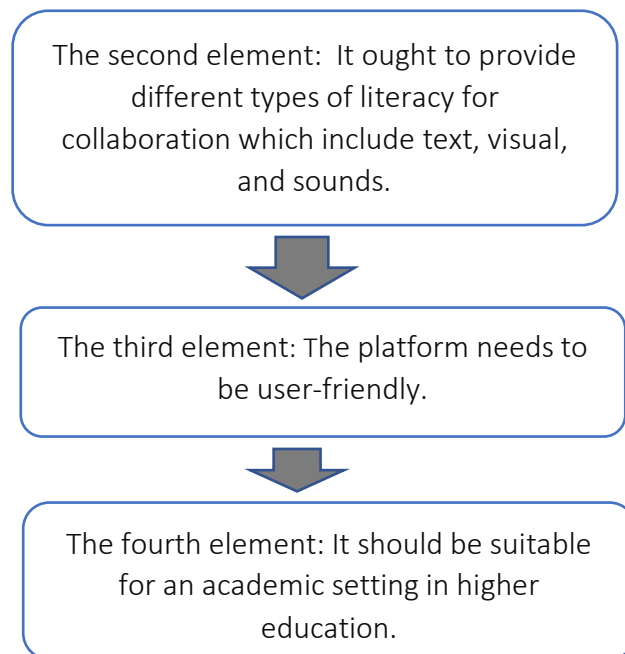
3.7.2 Online Collaboration Tools in Writing

Due to rapid advancements in technology, different digital tools have been used to facilitate authentic social interactions and collaboration among learners. Several free collaborative online platforms are available, but selecting one is not an easy task. Therefore, it is crucial to identify the pedagogical needs and evaluate the different available technological tools in terms of their affordances and constraints prior to choosing a particular tool. To do so, Coelho et al. (2016) suggested four crucial elements to be considered before selecting any tool in the educational realm as seen in Figure 3.3.

Figure 3.3 Elements to be Considered Before Selecting any Tool in the Educational Realm (Source: Coelho et al., 2016)



The first element: The platform should be available to the students.



Ideally, the goal is to select technologies whose affordances have the strongest features necessary to satisfy the principles while simultaneously attempting to minimise limitations that might adversely affect the intended results. In the current study context, a decision was taken by Salalah College of Technology to use the Moodle platform as it would best suit its needs after trying it out over several classroom situations. It is a Course Management System (CMS) (also referred to as a Virtual Learning Environment or Learning Management System) and is today one of the most commonly used e-learning platforms worldwide (Harris & Rausch, 2013). The term refers to Modular Object-Oriented Dynamic Learning Environment (Moodle). Moodle is not only the most widely implemented open source solution in higher education but also the most user-friendly platform available (Alexander, 2006). It is designed to help teachers generate quality online instruction (Brandl, 2005). It is also used to choose which tasks the students want to partake in and how the participation will occur (Littlejohn & Pegler, 2007). Furthermore, this free platform is used to promote students' language skills, as well as enhance interactions among students and their teachers (Al-Ani, 2013).

A review of the existing literature has demonstrated the willingness of both teachers and students to use the Moodle platform, as both groups have already realised its significance in language learning (Al-Ani, 2013; Banerjee, 2011; Henderson, 2010). Moreover, the use of Moodle supports the student-centred approach, since the emphasis of instruction is transferred from the teachers to the learners. Research indicated that Moodle promotes the students' learning inside and outside the classroom setting as well (Al-Ani, 2013; Gedera et al., 2013; Govender, 2009). Hence, many higher education institutions have adopted Moodle as an e-learning alternative to combine face-to-face and online methods, and Salalah College of Technology is no exception. As a CMS, Moodle is characteristically equipped with facilities and tools that promote interaction and collaboration among the learners in the foreign language, such as discussion boards, blogs, and wikis. Additionally, these three digital tools have been widely used within the Moodle platform because of their unique ways of offering a productive environment for promoting student collaboration. They are considered to have substantial promise for supporting collaborative learning. Particularly, they are advantageous when incorporating online collaboration into the writing classroom as discussed in more details in the following sections. Further still, these three online writing tools are closely associated with the learners today where text messages, e-mails, blogs, chats, and forum discussions are widespread methods of day-to-day communication (Miyazoe & Anderson, 2010). In what follows, a little light is shed on the three main tools used for supporting collaboration among learners on the Moodle platform.

3.7.2.1 Discussion Forums

Online discussion forums have been used enormously as a pedagogical strategy and technological platform for developing reflective habits (Levin et al., 2006; Paulus & Roberts, 2006; Ruan & Beach, 2005). The central features of a discussion forum are a means of posting messages, a repository for storing them, and an interface for navigating through the 'threads' of messages and replies (Kear et al., 2010). Discussion forums have expanded the audience so that learners can receive feedback from their peers as well as their teachers. Freidhoff (2008) listed three main advantages of discussion boards which are that (a) students already have access to them, (b) students can use them to be successful on course assignments, and (c) they expand the scope of the audience to include other students in the course. As asynchronous online tools, discussion forums are considered as the simplest computer-mediated communication tools that teachers can easily integrate into their teaching to extend discussions beyond the confines of the classroom (So, 2009). Accordingly, students can acquire enough practice and exposure to the English language since it is taught for a limited period of time in the classroom. In the Omani context, Al-Busaidi and Tuzlukova (2013) reported a positive effect regarding discussion forums on Moodle related to students' achievement at Sultan Qaboos University. The students demonstrated positive attitudes towards discussion forums because of their flexibility and ease to access.

A review of the literature revealed a number of studies which have been undertaken to explore the nature of discussion forums as a mean for online collaboration in an EFL writing context. Table 3.1 illustrates a summary of some empirical studies on online collaboration via discussion forums in an EFL writing

context, indicating the aim of the study, the participants, methodology, and the main findings.

Table 3.1
Studies Regarding Online Collaboration via Discussion Forums in EFL Writing

Aim of the Study	Participants	Methodology	Key Findings
Thomas (2002) explored students' learning outcomes and patterns of interaction within an online discussion forum.	A total of 69 undergraduate students at a university course.	An online discussion forum was designed to provide virtual learning.	The online discussion may be insufficient for the realisation of truly conversational modes of learning.
Al-Ani (2013) explored the impact of the usage of discussion forums on students' achievement, motivation, and collaboration.	A sample of 283 students from all colleges at Sultan Qaboos University in Oman.	Quantitative, Questionnaire.	The results indicate that using Moodle in blended learning has encouraged students' achievement and collaborations.
Qian and McCormick (2014) examined a sample of online discussion data from the course forum.	A total of 467 students on a Chinese course offered by the Open University in the UK.	Quantitative via questionnaire and qualitative via interviews.	Most students had a very positive experience of the forum. They perceived the online discussion forum as a virtual meeting place where they could find support and help, and where they could share their learning experiences, resources, difficulties and frustrations as well as a sense of achievement.
Yukselturk (2010) explored the factors that affect student participation in discussion forum.	A total of 196 Turkish EFL students.	Online survey and semi-structured interviews.	Students' workload and responsibilities, progress of interaction over the Internet taking more time, planned and structured instructional activities are the key factors that affect student participation in discussion forums.
Tan (2017) explored the online discussion forums interactions of students completing an assignment on paraphrasing.	A class of 43 English as a Second Language (ESL) students in a Malaysian university.	Analysis of the students' interaction in the discussion forums.	Students were found to do their assignment in a self-directed and self-regulated manner within cultural and institutional constraints. The findings have recommended integrating discussion forums in a university context to further enhance the writing practices of the students.

The above cited studies on online collaboration via discussion forums in some EFL contexts have highlighted the significance of discussion forums in writing courses by allowing students to communicate with each other and with their teachers online. The results of the numerical simulation have indicated that using discussion forums on Moodle has encouraged students' achievement and collaborations. However, some technical issues like the lack of time and technical support have to be taken into account when using discussion forums. Forums are not the only online technology for learning. In recent years, wikis have evolved as unique tools which have particular promise for collaborative learning. The following section highlights this relatively new tool when used in conjunction with collaborative learning.

3.7.2.2 Wiki

Wikis have been broadly used in EFL classrooms to promote students' English writing (Li, 2017; Mak & Coniam, 2008). Within wikis, students can edit, update, or remove information easily and quickly (Richardson, 2006). Moreover, wikis provide meaningful interactions among students themselves and their teachers (Achterman, 2006). For these interactions to be meaningful, students must understand how to work with their peers and share opinions with them (Mak & Coniam, 2008).

Wikis have several characteristics that are available for students in their online collaboration activities. Achterman (2006), for example, reported that the critical features of wikis are their availability and ease of use, in that, everybody can create wiki sites and they facilitate individual content creation. Wikis might also facilitate the incorporation of reflection and metacognition during content creation. Additionally, wikis allow its users to track their work, offer information about changes in the content, and act as a means for monitoring progress.

Another essential feature of wikis is that the users can create, remove, and share wiki sites at any time (Pifarré & Staarman, 2011). Moreover, wikis provide students with motivation through active participation in collaborative works (Al-Khalifa, 2008; Huang & Nakazawa, 2010). Table 3.2 illustrates a summary of key empirical studies on online collaboration via wikis in an EFL writing context, indicating again the aim of the study, the participants, methodology, and the main findings.

Table 3.2
Studies Regarding Online Collaboration via Wikis in EFL Writing

Aim of the Study	Participants	Methodology	Key Findings
Wichadee (2013) investigated writing improvement after a wiki-based group work.	A total of 35 Thai ESL university students.	Quasi-experimental T-test on single group pre- and post- test.	No significant difference was found between the two groups' writing mean scores and satisfaction with the learning methods. However, students showed positive attitudes towards learning through the wiki.
Kuteeva (2011) examined how the course wiki was used to teach writing for academic and professional purposes.	A total of 14 EFL students at a Stockholm university.	Descriptive text analysis. Meta-discourse analysis based on coding taxonomy.	The use of the wiki for writing activities made students pay close attention to grammatical correctness and structural coherence. Most of the students illustrated that writing on the wiki made them consider their audience.
Li and Zhu (2013) explored patterns of group interaction.	A total of nine Chinese EFL university students (three groups).	Qualitative text analysis based on coding taxonomy and interviews.	Different patterns of interaction influenced the students' perceived learning experiences. The contributing group collectively reported the most learning opportunities.
Kessler and Bikowski (2010) examined collaborative writing process and group behaviour in wiki.	A total of 40 non-native pre-service EFL teachers.	Qualitative Qualitative analysis using wiki revision history function.	Student interaction and language use benefitted from flexible learning environments although student use of these spaces may not be consistent with instructor expectations. The process students engage in as they write collaboratively is more important than the quality of the final wiki.

Aydın and Yıldız (2014) explored collaborative writing tasks.	A total of 34 (16 females, 18 males) EFL learners in a Turkish university.	Focus-group interviews and questionnaires.	The use of wiki-based collaborative writing tasks led to the accurate use of grammatical structures (94% of the time). Also, students paid more attention to meaning rather than form regardless of the task type. Finally, students had positive experiences using wikis in foreign language writing, and they believed that their writing performance had improved.
Lin and Yang (2011) carried out a study to investigate how wiki technology would improve students' writing skills.	A total of 32 students in an English department at a college in Taiwan.	Mixed method observations, interviews, and surveys.	The results demonstrated that most students explicitly showed positive attitudes towards their ability to use wikis and peer feedback in their writing tasks. However, students faced both functional and psychological obstacles to using the new tools, indicating the need to alter their traditional learning practices to embrace new, technology-enhanced learning systems.

The above cited studies on collaborative writing via wikis in an EFL context mainly highlight the significance of the wikis as a collaborative learning tool. They put great emphasis on the positive impact of wikis in the motivation and achievement of students. Also, wikis provide a flexible learning environment where students write collaboratively. In what follows, a little light is shed on another important tool regarding online collaboration.

3.7.2.3 Blogs

Blogs, one of the most used online collaboration tools, first appeared in 1997 as a dynamic online journal that allowed blog owners to continuously add, edit, or delete any topic of their preference while allowing other users to read and comment (Matheson, 2004). From its early days as an online diary or a web-based log ('weblog') of 'links, commentary, and personal notes' (Blood, 2000), blogs have become a substantial learning and social networking tool that can help individuals, groups, and organisations learn in new and interesting ways

(Karrer, 2007). Through blogs, users can update pages with the most recent entry at the top of the page and the previous ones displayed in reverse-chronological order. Blogs have attracted increasing attention in higher education, as they allow students to publish their work instantly to the Internet from anywhere. Blogs can also be used by teachers to post information about their courses and create links to other content areas. Norton and Hathaway (2008) presented a series of crucial affordances of blogs such as strengthening communication and enhancing reflective thinking among students. Similarly, Rubio et al. (2010) suggested that blogs enhance the students' sense of responsibility and social skills. However, the authors have acknowledged that there was a lack of knowledge in terms of the integration of blogs in education. Therefore, students should use blogs to engage in dynamic learning environments where they can find online information, assignments, announcements, news, and feedback (Franklin & Harmelen, 2007). Moreover, blogs give students the freedom to review stories and other feedback over time (Alexander, 2006). To provide more insights, Table 3.3 provides a summary of some empirical studies on online collaboration via blogs.

Table 3.3

Studies Regarding Online Collaboration via Blogs in EFL Writing

Aim of the Study	Participants	Methodology	Main Findings
Sun and Chang (2012) explored how blog features help in facilitating academic writing skills.	A total of seven international graduate students.	Qualitative Content analysis of interviews and blog pages.	Blogs encourage students to engage in knowledge sharing, knowledge generation, and the development of strategies to cope with difficulties encountered in the learning process. Blogs also endow students with a sense of authorship.

Arslan and Sahin-Kizil (2010) investigated the effect of blog-centred writing instruction on students' writing performance.	A total of 50 intermediate English students at a Turkish university.	Quasi-experimental T-test on experiment groups' pre- and post-test and ANOVA.	Blog-integrated writing instruction might have resulted in a greater improvement in students' writing performance than merely in-class writing instructions.
Lin (2015) conducted a study to examine the impact of incorporating a learner-centred blogging.	A total of 18 Taiwanese students at the tertiary level.	A mixed method was used and writing tests were implemented to examine the writing performance.	Blogs helped students enhance their writing skills, motivation, and self-efficacy.
Lee and Bonk (2016) examined the social network of the learners' relationships and online interactions in a writing course.	A total of 23 graduate students at a Korean university.	A mixed method was used.	The social network patterns and values as measured by peer relationships were noticeably changed at the end of the semester, when compared to that at the beginning. The impact of blogging activities on such changes was supported by correlational analysis between the peer relationships in the social network and online interactions through the learners' blogs.
Fageeh (2011) examined the use of a blog in an intermediate level EFL college writing class.	A total of 50 students of the English Department at a Saudi university.	An experimental research method and a descriptive research design.	The students perceived Weblog as a tool for the development of their English, in terms of their writing proficiency and attitudes towards writing.
Wang (2009) examined blog-based online feedback.	A total of 30 Taiwanese university students.	Case study.	EFL students provided feedback in a rather unbalanced manner, highlighting micro-level and weakening macro-level components. Moreover, the accuracy level of comments provided did not significantly predict student revision.

As noted above, blogs have promoted collaboration among students which results in a better improvement of students' writing performance. Also, blogs provide a great environment for peer feedback and revision among students.

In a nutshell, online collaboration tools are assumed to be designed to afford social interaction and collaboration among learners. Students face a wide range of options to interact and collaborate with their colleagues via online tools.

Although the above-mentioned tools share the trait of providing a suitable environment for interaction and collaboration, there are some unique features for each one of them. Table 3.4 shows a summary of the main features of those three tools.

Table 3.4
The Main Features of Discussion Forums, Wikis, and Blogs

Function	Discussion Forum	Wiki	Blog
Definition	A noticeboard or message board where students can start new topics or discussions and respond to existing ones.	An easily edited set of one or more linked web pages that learners can add to or edit. This facilitates collaborative content creation.	An online journal (web log), diary, or news column with posts in reverse-chronological order (latest first) and options for readers to comment on the content.
Updating	Asynchronous – users can post at any time.	Synchronous – anyone can update in real time.	Updated as regularly as the author desires.
Authors	Multiple authors contribute to their own or others' discussion threads.	A wiki is updated by many people, from a local group or different locations.	A blog can have a single author or multiple contributors.
Content	User-generated content initiated and facilitated by the teacher, with an exchange of ideas and views.	Wiki articles represent consensus but can have an associated discussion page, too.	Author posts, reader comments. A blog post is usually one person's opinion, followed optionally by comments. Tends towards the sharing of news, knowledge, or expertise.
Interaction	Many-to-many interaction.	Many-to-many interaction.	One-to-many interaction (posts) and many-to-one responses (comments).

Levels of Access	Normally limited to members of a designated group.	Different levels of access can be set <ul style="list-style-type: none"> • Private—only selected members can view and edit. • Public—anyone can view and edit. • Semi—anyone can view but only selected members can edit. 	Different levels of access can be set, but the initial post can only be edited by the blog owner.
Relevant LMS	Discussion assessing by Moodle.	Create a wiki activity in Moodle.	Blogging in Moodle.

Although online collaboration tools have been identified to be positively correlated to collaboration and course satisfaction in these studies, its correlation to writing performance and revision behaviours still remain relatively debatable. Some concerns have been addressed regarding the effects of using these tools in an EFL classroom. For example, McKeogh and Fox (2009) studied the factors that affect students' motivations to take part in an e-learning programme. The results revealed that most students are in favour of face-to-face lectures due to their doubt about the benefits of online methods of instruction. The results also raised the issue of the lack of time and technical support. Moreover, Perez and Medallon (2015) identified other barriers, such as poor Internet connections and lack of knowledge. Al-Ani (2013) also found that the highest obstacles facing students related to the availability of computer devices, as well as the technical problems associated with using them. Teachers and students are requested to deal with such obstacles and seek other solutions to overcome any other problems that might arise during the use of Moodle. Furthermore, Vonderwell (2003) reported some problems with the students' engagement with each other in dialogues. It might be because of the fact that the students had not met each

other previously and felt uncomfortable making initial contact with other unknown students. These drawbacks raise questions about the use of these tools and the way in which learners make use of them. In consequence, my current study endeavours to examine how online collaboration might make a positive impact on L2 learners' writing performance and revision behaviours. The impact of online collaboration in L2 writing is addressed empirically. The research is based on the understanding of students of online collaboration as a useful technique that promotes their peer feedback and revision practices, which result in achieving the ultimate goal, which in turn, is improving the students' writing performance and revision behaviours and enhancing their interaction with each other and with their teachers. In this vein, feedback is considered as a crucial element contributing to the improvement of students' writing. The next section sheds some light on the significance of feedback on the students' writing.

3.8 Feedback

Feedback is considered as a fundamental element for both encouraging and consolidating learning in education (Hyland & Hyland, 2006). It is widely seen as one of the most essential components in all writing classrooms regardless of the approach adopted by the teacher. Feedback allows students to modify their essays to produce better, later drafts. Narciss (2008) defined feedback as 'all post-response information that is provided to a learner to inform the learner on his or her actual state of learning or performance' (p. 127). The reviewer's evaluations, questions, criticisms, and suggestions help the writer develop a reader-based-prose. The significance of feedback has emerged with the development of learner-centred approaches to writing instruction for composition classes in North America during the 1970s (Hyland & Hyland, 2006). It is

assumed that feedback could motivate the writers to produce improved revised drafts otherwise it does not function as feedback (Hyland & Hyland, 2006). Arguing that not all feedback leads to performance improvement, Li (2017) provided a comprehensive list of basic principles for effective feedback:

Feedback should (a) provide information specifically relating to the learning process; (b) sufficiently frequent; (c) timely as delayed might not be as effective for students' development; (d) benefit students from individualised feedback; (e) tailored to students' language level; (f) motivate and empower students; (g) acted upon, and (h) appropriate for the purpose of the task. (Li, 2017, pp. 157–158)

Over the past years, it seems that feedback in English language writing courses has attracted much attention as one of the most crucial elements to improve the students' writing competencies. Feedback can be regarded quite pertinent for the learners as it teaches skills that help them improve their writing proficiency and produce written texts with fewer errors (Williams, 2003). This can also enhance learning and enable learners to improve their linguistic knowledge and understand more about the skills of writing as a result of receiving feedback. Jahin (2012) argued that all of the aforementioned advantages of feedback support the ultimate goal of encouraging L2 writers to make revisions that result in a better quality of writing. However, the common way for learners to get feedback seems to be obtained from their teachers in the traditional writing classroom setting. In fact, both recent research and practice have supported the use of peer feedback in EFL writing classes (Rollinson, 2005), as its high importance is considered a major factor in promoting interaction and collaboration. Thus, the next chapter discusses the concept of peer feedback and survey empirical studies about this classroom technique.

3.8.1 Peer Feedback

Peer feedback can be regarded as a form of social interaction which motivates learners and produces positive learning outcomes (Rollinson, 2005). It is an activity 'in which students work together to provide comments on one another's writing in both written and oral formats through active engagement with each other's progress over multiple draft' (Hansen & Liu, 2005, p. 1). Peer feedback is not merely helpful for those who receive it but also beneficial to those who provide it since students need to read critically when they are engaged in the peer review process (Cao, Yu, & Huang, 2019; Nicol & Macfarlane-Dick, 2006; Yu & Hu, 2017). If they can help their peers edit their writing drafts, it means they also can edit their own writings.

Peer feedback encourages collaborative learning, contributes to learner autonomy, enhances a sense of audience awareness, and fosters the ownership of texts, and provides exposure for learners to various writing styles (Berg, 1999; Grabe & Kaplan, 1996; Klucsevsek, 2016; Min, 2006; Paulus, 1999; Tsui & Ng, 2000; Uymaz, 2019; Villamil & Guerrero, 1998). It has been widely adopted in many EFL writing classrooms. It involves learners working in groups commenting on one another's writing, and works as a source of feedback that complements teachers' feedback (Ho, 2015).

It is crucial to understand that the full preparation and training of peer feedback to students prior to peer-feedback activities affect the student reviewers' stances, student writers' attitudes, and the quality of students' interactions (Berg, 1999; Levi Altstaedter, 2018; Min, 2006; Storch, 2005). Levi Altstaedter (2018), for example, carried out a quasi-experimental study to investigate the impact of trained and untrained students' peer feedback on their written comment types and writing quality. Based on the results, trained students

provided a significantly higher number of comments focused on organisation and content (global aspects) than untrained students, who provided a substantially higher number of comments based on grammar, vocabulary, and punctuation (local aspects) than trained peers. However, the results of the numerical simulation indicated no differences in terms of increased writing quality between the trained and untrained groups, with both groups showing significantly higher writing quality in the final draft as compared to the first draft. Similarly, Sánchez-Naranjo (2019) conducted a study to investigate the effect of teaching students to provide and consolidate peers' feedback on their partners' L2 writing. The study included 65 students enrolled in Spanish writing classes. They were assigned to one of three groups: 'trained peer feedback', 'untrained peer feedback', and 'a non-peer feedback comparison group'. Each group produced narrative and expository texts that were analysed and scored by three teachers to determine the extent to which the quality of the students' essays improved over the drafts and what types of feedback L2 students incorporated into their revisions. The findings revealed that the students who participated in peer feedback training provided significantly more comments that contributed to substantial gains in final text versions compared with students in the untrained group. Additionally, students who received feedback from a trained classmate and incorporated a higher number of peers' comments into their text revisions were able to effectively use feedback that led to better essay quality. It is evident that training and preparing students for peer feedback can lead to very different results (Topping, 2010). Nevertheless, Topping argued that training alone is not sufficient. The training period needs to be extended (Sluijsmans et al., 2002). Furthermore, an ongoing and developmental training is needed to handle the emergent issues during the implementation process.

Jun (2008) reviewed many studies that investigated the concept of peer feedback, and found that the fundamental purposes of peer feedback in L2 writing instruction are to develop a writer's sense of audience, improve learners' reading and analytical abilities, provide an explicit focus on intended meaning and idea development, and help both the writer and the reviewer envision writing as a process. As a result, this would allow the reviewer to more accurately assess a writer's progress through various drafts of a text. In addition, peer feedback allows students to respond more reflectively and constructively when they discuss the content they are working with. Therefore, they can improve the quality of their writing (Lopez-Pellisa et al., 2021). Furthermore, peer feedback provides learners with the experience in 'expressing, interpreting, and negotiating meaning' through collaboration (Lee & VanPatten, 2003, p. 215). Laurillard (1993) emphasised the significance of feedback in any learning activity as human beings learn through interacting with the external world as well as getting some sort of feedback from it. As previously discussed in Section 3.3.2, the sociocultural theory with its emphasis on co-construction of knowledge through social interaction and communication encourages the integration of peer feedback in educational settings. More precisely, peer feedback practices in writing classrooms can be regarded as one of the tools by which writing skills are developed and internalised.

A review of the literature points out that the experimental data are somewhat controversial, and a general consensus of opinion is lacking among researchers concerning the issue of feedback, especially in an L2 writing context which needs further investigations and research (Denman & Al-Mahrooqi, 2014; Hyland & Hyland, 2006). Over the past two decades, changes in writing pedagogy and insights gained from research studies have transformed feedback

practices, with summative feedback being replaced or supplemented by formative feedback and feedback mechanism in L2 writing being viewed from a sociocultural learning perspective rather than a cognitive stance (Nassaji & Swain, 2000).

Although peer feedback has been widely adopted in EFL classrooms, the effectiveness of this kind of feedback remains questionable (Ferris, 2003; Gielen et al., 2011; Topping, 2010; Tsui & Ng, 2000). An area in question is the capacity of novice writers for helping each other when working in groups or dyads (Nelson & Murphy, 1992). In fact, this type of concern cannot be adequately addressed unless more is known about what happens when students gather to critique and revise their writings. In this vein, Allen and Mills (2014) reviewed some literature about the impact of L2 proficiency on the students' feedback and suggest an important role of L2 proficiency in the process of peer feedback, with increased L2 proficiency potentially leading to more negotiations and engagement. This result suggests that high achievers could learn from the task rather than low achievers because of their high engagement. Besides this, Lundstrom and Baker (2009) investigated the impact of peer feedback on the students' writing ability. It revealed that those who gave feedback made significantly greater gains in writing ability than those who received feedback. If we consider this result in light of the previous research discussed above, high achievers should benefit more from the peer revision process than lower proficiency peers as they should be able to give more feedback than low achievers. In their review of the literature, Hanjani and Li (2014) found four main potential problems inherent in peer feedback practice and they basically lie in the following areas:

- The students' different attitudes and expectations towards collaboration and pair or group mechanisms.

- Students' various beliefs about the essence of teacher and peer feedback.
- Students' inability to detect errors, offer valid feedback, and lack of experience and unfamiliarity with peer evaluation techniques.
- Lack of trust in their peers' writing skills and reservations to each other's advice.

It is evident that most of the published studies on peer feedback have focused on the effectiveness of such practices of students' writing. However, there are not enough studies about the nature of interaction and collaboration that take place when students get together to comment on a piece of writing. Although it may provide important clues to why peer feedback is or is not successful and ultimately may help practitioners make informed decisions as to its classroom use. This issue is especially meaningful when it involves L2 learners, for whom the language of written communication in the classroom is simultaneously the language they are trying to learn. In this research, I endeavour to answer some questions concerning the actual dynamics of peer feedback among EFL learners with a homogeneous language background.

3.8.2 The Impact of Culture on Peer Feedback

The body of literature has revealed the overwhelming role of culture in shaping the process of peer feedback. Although culture has been defined in many ways, King and McInerney (2014) defined it as 'the set of values, beliefs, and traditions that influence the behaviours of a social group and as it pertains to a society's characteristic way of perceiving and interacting with the social environment' (p. 167). Therefore, it is essential to understand cross-cultural similarities and differences in student motivation.

Ahn et al. (2016), for example, suggested that individuals in collectivistic cultures more actively pay greater attention to, and are more influenced by others' opinions, expectations, and behaviours than those in individualistic cultures. Many studies in the collectivism cultures like China and Vietnam (Li, 2012; Lin & Yang, 2011; Nguyen, 2011) supported that students in such cultures are influenced by others around them. Furthermore, students in collectivistic cultures became most motivated when they trusted others such as authority figures and peers who made the choice for them (Iyengar & Lepper, 1999). Besides this, they do their assignments in order to please their parents and teachers. In contrast, students from individualistic countries like Anglo-American children became more motivated in the task (solving anagrams/word puzzles, etc.) when they were allowed to make a personal choice (King & McInerney, 2014).

Moreover, Mahat et al. (2014) found that students from collectivistic cultures tend to rate their academic self-efficacy lower compared to their counterparts in individualistic countries although they often outperform students in individualistic countries (Lee, 2009). This might be due to the fact that they prioritise the teacher's feedback and view the teachers as the sole authority who have the right to act on their texts. For instance, Nelson and Carson (1998), and Ho and Savignon (2007) found that Chinese ESL students rarely criticise, disagree, or claim authority, whereas Spanish ESL students often point out problems for further revision in their peers' writing. Nelson and Carson conducted a study to investigate three Chinese and two Spanish-speaking students' perceptions of their interactions in peer feedback groups in an ESL composition class. The results demonstrated that Chinese students avoided critiquing their peers' papers as they were concerned not to hurt their peers' emotional feelings. Students were less concerned for themselves and more concerned for others.

They noted that whilst engaging in peer review, Chinese students' participation is limited because they do not want to vocalise thoughts and ideas that may embarrass or disagree with the writer's ideas. Furthermore, they acknowledged that their limited language proficiency and their inability to offer valid alternatives did not allow them to provide feedback in many situations. Finally, the findings of their study convinced the researchers to assert that although the students perceived the goal of writing groups as criticising each other's drafts, the Chinese students aimed at maintaining group harmony and avoided generating conflict within the group. This perspective was in sharp contrast with individualistic cultures where the group works more often for the benefit of the individual writer than for the benefit of the group (Nelson & Carson, 1998). They argued that ESL students' writing performance is being affected to some degree by the social situations in which they find themselves in. They stressed that while peer reviewing is well received and delicately practiced by the students in an L1 context due to its compatibility with individualistic cultures, it may be problematic for ESL students who come from collectivistic cultures.

3.8.3 Online Peer Feedback

With the widespread use of networked computers and the advent of technology, there has been an increasing emphasis on the integration of technology into EFL writing instruction. The potential affordances of technology about supporting the quality and quantity of feedback practices have been highlighted in various recent studies and publications (AbuSeileek & Abualsha'r, 2014; Levi Altstaedter, 2018; Noroozi et al., 2016). The online platforms provide students with rooms where they can communicate and share their ideas to solve problems and complete tasks together. Also, these platforms can develop both

their thinking and social skills through the use of language, so that learning effectiveness can be greatly enhanced by increased communication (Venville et al., 2000). Although most of the research shows that students enjoyed the process of interaction, some of them did not find peer feedback and responses useful or helpful.

In assessing students' responses about the use of both online and face-to-face feedback, several attempts have been made to study the discourse used by EFL students in an online interaction, comparing it with face-to-face discourse (Crews & Butterfield, 2014). To exemplify, Ho (2015) carried out a study to investigate the use of face-to-face and computer-mediated peer feedback in an EFL writing course in Taiwan to examine how different interaction modes affect comment categories, students' revisions, and their perceptions of peer feedback. The results revealed that there were significantly more global alteration comments and fewer local alteration comments in face-to-face discourse than the computer-mediated mode. While the participants liked online feedback over handwritten comments, they felt face-to-face discussions were more effective than online chat due to the affordance of face-to-face talk (e.g. immediacy and paralinguistic features), that cannot be easily replaced by electronic chat. In a similar vein, Tuzi (2004) conducted a study to investigate the relationship between online peer feedback and its impact on second-language writers' revisions. The students wrote, responded, and revised on a database-driven website specifically designed for writing and responding. In addition to online peer feedback, students also received oral feedback from friends, peers, and tutors. The findings showed that online peer feedback had a greater positive impact on revision than oral feedback. It was also found that the trained students responded more effectively to the areas of concern in writing and giving feedback. However,

the results showed that students preferred face-to-face feedback to online feedback, though they found that online feedback was useful in revision.

On the other hand, Chen (2016) provided an in-depth comparative review of the features and differences between traditional modes of feedback and online feedback in a Chinese context. The results illustrated that electronic feedback in the writing classrooms decreased the threatening atmosphere compared with face-to-face interactions. Additionally, online feedback was considered to be more flexible mode of feedback than conventional feedback. Furthermore, Chang (2012) reported that online peer feedback can serve as a less pressured platform for students to make critical comments. Chang further posited that learners in an asynchronous environment could provide comments and edit writing mistakes at a convenient time and at their own pace. Bloch (2004), investigated the preferences of undergraduate students for both face-to-face and online learning feedback, and found that the most positive impact on face-to-face learning is interaction through class discussions, group projects, and other types of active learning. The data further indicated that the most positive impact on online learning experiences was the class structure that supports flexibility, organisation, and clear expectations. Choi (2014) pointed out that the engagement of students by providing peer feedback in an online environment is favourable in writing since face-to-face peer feedback is considered a time-consuming process.

In short, the above research has provided some assurance that students generally found the use of online peer feedback a useful tool for creating greater interaction between writers and their intended audience. These findings are consistent with the literature in the area that has emphasised the benefits of using online peer feedback in similar EFL writing contexts. However, it is important to

note that not all students found peer comments useful to improve their work. For example, Tsui and Ng (2000) and Hamouda (2011) discovered that students mistrust their peers' feedback as they believe that their peers are not knowledgeable enough to detect and correct writing mistakes. It also appears that feedback training is essential to help students become effective responders. It is widely acknowledged that students who themselves need feedback cannot give feedback to others as Graner (1987) described it as 'the blind leading the blind with unskilled editors guiding inexperienced writers in a process neither understands well' (p. 40). The current research attempts to understand and demonstrate by reference to recent studies how and when the use of peer feedback through online collaboration can provide a better environment for feedback that can, consequently, result in better writings by the students. Therefore, some classroom practices in terms of the use of peer feedback have been presented in this research.

3.9 Revision

As discussed in the earlier sections particularly in Section 3.8, the ultimate goal of providing feedback by reviewers is to enable the writers to recognise the potential ambiguities in their texts and to help them revise their papers to make them more reader-based prose. Revision, or the transformation of text through multiple drafts, is assumed as a necessary element in achieving quality in writing (Zamel, 1983). It can be said that a piece of good writing requires revision, which means that all learners need to rewrite their work (Tsui & Ng, 2000), a process in which the comments of others can be especially useful. However, revision behaviours vary from one writer to another based on their experience and skills. For example, skilled writers build and adjust their intentions throughout the

composing process, while novice writers think most about what comes next and rarely revisit their goals (Scardamalia & Bereiter, 1987). As regards attention afforded to revision, de Larios et al. (2008) investigated how time was allocated to various composing processes. They found that the time allocated for revision ranged from 6% at the lowest level to 16% of the time at the advanced level. Obviously, it is noted that the experienced writers allocated more time for the revision process as they recognise the crucial role of revision in their writing. In essence, experienced writers strive to develop their understanding of the topic, as well as to achieve their linguistic and rhetorical goals (Scardamalia & Bereiter, 1987).

Traditionally, writing was viewed as a linear process with revision being one of the stages performed after writing as a tidying-up activity mainly focusing on mechanical mistakes like grammar, punctuation, spelling, and dictation. This simplistic view of composing is no longer seen as appropriate (Faigley & Witte, 1981). In fact, it is considered a significant stage in the writing process as writing is a recursive process in which the writers should be able to go back to edit and revise their work so as to reorganise, discover, and remake new ideas (Soven, 1998; Zamel, 1983). This is consistent with the study of Myhill and Jones (2007) who considered revision as a complex process that takes place at every stage of the writing process and that it is not only a post-textual production activity. However, experienced and inexperienced writers may behave differently in terms of their revision strategies.

Revision is not an easy task for students as they face various difficulties in becoming competent at the revision process, however, efforts have been made to categorise revisions. Faigley and Witte (1981), for example, developed a widespread taxonomy which made a distinction between two types of revisions:

those that influence the meaning of a text known as 'text-based changes' and those that do not change the meaning of the text known as 'surface changes'. They further classified the surface change into the following subcategories: addition, deletion, substitution, permutation (rephrasing information), distribution, consolidation, and reordering. The text-based changes, in turn, were further divided into micro-text-based changes and macro-text-based changes. They investigated the revision of advanced and inexperienced writers. As a result, they found that advanced students made more revisions during composing their first drafts compared to novice writers indicating different composing strategies that skilled and unskilled writers utilised in the process. Furthermore, inexperienced learners concentrate on surface amendments, while expert writers make more meaning changes during composition activity (Sharples, 1999). Another important classification of revision was based on categorising revisions on a linguistic level (e.g. words, clauses, sentences) and on a level of operation (e.g. addition, deletion, substitution) (Sharples, 1999; Sommers, 1980). Inexpert writers are expected to face some difficulties in revision as it requires sophisticated understanding of how the reader would perceive the writing, how effectively the text would accomplish its task goals, and how it would suit the readers (Sharples, 1999). Therefore, it is essential for writers to understand the readers' possible reception of their writing (Myhill & Jones, 2007). Writers should bear in their minds the interests and expectations of the potential readers of their texts.

In terms of the revision strategies, Sengupta (2000) carried out a longitudinal quasi-experimental study to investigate the impact of such strategies on the performance and perceptions of EFL students in Hong Kong. Two groups of students were selected for the study where a control group did not receive any

explicit revision training, while the other experimental group received explicit revision training on how to develop more reader-friendly papers. Overall, it was found that the revision groups performed better than the traditional group and got better grades in their post-study writing assignment. The results of the numerical calculation also suggest that the revision group expressed positive views towards their new learning experience, and they thought more globally about writing. Unexpectedly, however, they were more in favour of the traditional pedagogy. Interestingly, the interviews showed that students who received revision training found that the instruction was useful just in terms of preparing them for the exam and familiarising them with the teachers' criteria for grading. Based on the results, the researcher recommended inclusion of revision instruction and multi-draft writing in L2 writing courses as an alternative to traditional pedagogy. Pertinent to this study is that revision in L2 requires more time and occurs more frequently than revision in L1 (Hall, 1990). Hall further pointed out that teaching revision in L2 writing must include strategies for helping students to personalise their revision strategies and pay more attention on the process than on the product.

Another substantial study by Hanjani and Li (2014) highlighted a significant kind of revision which they called collaborative revision. They investigated EFL students' interactional dynamics during a collaborative revision activity at an Iranian university. The study also involved an investigation of the impact of this jointly performed task on learners' writing performance. In pairs, the participants attended one collaborative revision session during which they jointly revised their argumentative texts utilising the feedback provided by their teacher. The results illustrated that the students used many techniques in their negotiations including scaffolding. The scaffolding technique was mutual and both partners benefited from the joint revision task regardless of their level of L2 writing proficiency.

Therefore, the researchers recommended that collaborative revision can be incorporated in EFL writing pedagogy as a method to improve writing and revision skills.

As mentioned above, EFL writers should write for real communication, so a response from actual readers would encourage the writers to be more attentive to the demands of the readers. At the same time, it would also promote mutual learning between learners as they would be involved in a 'highly complete socio-cognitive interactions involving arguing, explaining, clarifying and justifying' (Rollinson, 2005). However, reviewing the literature illustrated that there is no known study that exists which examines the impact of students' online peer feedback on their revision practices in their multiple drafts of writing in an L2 context. As it has been shown above, peer feedback and revision tasks are interrelated as both are derived from the sociocultural theory of learning. In this respect, this research would look at these tasks from the sociocultural theory in an EFL writing course by examining the students' online collaboration and peer feedback, and their impact on the students' writing performance and revision behaviours.

In this vein, it seems that there is considerable overlap in the terms of writing behaviour and revision behaviour. However, writing behaviour covers all observable aspects of what writers do. This would cover planning, transcribing, and revising but also strategies for idea generation, or what to do when the writer gets stuck, also patterns of pausing, thinking, and rereading. In a collaborative activity, it would also cover talking about writing, listening to others talk about writing as well as commenting on what others say. On the other hand, revision behaviour is the same as the above but focuses exclusively on changes to the text (remembering that even planning can be revised).

3.10 The Impact of Peer Feedback on Revision

If both peer feedback and revision are related in the composition process, what role can peer feedback play in the learners' revision? As it was noted before, one of the most significant, current discussions in EFL writing is the extent to which peer feedback might affect revision. Different writing approaches view such discussions through their own lenses. For instance, the process approach views revision and feedback as integral components of writing instruction (Zamel, 1982), as they provide students' with different opportunities to understand their readers' expectations and allow them to address those expectations in the subsequent revisions of their written works (Reid, 1994; Susser, 1994). This emphasis on audience, feedback, and revision (Raimes, 1991; Susser, 1994; Zamel, 1982; 1983; 1987) supports the increased use of peer collaboration (collaborative writing, peer feedback, revision) in composition classes (Ferris, 2003). The genre model, on the other hand, perceives writing as a social activity through which the writer tries to approximate what is expected by the discourse community (Silva, 1990). Importantly, the process genre approach considers writing as a 'dynamic set of social, linguistic and cognitive processes that are culturally motivated' (Kern, 2000, pp. 5–6). This approach strives to integrate the four elements: the form, the writer, the content, and the reader. Hence, L2 students' need for linguistic knowledge about the texts is emphasised to highlight the importance of the skills involved in writing and acknowledge that writing is a social practice with special attention being paid to purpose and audience. Within this contextual framework, the peer reviewer collaboratively negotiates with the writers and actively supports them by providing feedback to construct meaning through multiple drafts.

Writing in EFL classrooms has witnessed a shift from a product, teacher-directed pedagogy to a process approach, and student-centred instruction, which facilitates peer collaboration, evaluation, feedback, and revision during the writing process (Ferris, 2003; Hansen & Liu, 2005; Tsui & Ng, 2000). Bearing in mind the need for a more appropriate approach in writing classrooms, Al-Hazmi and Schofield (2007) provided three techniques associated with a more learner-centred approach to writing which includes the following: writing multiple drafts, employing a writing checklist for revision, and using peer feedback. In addition, Mendonca and Johnson (1994) found that peer feedback can enhance the sense of revision and lead to a better quality of work. More precisely, feedback goes beyond that as it is the core feature in the revision process, playing a vital role in encouraging the interactions between the writer and the audience (Liu & Sadler, 2003).

Empirical studies that investigated the impact of students' online collaboration via peer feedback and revision have provided little evidence of the way in which students make use of their peers' feedback in their revisions. It is, therefore, extremely crucial to explore the possibility of providing alternative methods to the existing L2 writing pedagogy in L2 composition classes through the incorporation of online peer feedback and revision techniques into EFL writing courses, by drawing on sociocultural perspectives to L2 learning.

3.11 Mutual Scaffolding

Peer feedback, as noted above, allows students to negotiate the text meaning, learn collaboratively, and construct their knowledge. In simple terms, peer feedback provides students with a more conducive environment in order to learn from each other by means of receiving and giving feedback (Hyland &

Hyland, 2006) and promotes their writing competence via mutual scaffolding (Tsui & Ng, 2000). In addition, feedback aims at offering instructional scaffolding that improves the students' learning and provides them with the opportunity to achieve and meet their desired learning goals (Clark, 2010). More precisely, Bruner (1983), a cognitive psychologist, described scaffolding as 'a process of setting up situations to make novice's entry into the task easy and successful and then gradually pulling back and handing the role to them as they become skilled enough to manage the task' (p. 60). In a similar description, Shepard (2005) demonstrated the significance of scaffolding as supportive bridges between students' current learning and what they could achieve. The ultimate goal is to allow students to construct their own knowledge without any assistance (Sun et al., 2011).

More studies have highlighted the significance of identifying the nature and the form of the scaffolding strategies which would be very helpful in the process of learning, as well as providing students with supportive scaffolding as instructional aids (Devolder et al., 2012; Villamil & De Guerrero, 1996). Moreover, the sociocultural theory holds that writing and learning are social processes and peers can mutually scaffold each other to improve their writing skills (Storch, 2002). This theory supports mutual scaffolding between the reviewer and the writer in the writing composition classes that aim to produce meaningful texts and develop the competence of the students' writing skills. Although Thorne and Lantolf (2007) argued that considering the concept of ZPD and the notion of scaffolding as being equivalent is a misconception; cognitive apprenticeship which, for the most part, belongs in the invisible side of learning 'draws heavily upon Vygotsky's (1978) work in socio-cultural theory' (Kopcha & Alger, 2014, p. 49).

In relation to students' learning experiences and their other mindful practices, a question might be raised about the nature of the novice-to-expert guidance they need to receive. There can be fixed and adaptive approaches to scaffolding (Azevedo et al., 2004). Scaffolding is a delicate responding process occurring while students build on their competencies. The delicacy of scaffolding lies in the adaptive guidance, neither strong nor poor, through which students can be empowered to take risks, become creative, direct their work, and engage in 'mindful' learning. Scaffolds are 'tools, strategies, and guides that can support students' (Azevedo et al., 2004, p. 204) to make the process more 'mindful'. To make the learning environment better, Bamberger and Cahill (2013) recommended adding a more practical side as they mentioned a number of scaffolding strategies 'such as diaries, gallery walks, and storyboards used in the middle-school context to document the process' (p. 183). In this regard, Azevedo et al. (2004) introduced four scaffolding types in hypermedia environments, with reference to Hannafin et al.'s (1999) work: '(a) conceptual, (b) metacognitive, (c) procedural, and (d) strategic' (p. 346). In the case of writing, they seem to relate ideas in the text, understanding your own writing strengths and weaknesses, planning what to do next and being aware of revision strategies (i.e. revision for meaning, revision for accuracy, revision for impact) to scaffolding.

As a vehicle for writing, online collaboration provides distinctive tools for scaffolding. Demetriadis, Papadopoulos et al. (2008), for instance, found that scaffolding via online tools has positively affected students' achievement. Further exposition on the advantages of online scaffolding is made by Hussin (2008) who has reported the fact that online learning positively improves language proficiency. Consequently, learners are expected to be more motivated to work together in accomplishing tasks. Moreover, Laal and Ghodsi (2012) argued that

learners work more with each other in developing a shared product rather than listening as a group to the teacher or performing the given tasks independently. In addition, they noted that learners developed critical thinking skills when they shared expertise with each other.

However, the literature showed that although there is an awareness of the importance of developing learners' critical thinking skills and that this is increasing among instructors, there is a lack of teacher training in how to teach critical thinking in at least some Middle Eastern nations (Chouari & Nachit, 2016). In this context, Al-Mahrooqi and Denman (2020) conducted a recent study to assess the critical thinking skills of college-level students at Sultan Qaboos University in Oman. The test included 36 questions across six-item groups that were associated with five critical thinking principles. The findings indicated that the participants have only developed critical thinking skills to a limited extent. The study calls for wide-scale reform across all educational levels to develop the learners' critical thinking skills to the levels required for their future educational, professional, and social success. Critical thinking is significant in developing L2 writing skills as students need to present an effective argument in their essays. Online collaboration allows students to become less stressed as their peers can provide assistance to them, thus reducing their sense of individual exposure. It can also help to cultivate the sense of interdependence, which encourages learners to engage in the task and help one another in the writing and revising processes.

3.12 Students' Perceptions of Online Collaboration

The rapid development of technology has made tremendous changes in the structures of society and education. Technology not only provides students

with a chance to control their learning process but also gives them ready access to a massive amount of information (Lam & Lawrence, 2002). Students' perceptions and acceptance of technology are considered very vital aspects in adopting new technologies into their learning. The Technology Acceptance Model (TAM) suggests that if the users believe that the use of technology can enhance their performance, they would have a positive attitude towards it, and this attitude would further encourage the use of technology (Li, 2017). In this respect, a considerable amount of literature has illustrated that students' perceptions about online collaboration environments might be affected by a variety of factors. To exemplify, Lu et al. (2012) found that several factors affected students' satisfaction in blended learning that are based on TAM. These factors include students' characteristics, instructor characteristics, course characteristics, infrastructure characteristics, perceived usefulness, and perceived ease of use. Similarly, using TAM helps in identifying factors that affect users' acceptance based on two beliefs including perceived usefulness and perceived ease of use (Marangunić & Granić, 2015). Perceived usefulness is described as 'the degree to which a person believes that using a particular system would enhance his or her job performance' (Davis, 1989, p. 320).

These potentials have created ample speculations about creating an educational environment that allows students to use new technologies to provide learners with new approaches and mixed method skills that can foster their learning. For instance, Fang (2010) carried out a study to explore Chinese EFL college students' perceptions about computer-assisted writing programmes. The results have disclosed that the majority of students held positive attitudes towards using computers as a writing tool, but they were less positive in terms of its use as an essay grading tool. It has also been found that using computer-mediated

feedback aided students to revise their writings, which showed a positive effect on the development of their writing skills. In a similar study, Alaidarous and Madini (2016) performed a mixed method study to investigate Saudi female students' perception of learning English in a blended learning environment via a learning management system. The study also explored factors that influence students' perception in the blended learning environment. Although students faced some challenges while using technology, they generally showed strongly positive perceptions towards blended learning. The students mentioned some factors that exerted influence on their perception such as the easiness and relevance of the course content to their real lives, the instructor quality, and the type of activities used. Furthermore, Al Zumor et al. (2013) explored Saudi EFL students' perceptions towards the advantages and limitations of learning management system via BlackBoard at King Khalid University. The results of the numerical simulations have illustrated positive perceptions towards the benefits of learning English in such an environment. Moreover, it was found that blended learning provides an environment for more effective employment of indirect language learning strategies such as meta-cognitive strategies (arranging and planning learning), affective strategies (confidence enhancement), and social strategies (cooperating with others). However, some limitations were addressed such as technical problems, lack of training for students, insufficient number of laboratories. In a similar context, Ja'ashan (2015) conducted a case study to explore Saudi EFL students' perceptions and attitudes towards learning English through a blended learning environment in a Saudi university. The results have illustrated that students showed positive perceptions towards learning English in blended learning. The students strongly believed that their environment had

helped them to promote their English language skills, as well as making the learning experience more fun, collaborative, and interactive.

In the Omani context, an important study was conducted by Denman and Al-Mahrooqi (2014) that investigated the perceptions and practices of EFL Omani university students on peer feedback in their English writing classrooms. The results revealed mostly favourable perspectives of peer feedback, although a number of limitations were identified as having a negative impact upon its effective implementation. In order to address these issues, the researchers have proposed a need for more steps for making peer feedback more effective in Omani university writing classrooms.

3.13. Summary

Earlier research investigating Computer Assisted Language Learning (CALL) has allowed us to have a better understanding of the use of online collaboration in the EFL writing context. Summing up the literature reviewed in this chapter, online collaboration can be a useful aid in EFL writing classrooms. Through the incorporation of an online collaborative learning mode, it is believed that students can achieve effective writing outcomes. Research findings suggest that learners should use online collaboration to enter into a new realm of collaborative learning and a new knowledge creation process. The literature regarding online collaboration has also underlined the importance of peer feedback and revision practices that can empower EFL learners to be effective writers.

Overall, although a growing number of studies have been carried out in the EFL context to probe different aspects of online collaboration, scant research has examined the pedagogical affordances of integrating online collaboration into

the learning of writing and its processes and the extent to which online collaboration as a collaborative learning technique into EFL writing classes might impact students' writing performance and behaviour. There has been little discussion about the way in which online collaboration might support students to implement peer feedback into their revisions to their writing, and the extent to which peer feedback and revision can facilitate mutual scaffolding among EFL students (the reviewer and the receiver). Students' perception and understanding of online collaboration need to be investigated to explore the impact of such an approach. Thus, there is a need for further research to explore how students employ online collaboration in their writing classrooms.

Chapter 4: Methodology

4.1 Introduction

This chapter provides a detailed description of the procedures followed to undertake this study. It starts with a brief explanation of the research aims and questions. Then, it discusses the theoretical framework underpinning the study by giving a thorough explanation of the ontological and epistemological assumptions that guided the researcher's decision to use an interpretive approach and a case study methodology. Next, an explanation of the methods of data collection and details about the participants in the study are provided. The section after that highlights issues pertaining to the ethics of the current study, in addition to the pilot study and the criteria of trustworthiness in relation to the methodology and methods of research. In addition, the methodology chapter sheds light on the process of designing, developing, and implementing an online collaborative environment for writing classes at the tertiary level in the Omani context. The focus of this methodology is to study the impact of integrating technology in the classroom pedagogic practice in Omani students' writing practice. If it does have an impact on students' writing practices then this gives an opportunity to investigate how students collaborate, what aspects of the writing process respond to collaborative strategies, their views about the value and challenges of working collaboratively, and what enables them to engage effectively in the process of online collaboration.

4.2 Research Aims and Questions

The broad aim of the current study is to explore the way in which online collaboration among EFL students might enhance their peer feedback and revision practices with the ultimate aim to improve their writing. This research contributes to the ongoing '*debate*' about the impact of new technologies on

students' writing practices. This was done by examining the topic from the students' own perspective, which is often neglected in many EFL settings. A case study in the Omani context was conducted to answer the research questions in the light of the most recent trends in the educational system in Oman, towards the integration of new technologies to provide collaborative learning environment among students. Indeed, students are the main participants in this study, since they are the core recipients of the changes provided by their educational institutions. To determine the extent to which the most recent changes have met the needs of students, the core of the research focuses on students' understanding of the impact of these changes (online collaboration) in improving their writing practices. Hence, it investigated the extent to which they see the reforms as having contributed to improving their practice in terms of how they use peer feedback and the sophistication of their revision practices. The study also attempts to explore the Omani students' understanding of the affordances and challenges of online collaboration in the tertiary level classrooms and identify their impact on their writing practices in terms of their peer feedback and revision practices. Although this is not an intervention study, participations in the study offered opportunities for students to explore their own writing choices and revision practices and this might be of educative value to the students. The study further investigated the extent to which online collaboration affected students' writings in terms of changes in their writing and also changes in how they talk about revision and online collaboration.

The nature of the students' online collaboration and their understanding of its affordances in the light of the practice in a particular sociocultural context were examined in depth to provide insights into the students' practice related to their writing activities. In addition, the study aims to understand the extent to which

online collaboration supports students to draw on peer feedback to inform their revisions and the extent to which this results in supporting their writing. It also attempts to explore how online collaboration impacts the students' writing performance and revision behaviours, as well as to understand, if and how, online peer feedback might facilitate mutual scaffolding between students. To achieve these aims, the study seeks to answer the following research questions:

Q.1. What do students understand about the affordances and challenges of online collaboration in supporting EFL students' writing?

Q.2. To what extent does online peer feedback as a collaborative learning technique used in EFL writing classes impact students' writing performance (quality)?

Q.3. To what extent does online peer feedback as a collaborative technique impact students' revision behaviours?

Q.4. How does online peer feedback facilitate mutual scaffolding between EFL students (contrasting the two roles of reviewer and receiver)?

The research questions were intensely investigated through many instruments. The study is positioned within the interpretive paradigm, not seeking to test a specific hypothesis but rather to generate themes and examples which unveil different ways that students work collaboratively to inform, and hopefully, to improve their writing practices. The study also represents the first attempt to understand the relationship between online peer feedback and students' revision practices in the Omani context.

To address the research questions, the views of Omani EFL students were elicited through a number of instruments: in-class and online observations, semi-structured interviews, focus groups interviews, and analysis of students' writing samples.

4.3 Theoretical Framework

A theoretical framework for research is crucial when conducting any investigation as it aids the researcher to reflect on a greater breadth of research analysis (Anfara Jr & Mertz, 2014). It is the intellectual structure which guides the study and informs the researchers' view of the data (Troudi, 2014). Richards (2003) argued that ignoring this important aspect may lead to severe confusion and a waste of time. Moreover, Pring (2015) pointed out that 'without the explicit formulation of the philosophical background, researchers may remain innocently unaware of the deeper meaning and commitments of what they say or of how they conduct their research' (p. 90). Grix (2010) also highlighted the need for the researchers' knowledge of philosophical assumptions because having a clear theoretical standpoint at the outset of the study helps researchers to support their perspectives and evaluate others' work. He further added that a clear theoretical stance allows the researchers to justify their choice of methodology and methods and understand their interrelationship. In this vein, Troudi (2014) illustrated the distinction between the theoretical framework and the paradigmatic framework as it may not always be clearly discernible. He argued that the theoretical framework 'reflects where you stand intellectually vis-à-vis your research questions and the way you are going to look at the data' (p. 316). Crotty (1998) suggested that researchers should consider two key aspects at the beginning of their research, namely the choice of methodology and the justification of their decision. He further stressed that researchers should eventually be clear about two other essential elements related to their views about reality that they bring to the study and the way in which they will approach their research problem. Thus, developing a theoretical framework before conducting an investigation is essential and beneficial, as it helps to discern the philosophical foundations of

the research. In other words, the philosophical foundations are typically represented as a stance towards the nature of social reality (ontology) and views on knowledge and its generation (epistemology), which influences the methodology adopted in any given research investigation (Crotty, 1998; Grix, 2010; Richards, 2003).

The ontological and epistemological foundations of an investigation are often discussed along with the methodology, with reference to a particular research paradigm, which Guba and Lincoln (1994) defined as 'a set of basic beliefs that deals with ultimate or first principles' that are 'based on ontological, epistemological, and methodological assumptions' (p. 107). These beliefs have a tremendous impact on researchers in a particular discipline about what should be studied, how research should be done, and how results should be interpreted (Bryman, 2016). Troudi (2014) emphasised the significance of establishing a research paradigm in which researchers are expressing their position vis-à-vis the researched phenomenon. Therefore, the next section sheds light on research paradigm.

4.4 Research Paradigm

A research paradigm is a framework of a particular worldview, a general perspective, a way of breaking down the complexity of the real world, beliefs, or assumptions that a researcher draws upon in understanding and interpreting knowledge (Patton, 2002) and which ultimately lead to the selection of particular philosophical positions (Troudi, 2014). It is argued that the paradigm a researcher adopts affects the selection of the focus of the study, the way the topic is investigated, and the way the data are interpreted (Bryman, 2016). Thus, recognising the most suitable paradigm determines to a great extent the

significance of the study and the importance of its findings.

In general, three main paradigms, namely scientific, interpretive, and critical theory, inform the investigations performed by educational researchers. This research project can be seen as interpretive by nature, as it is closely aligned with interpretivist ontology and epistemology, given that it seeks to capture the participants' understanding of online collaboration on their writing practices. Additionally, students' perspectives are explored, as they are fundamental in the collaboration process. Furthermore, it is positioned within the interpretive paradigm, which views knowledge as a human construction, as it seeks to explore the students' experiences and practices in the light of a sociocultural context and circumstances (Hammersley, 2012). Interpretive inquiry does not start with a set of assumptions to be tested out, but instead focuses on 'learning the meaning that the participants hold about the problem or issue, not the meaning that the researchers bring to the research or writers from the literature' (Creswell, 2007, p. 39). The study does not aim to produce generalisable results, but, recognising that 'the uniqueness of each context does not entail uniqueness in every respect' (Pring, 2015, p. 119). It provides an understanding of the students' experiences and practices which reflect some of the range present amongst students and suggests trends within the sample which may be indicative of those amongst the wider community. It thus contributes to our understanding of how students view online collaboration, and the way in which they interact online. Since this study considers the EFL students' understanding of the use of online collaboration and explores the impact of such collaboration on their peer feedback and revision practices, I believe that the research is informed by the interpretivist view. It is concerned to understand how the students construct the value of these strategies, and how they are integrated into their own writing practices, within a

particular social and cultural context.

Many methods have been employed to conduct the interpretive approach, but all of them share the same philosophical assumption, that reality is constructed and this is understood by exploring how individuals interpret and make sense of their worlds and their experiences (Denzin & Lincoln, 2011; Hammersley, 2012). It can be viewed that interpretivism constitutes a significant shift from the scientific research paradigm, as it endeavours to understand and interpret human and social realities rather than to measure and predict it. According to Schwandt (2015), interpretivism is primarily concerned with studying phenomena within their natural settings to understand interpretive phenomenon concerning the meanings people bring to it. In other words, interpretivists try to understand human concerns, feelings, and morals that positivism has failed to examine as it has emphasised the general over the particular (Goodsell, 2013). The interpretive paradigm emphasises the individual differences in human behaviour since it is argued that humans perceive and interpret the world in various ways. These different individual interpretations of social phenomena in turn influence both individual and social behaviour. Consequently, interpretive research does not see humans as responding merely to simple stimuli, but as making decisions based on their individual knowledge, experiences, intentions, and interpretations of social reality. Thus, the purpose of interpretive enquiry is to advance knowledge by providing interpretations which, according to Cohen et al. (2007), are sometimes contradictory. Ernest (1994) contended that individuals' perceptions are starting points in studying any social phenomena. Therefore, the primary aim of interpretive enquiry is to enhance knowledge by providing arguments that are sometimes contradictory and seek to understand the contradiction (Cohen et al., 2007).

Several characteristics of an interpretive study and set implications to conduct this type of research have been addressed in the literature by many researchers (Cohen et al., 2007; Creswell, 2007; Guba & Lincoln, 1994). These features allow the researchers to create a highly interdependent and logical description, which assists them in conducting a well-designed, rigorous research method. This research is consistent with other studies that have implemented a similar approach, and includes the following features: undertaking the study in a natural context (writing course); understanding the way in which social reality is constructed (use of online collaboration in the writing classes); making an interpretation of what is found (students' online collaboration and their understanding of its affordances), rather than trying to explain and seek causal and mechanical relationships; and finally, concentrating on particular cases, rather than attempting to create generalisations.

As noted above, the research paradigm should be chosen according to the answers gained from the ontological, epistemological, and methodological assumptions inherent in the research (Grogan & Simmons, 2012). These three stances are discussed in more detail in the following sections.

4.4.1 Ontology

Many researchers would argue that ontology is the starting point of research. According to Blaikie (2009), ontology is construed as claims and assumptions that are made about the nature of social and political reality, claims about what exists, what it looks like, what units make it up, and how these units interact with each other. Moreover, it can be described as the 'study of being' and concerned with 'what is' with the nature of the existence (Crotty, 1998, p. 10). Ontology is concerned with studying the nature of reality and what there is to

know about it (Creswell, 2007; Guba & Lincoln, 1994). Different ontological stances can be adopted depending upon the reality that researchers aim to discover.

The nature of reality in the philosophical assumptions of educational research can be seen through at least two ontological views, namely realism and relativism. The first is defined as 'the view that there is a reality, a world, which exists independently of the researcher and which is to be discovered' (Pring, 2015). The latter claims that there is no absolute truth but there are relative subjective values. By taking the differences in the participants' perspectives and their explanations of the issue into account, I believe that the ontological stance of the current study is relativism. The multiple perspectives about the students' understanding of the affordances and challenges of online collaboration in their writing exist independently of the researcher. They are constructed by the participants according to different sociocultural variables and positions and need to be explored. Accordingly, multiple interpretations that show how the world is made up of multiple constructed realities are provided (Pring, 2015; Richards, 2003). For example, Richards (2003) contended that people live in a world of ideas, and they construct their physical and social world through those thoughts. This meaning that is constructed by the individual forms the concept of reality in this school of thought, and in fact, lies at the heart of interpretivism. It is argued that reality might be viewed differently from one country to another and from one person to another (Riehl, 2001).

The aim of this study is to understand a social phenomenon (how students understand the affordances and challenges of online collaboration) from their subjective experience and thus to contribute to narrowing the gap between theory and practice. At the same time, it is an attempt to contribute to the understanding

of the impact of online peer feedback on revision behaviours with results that might improve students' writing practices. In brief, the researcher's ontological stance is that reality is externally influenced but internally constructed by students, whose classroom practice is driven by their interpretations of their understanding of the affordances of online collaboration assumptions. Thus, it is expected to face multiple realities throughout the study. This study presents my interpretation of the participants' actions and the meaning they make from their ways of understandings during the online collaboration activities. In order to understand the impact of online collaboration on students' writing practices, I used both qualitative and quantitative data to gain a deep understanding of reality. The knowledge that I seek is of the social realities that are generated through interactions, such as students' practices, which have a need to be interpreted as they are not things in themselves.

4.4.2 Epistemology

Epistemology can be defined as 'the possible ways of gaining knowledge of social reality' (Grix, 2010, p. 63). Generally, it deals with the nature of knowledge (Crotty, 1998). This concept focuses on knowledge-gaining procedures and seeks to generate new ideas or perspectives that are better than or additional to the existing ones. The scientific paradigm often attempts to discover the objective reality that exists out there in the world, whilst the interpretivism argues that meanings are constructed by human beings as they engage with the world they are interpreting (Creswell, 2009). Interpretivists would argue that there is no objective truth waiting to be discovered as meaning is not discovered but constructed (Crotty, 1998).

Epistemology should consider the relationship between the investigator and what can be discovered (Howell, 2012; Lincoln & Guba, 2000). The definitions of epistemology illustrate that two key issues seem to generate epistemological debates in social research. The first issue concerns the best mode of gaining knowledge, and the other is related to the nature of the relationship between the researcher and the case being studied. Interpretivists believe that, in the social world, the relationship between the researcher and the researched phenomena is interactive and cannot be isolated (Creswell, 2007). The reason behind this argument is that individuals are influenced by the participants, or the phenomenon being investigated. Therefore, according to Ritchie et al. (2013) findings are 'either mediated through the researcher (value mediated) or are negotiated and agreed between the researcher and the participants' (p. 8). Thus, researchers ought to lessen their interference by making their assumptions and biases transparent while trying their best to be objective in their approach (Ritchie et al., 2013). Similarly, Carr and Kemmis (1986) argued that 'subjective and social factors play a crucial role in the production of knowledge' (p. 71). Therefore, the knower and known are inseparable, as there seems to be no meaning without a mind.

Researchers adopt an epistemological standpoint which refers to the way they come to acquire knowledge (Bryman, 2016). An epistemological standpoint differs as to the relation of knowledge to assumptions, beliefs, and values. It is a cognitive process that underpins what people believe to be true, and accordingly, how they behave and interpret their social interactions. In this study, the interpretation of the impact of online collaboration on students' practice in a different environment, and the nature of their peer feedback and revision practices, is likely to help the researcher reconstruct new effective actions. Due

to the nature of knowledge that the current study seeks to explore, which is constructed by different participants who may construct meanings from various perspectives, the epistemological stance that is held in this research is a constructionist one. This standpoint argues that the meaning and truth about people's experience is created, indeed constructed, by the individuals themselves through their interactions. It concentrates on exploring the students' understandings, knowledge, and pedagogic practice as they gradually work collaboratively to develop their piece of writing. Furthermore, to understand the features of an online collaboration within a social context of an Omani college, my study focuses on understanding the knowledge and practice that the individuals share within this collaboration. Thus, the research focuses on understanding the nature of peer feedback and revision practices whilst students work collaboratively, the impact of peer feedback on the students' revision practices, and the changes to the students' understanding of online collaboration over the period of the course. My ultimate goal is to listen to the students in order to interpret their actions and experiences to understand the mechanism of collaboration and the similarity of interests and problems shared within the online collaboration. Paul (2005) articulated this standpoint as he views learning as an interactive process which does not happen in isolation. This interaction allows students to comprehend and reflect on what they acquire and to link it to their daily practice. However, the students' perspectives in terms of regarding best practice may either foster or hinder their learning of new knowledge.

4.4.3 Research Methodology

Theoretical assumptions are closely connected to the methodology and methods of any research study and all together constitute an integrated package

to address research questions (Grix, 2010). Indeed, the philosophical stance of a researcher provides the base of the research methodology and the different perspectives of exploring it (Crotty, 1998). Decisions about research methodology and methods are also informed by the nature of the research questions, as well as the aims and objectives of the study. Therefore, theoretical perspective, methodology and methods, research question and objectives are inevitably interwoven. As Guba and Lincoln (2005) stated, 'methodology can no longer be treated as a set of universally applicable rules or abstractions' (p. 191). It can be viewed as 'the strategy, plan of action, process or design lying behind the choice and use of particular methods and linking the choice and use of methods to the desired outcomes' (Crotty, 1998, p. 3). It is also argued that methodology is the actual techniques and procedures employed by researchers to obtain knowledge. Broadly speaking, a methodology is the frame of reference for the research, which is affected by the paradigm in which the theoretical stance is developed (Walter, 2006). It helps the researcher select a suitable methodological design and the instruments that contribute to the attainment of the research aims (Burrell & Morgan, 2017). In short, methodology refers to a research design linked to a paradigm or theoretical framework, such as case studies, action research, or quantitative, qualitative, or mixed methods, whereas methods are the practical applications of doing research and consist of procedures or tools used for data collection and analysis, such as interviews or questionnaires.

Methodologically, researchers can adopt three types of design to conduct their research depending upon the intended knowledge or nature of the findings: quantitative, qualitative, and mixed methods. An example of quantitative strategies is survey research that provides numerical descriptions of attitudes or

trends of a sample population through the use of questionnaires or structured interviews with the intent of generalisation. In contrast, qualitative research can be conducted by, for instance, using a case study strategy, which aims to explore in-depth a process or value of activity through observation or open-ended interviews.

Based on the nature of this study's research questions and the researcher's stance, this study adopts a mixed method of both qualitative and quantitative methods for data collection. The qualitative data was collected through observations, semi-structured interviews, and focus groups, and the quantitative data was collected through students' text analysis. However, more dependence was placed on qualitative methods, due to an awareness of what is most useful to answer the research questions. In this case, participants' views and how they construct meaning and reality are closely sought after.

There are many other factors for placing the weight of this study on the qualitative strand. First, qualitative studies allow researchers to understand the meaning of participants' actions, situations, and events which they are involved in, and understand their experiences from their lens (Maxwell, 2008). This enabled me to explore the complexity of the sociocultural context and its relationships. Also, qualitative methodology allowed me to study the issue in-depth rather than breadth. Second, qualitative methodology can offer an understanding of socially-constructed reality through relying as much as possible on the participants' views of the situation (Creswell, 2007). This can also provide a profound understanding of the experience of students, as practitioners, in constructing knowledge and their interpretations and assumptions, through seeking to 'understand the subjective world of human experiences' (Cohen et al., 2007, p. 17). Layder (2006) argued that meaning 'arises from the world of daily

experiences as it is lived by the different individuals who try to make sense of it and come to terms with it' (p. 93). This justifies the importance that is allocated to the daily experience of students and how they make sense of their online collaboration in their writing classes. Third, Creswell (2007) pointed out that qualitative studies are conducted to explore an issue or a problem. This exploration is essential to study a group or population in order to find out and listen to their neglected voices. In this particular study, it is significant to explore how Omani EFL students view online collaboration as a learning technique and how this might affect their writing practices.

As noted above, this study has adopted an interpretative perspective in order to disclose and explain factors lying below the surface (Bryman, 2016). In order to form a deep understanding of the research questions, many different data collection methods were employed to gain multiple perspectives which offered a rich interpretation of the context. Therefore, the use of the mixed methods approach provided a flexibility that allowed the researcher to go beyond the general indicators and given responses to discover and interpret what is behind them.

In my current study, it is impractical and even impossible to investigate online collaboration throughout the whole of Oman, due to the limitations on time and resources available to this study. It is more manageable and rational to focus on a specific college to select the case study, a focus which is explained in Section 4.5. Moreover, the interpretivist stance adopted by the study requires an in-depth investigation which has an appropriate resonance with the implementation of the case study approach (Cohen et al., 2007). Based on the nature of this study's research questions and the researcher's standpoint, a

mixed method approach of both quantitative and qualitative methods was chosen and based a case study.

4.5 Case Study

A case study is a methodology in which the researcher explores a case, or cases, over a period of time, through an in-depth investigation that employs several methods of data collection (Creswell, 2009). Furthermore, Robson (2002) argued that the case study approach is 'a well-established research strategy where the focus is on a case in its own right, and taking its context into account' (p.178). The case study involves multiple sources of data collection instruments which can include quantitative and qualitative data (Creswell, 2007; Punch, 2013). Stake (2008) identified three types of case study in terms of the intent of the case analysis: intrinsic, instrumental, and collective. The intrinsic case study is undertaken to provide a better understanding of a particular case regardless of the presentation of other cases. Then, the instrumental case study in which a particular case is studied mainly to provide insights into the wider context of the issue or to support a generalisation. The case is considered of secondary interest as the aim is to provide a better understanding of something else. Finally, the collective case study involves an in-depth, detailed study of a number of cases which are examined in order to investigate a phenomenon or a general condition. The current study has features of the first and the second types of case study. First of all, it is an intrinsic case study where the students' perceptions and practices of the integration of online collaboration in their writing classroom is studied in-depth because of the lack of studies that cover this area in the Omani context. Secondly, it could be considered as an instrumental case study as it provides insights into the way in which online collaboration influence and shape

the students' writing performance and revision behaviours in the intended context.

Yin (2017) also argued that case studies can be used for three purposes; explanatory, descriptive, and exploratory. Explanatory case studies are used to answer a question that seeks to explain the assumed links and relationships between variables and factors affecting the studied phenomenon. Exploratory case studies are also used to explore those when little is known about the explored phenomenon when the outcome is not clear, while descriptive case studies are used to describe a phenomenon in its real-life context. Yin further adds that 'how' and 'why' questions are suitable for explanatory case study since they lead to finding links and relationships, while 'what' questions are appropriate for exploratory case studies. He pointed out that a case study is preferred in three conditions: (a) 'how' and 'why' questions are being posed, (b) the extent of control an investigator has over events, and (c) the degree of focus on the contemporary phenomenon with a real-life context. The unique strength of a case study is its ability to deal with multiple sources of evidence as a way of triangulating to support findings that show the validity and consistency between the methods of data collection. Moreover, Cohen et al. (2007) highlighted four main advantages of case study research: (a) is strong on reality and recognises the complexity of social issues embedded within a cultural context, (b) offers rich and in-depth insights about a target phenomenon, (c) can manage unpredicted events and uncontrolled variables, and (d) its results are comprehensible to the readers.

Punch (2013) argued that any study can have all quantitative data or all qualitative data or can combine both in any proportions. However, qualitative data are important in interpretive research, and almost anything can be used as data. Patton (2002) contended that the use of mixed methods helps minimise errors

that might occur when using a single method. Tashakkori and Creswell (2007) defined mixed methods as those 'in which the investigator collects and analyses data, integrates the findings and draws inferences using both quantitative and qualitative approaches in a single study or a programme of inquiry' (p. 4). Mixed methods research helps researchers solve and deal with common problems in a way that neither qualitative nor quantitative methods can do alone (Teddlie & Tashakkori, 2003).

Despite the advantages of the case study approach, some researchers are still sceptical about its effectiveness as they claim that it may lack rigour due to researcher's being selective and biased and its results are not normally generalisable. However, Yin (2017) refuted this claim as bias may occur in other forms of research. He further stressed that 'case studies, like experiments, are generalizable to theoretical propositions and not to populations or universes' (p. 15). However, the purpose of a case study is to gain a thorough understanding of a unique and complex case or issue within its context and it is not concerned with generalisability (Punch, 2013).

Given the complexity of researching the nature of the students' online collaboration, writing performance, and revision behaviours, and the understanding of the affordances of online collaboration of students involved in writing tasks during an online collaborative platform, a case study has been decided to be compatible with the purpose of the study and the phenomena examined. Further, a case study approach is adopted because of its flexibility in involving qualitative or quantitative data, or both. To do so, perceptions and experiences of L2 writing students involved in two writing cycles through an online platform during a naturally occurring writing course were sought. This study integrated a variety of research methods to contribute to a greater understanding

of the way in which students work collaboratively in an online platform for writing classes. It employed several tools to obtain data: focus groups, face-to-face interviews, text analysis, and online and in-class observations. Data was collected incrementally, starting with focus groups that provided the researcher with a general portrait of the situation. To obtain a detailed picture, online and in-class observations, semi-structured interviews, and texts analysis were conducted, which provided a more holistic picture and a thorough understanding of the problem. More precisely, the focus groups served as a means to explore how students view their past experience and future expectations of the online task. The focus groups were also used to develop questions for the interviews and provide further insights into the understanding of the issues that might not emerge through the other data collection tools. The observations allowed the researcher to gain an insider look at students' interaction in the online environment as well as in class. Students' texts were analysed to track changing performance levels for the students and to quantify the number and type of revisions and the extent to which peer feedback might improve the quality of their essays. Finally, the interview focused on the nature of students' peer feedback and revision practices, issues that arise from other methods, and the understanding of the affordances of online collaboration over the period of the course. The purpose of using multiple sources in my study was to build a case study, to gain an in-depth understanding of the potential changes in students' pedagogic practice as a result of participating in the online platform.

The case study is relevant to the exploratory nature of the present study's questions and aims. The study seeks to understand the impact of online collaboration on students' writing over a period of time in the context of an Omani college. In addition, it seeks to explore in-depth how participants developed and

used the online collaboration techniques to inquire and investigate into their classroom practice to improve their peer feedback and revision practices. Furthermore, to gain a better understanding in the way in which peer feedback and revision practices might contribute to participants' development of their writing quality to improve their pedagogic practice. Understanding the nature of students' collaboration helps educators understand students' needs and provides them with the best mechanisms for online collaboration to prepare them to deal with the demands of the technological revolution going on around them.

Since the goal is to study the phenomenon in-depth in its real-life context, the collection of evidence has to be from several resources so as to obtain triangulation. For Cohen et al. (2007), triangulation is 'the use of two or more methods of data collection in the study of some aspects of human behaviour' (p. 141). It provides researchers with a comprehensive understanding of the investigated aspect and adds to the validity of the data. Marshall and Rossman (2014) argued that triangulation allows corroboration, elaboration, and illumination of the issue in question and enhances the validity of the findings. In addition, triangulation is used to seek a convergence of the findings of the different methods, rather than seeking to identify each participant's position in relation to online collaboration (Teddlie & Tashakkori, 2003). In what follows, the methods of data collection are explained in detail.

4.6 Research Methods of Data Collection

The nature of the research questions should inform the research methods in any inquiry. As previously mentioned, this study's research questions aim to explore the nature of EFL students' online collaboration in their writing classes, including their peer feedback and revision practices, the impact of this

collaboration on the students' writing performance and revision behaviours, and finally the students' understanding of the affordances and challenges of online collaboration over the period of the course. As part of the chosen mixed method approach, the used methods were online and in-class observations, text analysis, focus groups, and finally semi-structured interviews. These methods of data collection provided me with the data needed to build detailed case studies and so answer the research questions. These instruments are pertinent to both the research questions and the theoretical framework of the study, the sociocultural theory, because they allow me to gain thorough insights into the nature of students' collaboration in an online platform and the interaction between them in the classroom. Further still, these methods were used to explore the investigated case through the lens of different data sets. They also helped capture the reflective thinking of the students as they go through a process of drafting each essay, receiving online peer feedback and making use of that to redraft their essays. Table 4.1 illustrates a summary of the research methods used to answer each research question.

Table 4.1

Research Methods Used to Answer the Research Questions

	Research Questions	Research Methods
1	What do students understand about the affordances and challenges of online collaboration in supporting EFL students' writing?	Focus groups-interviews
2	To what extent does online peer feedback as a collaborative learning technique used in EFL writing classes impact students' writing performance (quality)?	Text analysis- Individual interviews

3	To what extent does online peer feedback as a collaborative technique impact students' revision behaviours?	Observation- Individual interviews
4	How does online peer feedback facilitate mutual scaffolding between EFL students (the reviewer and the receiver)?	Observation-Focus groups-interviews

In the following section, the instruments and data collection procedures are elaborated in more details.

4.6.1 Focus Groups

Focus groups are an essential initial data collection method for this study, as they are appropriate for gathering insights on exploratory research (Bryman, 2016). They allow the researcher to gain depth and breadth to a new domain (Kvale, 2008). They are also useful for generating qualitative data, gathering data on opinions, feelings, and attitudes, and provides a broad coverage of the investigated phenomena (Cohen et al., 2007). In a focus group interview, several individuals are interviewed simultaneously in a dynamic process which helps gain exploratory data and shape it for further research (Hesse-Biber & Leavy, 2010). Importantly, interviewees feel safe and confident when they are with their peers (Wellington, 2015). Focus groups are appropriate for studying people's everyday experiences, such as their values, behaviours, and thoughts (Bristol & Fern, 1996). They develop not only a discussion among interviewees, but they also help the interviewees challenge and encourage each other (Cohen et al., 2007). Thus, the researcher can gather fuller and more realistic accounts of what people in that group think. Furthermore, focus groups often can challenge and reveal the taken-for-granted assumptions of research participants that can at times be challenging to recognise specifically (Bryman, 2016; Hesse-Biber & Leavy, 2010). Focus groups are also essential as their concentration on a particular topic allow the researcher to gather the data not accessible through a straightforward

interview (Cohen et al., 2007). Further still, as participants listen to each other they may modify or quantify a view or voice agreement regarding an issue that is raised that he or she would not have thought of examining without the facilitation of group discussion.

Smithson (2019) pointed out three main reasons for using focus groups in research, namely, practical, ethical, and methodological reasons. Practically, focus groups can be easier to arrange in some contexts and already existing groups can be used. Ethically, participants may be more willing to join in within a group situation or feel more comfortable with their peers around them. Besides this, focus groups facilitate different power dynamics between the researcher and participants. Methodologically, group interactions bring a specific sort of data. The researcher, for instance, can study how do decisions get made and how opinions get formed within focus groups. Furthermore, research setting and data more naturalistic than individual interview methods. Importantly, participants talk primarily to each other in their own terms rather than to a researcher.

Focus groups aim to support the interaction within the group rather than between the interviewer and a group, individual participant's views will emerge rather than simply promoting the researcher's agenda (Cohen et al., 2007). The researcher works merely as a facilitator or modifier of the discussion among the participants (Thomas, 2015). Therefore, focus groups are viewed as a significant data collection method and give this research the advantage of in-depth discussion, and possibly raise awareness of the possible effects of online collaboration on students' writing.

It is crucial to decide on the number of participants in a focus group, as a small number might exert a disproportionate effect, and a large group can be challenging to manage (Cohen et al., 2007). Bryman (2016) suggested that the

appropriate size of a focus group varies from four to 10 participants according to the goals of the research. More precisely, five to six participants for each group is seen as an adequate number (Fowler Jr & Cosenza, 2009; Wellington, 2015). However, to ensure the quality of the focus groups, Newby (2014) suggested some important considerations which should be taken seriously. These considerations are focus groups should be focused and clear about the agenda, the setting should be conducive to discussion, and finally, the discussion should be recorded for analysis purposes.

In this study, focus groups were used as a preliminary data collection method which allowed the participants to express their opinions freely about their understanding of the affordances and challenges of the use of online collaboration in their writing classes (Appendix 7). It also allowed me as a researcher to understand the existing meanings of the experience through the perspectives of those engaged in it and therefore make interpretations that are aligned with this experience. Importantly, the data collected from the focus groups informed the development of the subsequent data collection. The data also allowed students to raise issues and questions that may not have been foreseen in the research design. These issues and questions were used later in the individual interviews. The focus groups were also used to recruit a smaller group of students for subsequent data collection. Therefore, the focus group interviews were conducted with the students at the outset of the study and focused on collecting a greater range of responses from the participants.

4.6.2 Observations

Observation is a method of data collection in which researchers observe a phenomenon within a particular research field and is more valuable when

combined with other methods (Teddlie & Tashakkori, 2003). According to Cohen et al. (2007), observation allows researchers 'to see things that might otherwise be unconsciously missed and to discover things that participants might not freely talk about in interview situations' (p. 397). It is used as an instrument for gathering live data from a situation (Cohen et al., 2007). More specifically, three types of observation are defined; structured, semi-structured, and unstructured. In the structured observations, the researchers know in advance what they are looking for, with specified observation categories. Semi-structured observation takes place when the researchers have an agenda regarding the issues to look for, but still gathers data necessary to the study even if it is not on the agenda of the observation. Finally, the researchers in unstructured observation are uncertain about the kind of information that they are looking for, meaning that they will first observe and later decide what is significant (Cohen et al., 2007).

In the current study, semi-structured observations were conducted to explore the nature of the students' collaboration and interaction through an online platform as an initial method of data collection. Semi-structured observations draw attention to aspects of online collaboration and interaction through the online platform in a fairly unsystematic manner. As observations could allow the researcher to gain an in-depth understanding of the behaviours and interactions of L2 learners in class and online, I took the decision to employ it as one of my research data sets (Appendix 13). The students' online collaboration tasks were designed with the flexibility to explore the issues and new themes that could emerge during the observation. Thus, conducting observations before the interviews provided valuable insights into what I should focus on during the interviews and also informed the interpretation of the interview data. Wragg (2002) argued that 'by observing the events and interviewing the participants, the

observer was able to fill out an interpretation of what was happening in the classroom that would not have been apparent from even counting alone' (p. 11). I was able to observe students' interaction and the change of their behaviour over the period of the course.

The literature has addressed several strengths of observation as a useful data collection method (Bryman, 2016; Cohen et al., 2007; Creswell, 2009; Creswell & Creswell, 2017). First, this method does not stimulate or affect the participants' responses in the way other research strategies do because it is a non-interactionist data collection process (Adler & Adler, 1994). As observation is a first-hand experience with participants, it allows the researcher to record information as it takes place, as well as to notice unusual aspects. Hence, observations help the researcher uncover the usual activities in the participants' settings to enable the researcher to understand social actions in their own context (Radnor, 2001). Another critical advantage of observation lies in its emergence. In other words, researchers can construct knowledge, and generate categories instead of developing classifications in advance. Finally, observations of a particular context combined with data collected from other sources, such as interviews, can add to the depth and breadth of research findings (Thomas, 2015). However, researchers should be aware of the potential for participants to act differently when they know they are being observed.

The vast potential of observation as a method of data collection allowed the researcher to gain a comprehensive understanding of the situation from a participant's point of view when they are interviewed. Therefore, as a participant observer, I took part in the writing class and observed the course activities with a commitment to the teachers' goals and objectives. Semi-structured observations were employed in two contexts: the classroom and online. In-class observations

provided insights into students' practices and behaviours in real time. They allowed me to study the participants' behaviour in complex situations such as classrooms learning situations (Wellington, 2015). They also enabled me to observe what happened in different settings and how students reacted to various demands. Accordingly, I made an effort to trace the changes in students' behaviour in different situations. During the classroom observation, I used field notes to record the observations. More importantly, and very much crucial to the objective of this research, the online observations were achieved by having observer access to the online platform during and after each class's online discussion period. Online observations focused on how students experienced and worked with their peers in an online platform. Through observations, I observed how peer feedback and revision practices were carried out, and what the impact of these practices was on students' writing. The observations were repeated to capture differences in revising over successive drafts as it was the way in which I understood the students' change and development. Besides this, the online discussion board task was saved and printed for analysis. The saved materials helped me track the students' interaction several times without the pressure of making immediate notes. In addition, these materials were printed and discussed later with the participants in the interviews.

However, since observation only enables collecting data from the observable phenomena and the unobservable processes are neglected, participants were also interviewed to understand the reasons underpinning the events and behaviours (Dornyei, 2007). Interviews helped elucidate not only the way in which EFL students use online collaboration in their writing classes, but also the interactions between the students and the rationale behind their behaviours. Observations preceded the interviews which sought to capture the

main activities undertaken and the students' collaboration. These provided some contextualisation for the interviews, enabling to discuss specific events from the observed lessons.

4.6.3 Written Texts Analysis

Written texts can provide researchers with a rich source of information about the activities, intentions, and ideas of their creators (Punch & Oancea, 2014; Wolff, 2004). It is an unobtrusive method of data collection as the data is noninteractive and does not need an active participation of research participants (Hesse-Biber & Leavy, 2010). Nevertheless, in this study, gathering students' written texts can be referred to as obtrusive since it involves students' active participation and development of a number of writings in a visible online platform. The rationale for using students' written texts in my current study was twofold. First, I intended to examine the quality of the students' writing overdrafts and the way in which they use their peers' feedback. Text analysis allowed the researcher to track the students' writing performance after participating in online peer feedback. My second purpose was to support interaction and interview data. That is, analysing participants' writings allowed me to triangulate interaction findings and students' accounts. In this vein, the combination of different datasets enabled me to evaluate the results from different angles and to validate findings of other methods. I do believe that examining written data could better reflect students' writing performance compared to just relying on their responses to the interview questions. Thus, I can make sure whether students' responses were consistent with what they actually did, or they were articulated in order to merely please me as their teacher/researcher. As for interaction data, written texts could reveal the effect of online collaboration on the students' writing performance. Examining

participants' interaction dynamics and focus as well as tracing its potential effects on their peer feedback is an interesting issue which deserves attention.

In this study, written texts acted as a valuable source of information. Moreover, written texts were used as data sources during this process for their importance in evaluating the students' progress in writing and whether their writing skills are improving. In addition, written material such as students' writing assignments provided a useful base for evaluating the effectiveness of an integrated approach and whether it has enabled the students to improve their writing skills. To measure the students' writing quality, the head teacher used a scoring rubric summarising the writing criteria to assess and evaluate the written essays. It was also used by me to analyse the essays. I used four writing criteria in order to assess the students' writing ability (grammatical accuracy, range of vocabulary, content, and the organisation of paragraphs). Scores out of five were given to each element so that the total score was 20/20.

Analysing students' writings allowed me to understand the elements of their writing, such as how their ideas developed, or how students had structured arguments. This helped me create specific prompts around the interview questions, as these questions could be contextualised concerning a specific piece of writing. In addition, reading the students' texts helped me gain the interest and confidence of each writer since the researcher was in an ideal position to make useful comments on the students' writing.

4.6.4 Semi-Structured Interviews

An interview is considered by many researchers as a central source of case study data that deals with human behaviour and activities. It can be defined as 'a specific form of conversation where knowledge is produced through the

interaction between an interviewer and an interviewee' (Kvale, 2008, p. xvii). Furthermore, an interview can be described as 'a flexible tool for data collection, enabling multi-sensory channels to be used: verbal, non-verbal, spoken and heard' (Cohen et al., 2007, p. 349). Interviews are one of the most popular and influential methods that researchers use to try to understand how other people view and experience the world (Kvale, 2008). They open a window through which the participants' perspectives and feelings can be observed and interpreted (Mears, 2009). Researchers can gain valuable information and insights into the subjective aspects of participants' perceptions, practices, and activities, related to the nature of online collaboration with an ultimate goal to promote the students' writing, which is the main focus in the current study (Yin, 2017).

Semi-structured interviews were chosen in the present study because of their various advantages for my current study. Firstly, they provide an ideal means of exploring students' views as it is easier for students to be themselves. In addition, they help establish rapport and a relaxing atmosphere with the students. Creating this atmosphere makes the students feel more confident to provide honest and open responses which are considered crucial for the interview. To achieve this, Brown (2001) proposed starting the interview by some 'irrelevant' topics like a question about the weather in order to foster trust and ease for the interview to be worthwhile. Information gained through this type of interview may reveal not only answers, but also the reasons behind those answers (Cohen et al., 2007). Furthermore, the interviewees are given the freedom to be expansive and express their views in their own terms (Bryman, 2016). Thus, participants can provide more in-depth information to prompt questions guided by the research questions (Kvale & Brinkmann, 2009). Moreover, semi-structured interviews provide the researcher with the flexibility to

ask more questions about interesting points that are raised by the participants. This flexibility is vital in my current study as it allowed me to cover all the key elements in the light of the sociocultural theory like students' interaction, scaffolding, and peer feedback, as well as the elements that emerge from the other instruments and the research questions. In this respect, Thomas (2015) pointed out that the interviewer can investigate emergent themes and views, rather than only focusing on the topics and inquiries developed in advance. Nevertheless, the interviewers need to prepare some established topics for exploration during the interview in advance which help them appear competent during the interviewing process (David & Sutton, 2004). The researcher can explore whatever ways seem appropriate during the interview by way of probing or prompting, when needed, depending on individual responses in order to stimulate interviewees' responses. To do this, the researcher has to allow the participants to develop in-depth, natural responses (Richards, 2003). In the current study, the participants' responses helped me gather more perspectives and experiences from the students in terms of their understanding of the nature of their online collaboration in their writing context. In these interviews, open-ended questions were used to gain more profound and extended responses from the interviewees and give them an opportunity to elaborate on their own perspectives.

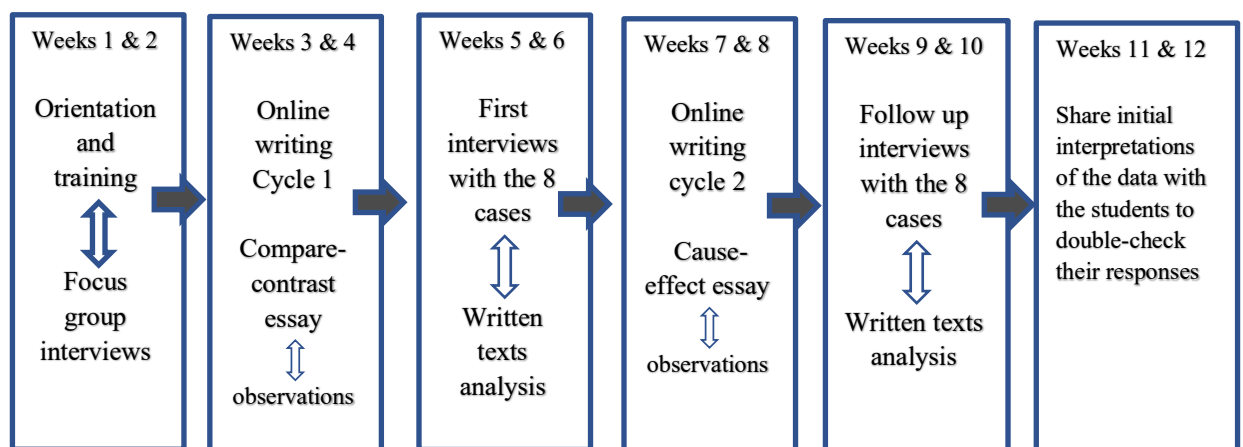
Although semi-structured interviews can provide researchers with many advantages, as discussed earlier, they have some limitations that need to be taken into consideration to make it serve the aims of the study. For example, Cohen et al. (2007) mentioned that the interview is less reliable than the questionnaire because it offers the participants less anonymity. In addition, scheduling and arranging the interviews may be time-consuming as the

interviewer may need to reschedule agreed interview times to suit the changing circumstances of the interviewees (Gray, 2013). Moreover, the analysis and interpretation of open-ended questions are also difficult and comparing the answers of participants can be challenging and complex (Hitchcock & Hughes, 1995; Oyaid, 2009). Silverman (2006) also shed some light on the hierarchical relationship between researcher and participants and the potential impact of this relationship on the participants' responses. These limitations of semi-structured interviews were taken into account in the data collection stage. I explained the aims of the interview to the participants and assured their anonymity and confidentiality. Moreover, I gave myself an adequate amount of time for the data collection, analysis, and interpretation.

Before conducting the interviews in this research, the process was planned and designed carefully. The interview questions were generated for the purpose of this study based on the research questions and the review of related literature in the field of L2 writing and CALL, validated by experts in the field including my supervisors and academics. The related literature informed the researcher by ensuring he was asking appropriate, accurate, and deeper questions to obtain a thorough understanding of the phenomenon under study (Creswell, 2007). Hence, an interview design was needed to help the researcher ask each student the same set of pre-prepared questions. Undoubtedly, a list with the intended questions was prepared to serve as a reminder of the themes and possible tangential questions (Thomas, 2015). The questions were designed to lead the interviewees to reimagine their own thought processes by which they wrote their piece of writing, from the first processes, such as planning, to the final processes, such as rewriting. Also, the interviewees were allowed to describe their writing processes in their own words. The writing itself was also used as a

stimulus in the interview to remind the participant of what they wrote and to discuss how planning was useful, or not, ideas that occurred as the text was produced, and their decision-making in making revisions to the text. The online collaboration task was also used as a stimulus for discussion during the interviews. As online interactions and posts contain a large body of evidence, I wanted to understand more about participants' views regarding online collaboration and knowledge-sharing. Accordingly, to enrich the dataset, interviews with purposefully selected participants took place after the writing process. Each student was interviewed twice over the period of the course, after each writing cycle. The interviews were recorded for analysis purposes. Cohen et al. (2007) argued that interviews are commonly used in conjunction with other research methods in the same research to validate the results of other methods and to follow interesting and unexpected results by studying in-depth the reasons behind the participants' responses and the motivations that make them act in specific ways. The following figure sheds light on the data collection timeline.

Figure 4.1
Data Collection Timeline



4.7 The Sampling Strategy

In the real world, it is not possible to study a group in its entirety. Therefore, samples are needed to provide an in-depth understanding of the phenomenon being investigated (Dornyei, 2007; Wellington, 2015). Sampling is succinctly defined as ‘the activities involved in selecting a subset of persons or things from a larger population’ (Scott & Morrison, 2006, p. 219). This process has to be well-organised to serve the research aims best and for this, an appropriate sampling strategy is needed (Wellington, 2015). The nature of a study often determines the sampling strategy adopted by researchers, but it can also be related to the chosen method of data collection (Scott & Morrison, 2006). Cohen et al. (2007) argued that ‘the quality of a piece of research not only stands or falls by the appropriateness of methodology and instrumentation but also by the suitability of the sampling strategy that has been adopted’ (p. 92). Sampling could be either ‘probability’ also called ‘random’ sampling, or ‘non-probability’ also called ‘purposive’ sampling, considering the extent to which it represents the whole population (Cohen et al., 2007). For example, quantitative research usually requires large representative and random samples from which to generalise results to the broader population, while qualitative research chooses smaller samples to understand a phenomenon through in-depth investigation in a specific context (Cohen et al., 2007; Ritchie et al., 2013).

Given that qualitative researchers do not aim at generalising findings to a population but seek to develop ‘in-depth exploration of a central phenomenon’ (Creswell, 2012, p. 206), the representative sample of this study is purposive and criterion (Creswell, 2009; 2012; Marshall, 1996). The researcher can specify a set of features in advance to make sure that they all appear within the sample (Cohen et al., 2007). Purposeful sampling helps to ‘select the most productive

sample to answer the research question' (Marshall, 1996, p. 523). My sampling also included a criterion sampling strategy for suitability to 'handpick the cases' (Cohen et al., 2007, p. 103) and build a sample that can satisfy the specific needs of the study. As Ritchie et al. (2013) proposed, a criterion sampling includes selecting samples that share particular characteristics which allows comprehensive exploration of the phenomenon the researcher needs to study. This was essential for this study because it enabled the identification of potential participants who met certain criteria related to the focus of the study.

Thus, I recruited students who could potentially provide the richest information that could, in turn, provide optimum insight to the research questions. Because I needed participants with specific characteristics and experiences that correspond to the issues I am investigating, three main criteria were used to identify the sample: (1) students who were familiar with, and had knowledge on using technology; (2) students who showed a willingness to take part in the study because without the students' voluntary participation, very little would be accomplished; and (3) students who posted their writings online as well as those who provided peer feedback. Along with these criteria, samples that differ on some characteristics were used to ensure diversity among the participants to enable comparisons. Students' gender, educational backgrounds, and experience with computers contributed to the heterogeneity of the sample. Purposive sampling was used to select the available students from those who had posted their writings and who had provided peer feedback on the discussion forum and who agreed to participate in the study.

Although the size of the sample varies from one study to another, 'there are no rules for sample size in qualitative inquiry' (Patton, 2002, p. 184). There are many factors that determine the sample size, such as accessibility, the

timescales, and definitely, the research style. Several sizes have been suggested by researchers (Dworkin, 2012; Marshall, 1996); however, because I focused on specific issues in-depth, having a relatively small number of participants was sufficient to gain valuable insights into the research questions as I did not intend to generalise results to a larger population. Nevertheless, despite the small size of the sample, the interviews generated extremely rich and complex data. Therefore, and more importantly, in spite of the small number of participants, the results obtained by the research provided new insights into the nature of online collaboration in relation to peer feedback and revision behaviours that further studies will need to take into consideration. Following the issues mentioned above about the sampling strategy, the following sections shed light on the data collection procedures undertaken in the research.

4.8 Background to the Participants

This study took place in Salalah College of Technology which consists of about 4,250 students. Therefore, selecting a small sample as a representation of the whole population was not an easy task. However, after some investigations, the participants in this small-scale study were the students in the English Language Centre enrolled at Level 3, the third level of English language courses before progressing to the students' academic majors. The choosing of Level 3 students was based on the following grounds:

- Level 3 students have already had two semesters of English language instruction at the tertiary level. That is, they have a sufficient mastery of mechanisms of writing as they have gone through experiences concerning different writing approaches and what they are expected to do.

- Level 3 students prepare themselves for a more advanced level of their education, transferring to the last level of the foundation programme, which needs a lot of research. As already mentioned, based on their experience in these two levels, they can decide what they would like to study at their academic majors. Therefore, they are at the stage of decision-making and are considered eligible to bring in-depth insights to the investigated case.
- The students at Level 3 are likely to have adequate knowledge of using technology in their learning.

My focus was on the writing classes which aimed at developing writing skills. This course met twice a week (approximately 120 minutes) for 12 weeks over the spring semester in 2019. The case study was a class of 23 students who were involved in their writing class. The 8 individual students were cases or the focus students.

All the students had similar EFL educational backgrounds. Most of them had studied English as a subject for 12 years before entering the university. Some of them had experienced learning English in private language institutes. They were in level 3 in the English Language Centre. Their ages ranged from 19 to 21 years old.

Arabic is the students' first language and English is a foreign language. As mentioned in Chapter 2, all the students took English and ICT as compulsory subjects. The students participated in group assignments and attended essay writing classes for which they received feedback from their instructors. However, the feedback was primarily to justify their grades and not to help them revise the texts under consideration. They were exposed to product-centred instruction and the instructors' feedback was summative rather than formative. The students also

attended ICT courses for two semesters and were assumed to have a firm grasp of technology use.

After explaining the purpose of the research, many students expressed a willingness to participate, and I selected just the first eight focus students who were willing and available to be studied from a pool of 23 students. Study participant willingness is vital for obtaining richer data and guaranteeing participants' involvement throughout the research process, especially considering that participants were asked to complete the online collaboration task outside of class hours.

To assign the focus students, all of these respective students were asked to write a compare-contrast essay in response to the prompt "Compare and contrast between the study at the school and the university? Give specific examples and details to support your comparison". The resulting scripts were believed to constitute a fair representation of the participants' writing abilities in a natural and stress-free condition because they had the opportunity of taking two weeks previously to develop their essays and post them online to receive peer feedback. This allowed me to not only have an understanding of the strengths and weaknesses of the students' writing skills but also to observe the nature of the students' interaction during the online collaboration task.

Further, all had a chance to participate in the training and activities designed for the study. The students were native speakers of Arabic, and according to both the sample essays they produced during the first week and their own self-assessment, their English proficiency level ranged from lower intermediate to upper intermediate with the majority of them being novice English writers, which represented the proficiency level of the essay writing course student population. Of the 8 students participating, 3 were females and 5 were

males. Table 4.2 illustrates the composition of the students and the characteristics of each participant. To protect participants' anonymity, pseudonyms have been employed.

Table 4.2

Participants' Demographic Information Overview

Name	Gender	English Experience (years)	Technology Experience	English Proficiency
Fahad	M	12	2 years	Low achiever
Ali	M	12	3 years	High achiever
Huda	F	12	3 years	High achiever
Sara	F	12	4 years	High achiever
Salim	M	12	4 years	Low achiever
Haitham	M	13	4 years	High achiever
Ahmed	M	12	3 years	Low achiever
Muna	F	13	4 years	High achiever

4.9 Pilot Study

A pilot study was employed with students not participating in the main study. Two students were subsequently observed during online collaborative writing tasks on two occasions and interviewed afterwards. A full pilot study was conducted to verify and enhance the instrument's content and estimate the time required to answer focus group and interview questions. Besides this, it was carried out to tackle any problems, limitations, or ambiguities regarding the research instruments.

The focus group's questions ultimately deployed in the course are set out in Appendix 7, and the questions were generated based on the literature review and my previous experience as an EFL lecturer. The questions were reviewed by

lecturers and fellow PhD students who are interested in CALL. The suitability of the questions was established by conducting pilot interviews with two students. The questions were found to be coherent and comprehensible, and the interview process was found to take around 60 minutes.

The interview and observation schedules were piloted in one of the online collaborative writing activities. In-class and online observations were conducted with the two students. The reason for conducting in-class and online observations was to ensure the quality of the focus of the observation and to take notes over a longer period with the students. The observation schedule was simplified to record students' interaction and collaboration in class and during the online collaborative task. Many changes were made to the layout of the observation schedule to show the nature of the students' online collaboration and its impact on the students' writing, in a clearer way.

In the second, pilot interviews were conducted with two students in order to verify the suitability of interview questions, check their wording after translation, and the time needed for the interview. The interview questions ultimately conducted in the study are set out in Appendix 9; the interview questions were generated based on the data obtained from the focus groups, analysis of the written texts and observations. To this end, the final version of the Arabic interview schedule was ready for data collection (Appendix 10).

Analysis of data from the pilot study revealed some interesting patterns in the students' stated understanding of the value of online collaboration, some sociocultural factors that impact the students' interaction and collaboration as students showed preference to work with others from the same gender, and a tendency to work in small groups instead of working with the whole class as a group. In addition, it was found that time limitations had implications for

performing multi-tasks of reviewing, discussing, and redrafting essays and uncertainties regarding the role and function of online peer feedback. However, it offered little insight into students' concepts of online collaboration, particularly their perceptions of the way in which online collaboration impacts their writing performance as well as revision behaviours. Since perceptions of the value of online collaboration may account for behaviours and feelings about students' interaction, it was decided that a broader set of questions was required to explore the potential relationship between these different dimensions. It also led to a number of minor modifications relating to the layout of the interview questions so that it would be more friendly-looking. For these reasons, it was decided to redesign the questions. This meant that it was significantly longer, but better at addressing the research questions more fully.

The findings from the two pilot case studies confirmed the value of an incremental model of data collection and the combination of evidence from different sources. For example, differences between students' claimed perspectives and their observed behaviours were apparent. Similarly, students' stated beliefs about the value of online collaboration were not always reflected in the concerns they attended to during writing. Repeat interviews enabled these contradictions or mismatches to be teased out, and it was possible to obtain more complex explanations than were evident from both students' initial responses, and to identify some unresolved dilemmas.

4.10 Data Collection Procedures

From the outset of the course, all of the participants were informed verbally and in writing using the participant information sheet about the procedures of the research and their expected role in the study.

A total of 16 one-to-one interviews with the eight focus students were conducted. Each student was interviewed on two occasions: immediately after the first cycle and following a second cycle of writing. Students were allowed to choose the site for the interview in order to provide a convenient atmosphere for them to express themselves freely. The interviews lasted from 30 to 40 minutes, conducted in Arabic as the students preferred to be interviewed in their first language, were audio recorded, transferred electronically onto my personal computer, and later fully transcribed. Separate data files were kept for each student and for the sample as a whole to facilitate the analysis as the study proceeded. Data from observations and students' texts were therefore used to focus the discussion.

The online interactions took place in a discussion forum through the Moodle platform, which is considered to be relatively new at Salalah College of Technology, and it is mostly used for accessing lecturers' slides and students' exam samples. Hence, the students were informed that they would be introduced and exposed to a new approach to L2 writing and feedback delivery over the semester which is slightly different from what they used to know or practice before. The students were asked to post their writings online to be revised and resubmitted after receiving feedback from their peers. Similarly, they were explicitly encouraged by the teachers to provide feedback on their peers' essays. Furthermore, the audience of the essays and the submission date of the final draft (a fortnight) had been made clear. In addition, some other issues such as course requirements, online participation, training requirements, and grading structure were raised in detail prior to commencing the course. I found that most of the students were enthusiastic and showed great interest in engaging in a new experience.

The technical design of the online platform includes three main functions: a means of posting messages, a repository for storing them, and an interface for navigating through the 'threads' of messages and replies. The students can post their writings in order to receive peer feedback. The thread contains a chronological record of all the comments that have been provided on a specific essay. Every thread also has a discussion space where participants can provide feedback on the posted essay. The online platform has expanded the audience so that learners can receive feedback from their peers as well as their teachers. It can be used for public or private purposes, and it can be engineered so that it is highly secure. As it has an open system, the teacher can make decisions about whether to allow public users to view and edit the other students' writing. The teacher can exercise the direction to restrict editing to registered users only or to alternately divide the students into small groups. In this study, the students were informed about the main functions of the online platform through the training programme at the outset of the course. They were trained on how to post their writings, edit and save the changes from the learning logs and read and post a comment to their peers' essays. As Hyland (2015, p. 181) argues, 'logs are important introspective tools in language research and can provide insights into language use that would otherwise be difficult to obtain.' He also points out that logs can 'provide access to elements of writing and learning that are otherwise hidden' (ibid).

Additionally, they were assigned to groups of four or five with varying collaborative behaviours and language proficiency levels. However, the five girls were assigned together in one group as it was found out in the focus groups that the girls were hesitant to engage with the boys because they were accustomed to a gender-segregated system at their primary and secondary school levels.

They were assigned to groups in order to ensure that all of the students would take part in providing and receiving adequate feedback.

In this study, data was collected incrementally, with each dataset informing the focus of subsequent data collection. Initially, data was collected from focus groups where the researcher could gain a general picture of the situation. The data collected from the initial focus groups informed the development of the observations and interviews. The data was collected from the observations as well as students' writings and then analysed. The findings of both the observations and the students' writings supported the development of the semi-structured interview questions by adding any emerging issues to that method. Also, students' texts were brought to the interviews to allow students to elaborate on their writings. In this phase, eight students from about 23 students were selected for the interviews. The rationale for using such an iterative model was to aid each method and to support the topics covered in the previous method. For example, using semi-structured interviews after the focus groups are useful for explaining and exploring the participants' views in more depth (Teddlie & Tashakkori, 2003). These sequential steps were repeated twice over the 3-month period of the course. In the first interview, students were asked to reflect further on their focus groups' responses and their compositions. Students were also asked to reflect on their revision behaviours and writing performance after receiving peer feedback and to articulate the affordances and challenges of the online task. In the second interviews, more questions were asked to the students about the changes they made in their writings over the drafts. Throughout the sequence of interviews, initial interpretations of data were shared with students and clarified or elaborated in order to double-check their responses.

Students were observed over the period of the course especially on two occasions: firstly, during the initial drafting of text and secondly during the redrafting or development phase. These observations took place online and in class. My intention was to observe writing behaviours and any associated activities – collaboration and interaction with peers, use of a dictionary/thesaurus, reference to written plans, and so on. These observations were recorded with line references to prompt the following discussion and to help students recall their thinking. Additionally, students' initial drafts and revised drafts were analysed to explore the change and impact of online collaboration on their drafts. Students were asked to show the changes they made on their writings so that revisions made at different stages of the writing process could be distinguished.

I sought volunteers rather than approaching individuals, chiefly because of the potentially sensitive nature of the study which required participants to allow me to observe their practice and probe their views and justifications in some detail. I wanted the participants to feel comfortable with me as an assistant teacher and to be interested in the study, as I felt that this would encourage them to be more open and exploratory in the interviews. Notably, my previous academic work experience and my role as a researcher created a unique opportunity for extensive involvement in the setting and with the participants alike. I joined the writing classes from the outset of the study committing myself to the teachers' goals and targets (Adler & Adler, 1994). Being familiar with the research context facilitates a more natural interaction between the researcher and the participants (Berger, 2013; Bell, 2005).

Because I aimed to explore the way in which EFL students use online peer feedback and revision practices in relation to online collaboration, I consistently endeavoured to support them in their writing tasks as well as guiding them in the

online tasks. I took the place of the teacher in two of the offered writing sessions in one week. During these sessions, the students were asked to post their writing online in order to receive feedback from their classmates. This extended involvement, in turn, allowed me to gain valuable insights into the nature of their collaboration and interaction whilst using the online platform. This unique standpoint gave me the privilege to build a better rapport with the students and thereby provide a more prosperous and fuller account of the investigated phenomenon.

The role of the researcher as an observer in terms of involvement may range around a continuum from a complete observer, observer as participant, participant as an observer, to complete participant (Radnor, 2001). That is to say, the circumstances and progress through each of these roles as their fieldwork progresses to determine the role of the observer which basically range from complete detachment to fully-immersed involvement (Hesse-Biber & Leavy, 2010). However, participant observation has been chosen for this study as it allows for more involvement in the natural context. Besides this, observations provide a perspective of the phenomenon as it takes place and assists in the development of questions for the follow-up interviews (Cohen et al., 2007). More specifically, the researcher has direct access to the data in its natural context and that the role taken by the researcher becomes a part of this study. Therefore, the researcher in the current study was an observer but, within the research, took the role of assistant teacher.

In participating in the online collaborative activity, I did not present myself explicitly as a teacher or highlight my previous teaching experience, but rather as a peer with perhaps more proficiency in English. I tried to act as a peer rather than as either a teacher or a researcher. It was essential for me 'not to alter the

flow of interaction unnaturally' (Adler & Adler, 1994, p. 380). Merriam (1998) pointed out that interdependency between the observer and the observed can bring about changes in both parties' behaviours. I attempted to gain access to all posted essays and comments and server data.

However, the participants were not representatives of a particular type of student, nor have I assessed their writing for assessment. Instead, these cases allowed me to gain a thorough understanding of the nature of online collaboration, and to find out when and how such practice affects both the students' writing performance and revision behaviours. Table 4.3 illustrates the successive nature of data collection, the methods employed, and the data generated at each stage of the study.

Table 4.3
Incremental Design of Data Collection

Sequence of Data Collection and Method	Dataset
Cohort focus groups (four groups of six students)	Contextual evidence. Students' perceptions of the affordances and challenges of using online collaboration into their writing.
Online and in-class observations (eight students; two from each focus group)	Observing the nature of students' interaction. Nature of peer feedback and revision behaviours. Contextual evidence. Revising behaviours, strategies employed.
Analysis of first draft texts (eight students)	Quality of students' writing. Number of posts. Nature and frequency of text revisions.
One-to-one writing interviews (eight students)	Explanations of focus groups' responses, revision behaviours. Post-hoc reflections on writing process, evaluation of first draft and goals for next session.

Analysis of final draft texts (eight students)	Quality of students' writing. The change of students' writings after peer feedback.
One-to-one post-writing interviews (eight students)	Post-hoc reflections on the writing process and evaluation of the finished text. Nature of peer feedback and revision behaviours. Further discussion of the affordances and challenges of using online collaboration into EFL writing and any additional ideas.

It is clearly demonstrated in the table above that four types of data were collected: four focus groups, online and in-class observations, texts analysis, and semi-structured interviews. In addition, field notes were kept for analysis purposes. As the data analysis was crucial in this stage, the following section sheds light on this process.

4.11 Data Analysis

The data analysis for this study involved both qualitative and quantitative data analysis techniques. The data analysis was carried out iteratively and simultaneously. The data set contained the following: focus groups, online and in-class observations, audio-recorded interviews, and student texts analysis. Screenshots of students' writings and online peer feedback were also collected and used in the individual interviews. The description of the data analysis process is divided into two distinct parts.

4.11.1 Qualitative Data

The qualitative data analysis was conducted with data collection using inductive and deductive thematic analysis. As Merriam (1998) put it, 'analysis begins with the first interview, the first observations, the first document read. Emerging insights, behaviours, and issues direct the next phase of data

collection' (p. 151). NVivo version 12 was used to organise the themes and codes. First, initial codes were identified from the focus groups and semi-structured interviews (Appendix 18). Then, a process of clustering these codes under categories according to their similarities was undertaken. Later, these categories were characterised under broader themes. To do so, the researcher used the model developed by Braun and Clarke (2006), which proposed that a detailed analysis process centred around the generation of themes and codes is used. This model comprises of six main steps in the thematic analysis, as set out in Table 4.4.

Table 4.4

Elements of the Braun and Clarke Model (2006)

1	Familiarisation with data
2	Generation of initial codes
3	Searching for themes
4	Reviewing themes
5	Definition and description of themes
6	Producing the reporting

First, I started with transcribing verbal data from the focus groups and interviews into written form before the analysis was carried out. Transcribing involved a process of noting down initial ideas into detailed written text; the close listening and rigorous transliteration required allowed me to gain a thorough understanding of the data. The second step included the generation of initial codes, that is, after a deep initial review, interesting features of the data were coded in a systematic way across the entire data set. This entailed the segmentation and tagging of the data relevant to each code. Third, the process

of grouping the codes into themes and sub-themes was conducted by sorting the codes into themes before arranging all of the codes within the thematic structure (Braun & Clarke, 2006). This process enabled a broad view of trends within the data to be obtained, as wider themes emerged from the relatively detailed and constrained code structure.

Then, a thorough review of the emerged themes was undertaken to check the appropriateness and comprehensiveness of the structure set out in the initial theme map and the entire data set. Through this process, consistency and congruity within and between themes was established, affirmed, and reinforced. Later, a process of defining and naming themes was undertaken. A repeated reconsideration and review of the themes and the codes within each theme, as well as the overall story the analysis tells, was carried out in constant relation to the research questions. Emerging issues were gradually clarified and refined as the sequence of research activities proceeds. This process was characterised by the constant comparison of each new dataset with every other one to identify relationships or discrepancies and to generate questions for the next phase.

The final step involved producing the report. Once the final version form of the thematic map was established, final analysis of the data was undertaken (Appendix 19). In this study, I decided to record the research results in the form of prose in order to reflect the fluid, evolving, and intricate nature of the data as it emerged through the collection process. Data items were reproduced verbatim to support each result. These were presented in such a way as to extend and expand on the data itself and shed light on its relationship to the research questions.

The data was considered both horizontally (cross-case) to identify similarities and differences among students, and vertically (within case) to identify

the students' writing performance and the revision behaviours of individual writers. As common patterns of behaviour or key themes emerged, these were mapped across cases to gain an overview of their range and relative importance. Data was constantly revisited at each stage of the data analysis process to look at the ways in which each case of the eight focus students was created and check the ways in which patterns, themes, and ideas were occurring. As analysis progressed, in-case and cross-case themes were also considered in relation to theoretical models of writing and the findings of previous studies, particularly the sociocultural model, as outlined in the literature review. Cross-case findings in relation to each of the main research questions were then summarised. In-case findings were used to compare the students' progress over the current study period of time to track the impact of online peer collaboration on their writing performance. The different qualitative data sets: focus groups, interview responses, online and in-class observations were analysed using the methods outlined below.

4.11.1.1 Initial Focus Group Data

As a preliminary data collection method, focus groups were used to obtain the participants' opinions and experiences about the affordances and challenges of the use of online collaboration in their EFL writing classes. Responses to focus group questions were analysed using NVivo version 12. The meanings of the experience through the students' perspectives were identified. Interpretations were then made to align with these meanings. The data collected from the focus groups informed the structure of the subsequent data collection. Apparent correlations, broad tendencies, inconsistencies, and uncertainties were identified and used to frame the interview questions and the focus of observations.

4.11.1.2 Interview Data

All interview transcripts were jointly coded with a research assistant using NVivo version 12. Interview data analysis started from the moment I listened to and transcribed the interviews. Analysis took place on three levels: managing the data, coding them, and providing descriptive as well as explanatory accounts for each emerging code/sub-code. First, the raw data were transcribed verbatim. A complete interview transcript is provided in Appendix 11. Since several pages of transcripts seemed quite daunting, managing the data was essential. Data management initially involved deciding on the main themes or concepts under which the data would be labelled, sorted, and summarised. A thematic framework was constructed with reference to the conceptual perspective of the study, research questions, and the interview guides. I also visited and revisited the data and tried to familiarise myself with it. The next step was to sort the data. Since the participants were interviewed on two occasions and some of the interview questions and responses overlapped, data points with similar content or properties were grouped together under relevant main themes. The purpose of sorting the data was to focus on each subject in turn so that the details and distinctions they contained within could be unpacked. The final stage of data management involved summarising the original data and inspecting the meaning and the relevance of the original material to the subjects under enquiry. This served to reduce the amount of material to a more manageable level. However, I was careful to retain the key terms, phrases, or expressions from the participants' own language as much as possible in order to neither lose the significant information nor strip it from the context it was initially given in. Once all the meaningful portions of the original data had been extracted, the data were

translated, and the categorisation stage began. A complete translated interview transcript is provided in Appendix 12.

4.11.1.3 Observation Data

Data recorded on the observation schedules were intended primarily to explore the nature of the students' collaboration and interaction through an online platform as an initial method of data collection to prompt students' recall. It provided a systematic description of the events and behaviours as well as verified other sources of data. Students' comments and behaviours during writing were also used to compile descriptive profiles of individual writers. Data was analysed to identify students' interaction and the change of their behaviour over the period of the course.

Observations were employed in two contexts: the classroom and online. In-class observations provided insights into students' practices and behaviours in real time. They enabled me to observe what happened in different settings and how students reacted to various demands. Accordingly, I made an effort to trace the changes in students' behaviour in different situations. On the other hand, the online observations were achieved by having observer access to the online platform during each class's online discussion period. Online observations focused on how students experienced and worked with their peers in an online platform. Through observations, I observed how peer feedback and revision practices were carried out, and what the impact of these practices was on the students' writing. The observations were repeated to capture differences in revising over successive drafts as it was the way in which I understood students' change and development. Additionally, the online discussion board task was saved and printed for analysis. The saved materials helped me track the students'

interaction several times without the pressure of making immediate notes. In addition, these materials were printed and discussed later with the participants in the interviews.

4.11.2 Quantitative Data

In this study, written texts were used as data sources during this process for their importance in evaluating the students' progress in writing and whether their writing skills were improving. To measure the students' writing quality, the teacher used a scoring rubric summarising the writing criteria to assess and evaluate the written essays. It was also used by the researcher to analyse the essays.

For each writing cycle students produced two drafts over two weeks. While the first drafts were written by the students, they were asked to develop the second drafts utilising the online feedback they had received from their peers. The second drafts, then, were submitted online to the instructor for assessment. Quantitative data sets about both overall scores and scores in the writing sub-skills were analysed. The mean of the students' scores were compared before and after receiving peer feedback. The eight focus students participated actively in providing and acting upon peers' feedback. All of the student drafts were marked by me and two other teachers from the same college to ensure that students' texts were fairly evaluated over both drafts. Importantly, the research question was not fully answered relying on the statistical analysis results – quantitative data – but qualitative data from the students' interviews and the observational logs were used to explain and clarify the obtained quantitative data findings. Students' interviews were used to enhance the interpretations of online

collaboration. This involved selecting extracts from the students' writings and asking the students to elaborate on some emergent issues in their writings.

The data from the first and last drafts of both writing cycles posted online were analysed at two levels, inferential and descriptive, using SPSS software. The descriptive statistics offered a great deal of information that helped the researcher familiarise himself with the data and the respondents' characteristics (Pallant, 2020). At the inferential level, these variables were analysed for significant differences between the students' writing before and after getting online peer feedback, using the non-parametric Wilcoxon Signed Ranks Test techniques, as applicable. The test was intended to find if there were any differences in the students' first and second drafts scores in terms of the paragraph origination, paragraph content, grammatical accuracy, and lexical range. For this study, I am using the term text analysis in a very simplistic sense, to elucidate that I read students' texts. It is used in tandem with Scardamalia and Bereiter's (1987) sense that reading texts can help provide critical support for interviewing.

4.12 Ethical Considerations

Conducting social research requires getting a unique sort of data from several different individuals. Therefore, researchers need to follow precise underpinning guidelines 'to reach an ethically acceptable position in which their actions are considered justifiable and sound' (BERA, 2018, p. 4). The current research was informed by the British Education Research Association's (BERA) ethical guidelines for educational research which groups ethical concerns related to the educational research (BERA, 2018). I was aware of a number of ethical issues, which I then addressed and made sure were not breached. I have acted

meticulously so as not to harm the participants in any way and to ensure that they were respected as individuals. I have attempted to use direct quotations as much as possible when introducing my findings, and to make clear distinctions between the raw data and my interpretations. I have allowed all participants to comment on my interpretations to fulfil my responsibility to participants. Checking 'data' and 'conclusions' with 'the people being researched' to develop the principle of 'trust' (Pring, 2015, p. 152). The ethical considerations were achieved by following specific guidelines.

Before engaging in the study, I submitted a Certificate of Ethical Research Approval form to the college's Ethics Committee at the University of Exeter, wherein I explained the focus and aim of my study and the procedures I would follow while collecting the data (see Appendix 4). Ethical approval was given by the University of Exeter before the research proceeded (see Appendix 3). The next step was to gain access to the English Language Centre (ELC) at Salalah College of Technology where I had been working as a lecturer and a level coordinator. I contacted the ELC's management beforehand via email to explain the aim and the data collection procedures. Then, an official visit and a meeting was held with the head of the ELC to explain my research project in detail, its aims, and the nature of participation expected from them. After gaining permission from the head of the ELC, initial contact was made with the level 3 coordinator, and meetings were then held with the teachers concerned (level 3 teachers). Written information was provided about the aims of the research and the role of the participating class, followed by a proposed research schedule for discussion with the teachers who had expressed previous interest. Most of the level 3 teachers agreed to participate. However, I, with the help of the head of the ELC, selected a teacher who had more than 20 years of teaching experience. He

had experience using technology in his classrooms and had different perspectives on its use. I believed that he would actively help me encourage the students to provide in-depth data about the online collaboration tasks.

After that, an appointment to have another detailed meeting with the participant class was decided, to explain the nature of participation and the role of the teacher and the students. For the selection of case- study students, participants were approached with a clear outline of the intended research aim and rationale. They were asked to inform me if they would like to be involved. By doing this, I attempted to remove any possibility that the head teacher could put pressure on students to take part in the study. Every effort was made to ensure that focus students did not suffer any loss of educational opportunity as a result of participation in the research. All participants were asked to give their written informed consent (see Appendix 5) to allow them to show their agreement before engaging in the study (BERA, 2018; Creswell, 2009). This form necessitated their voluntary participation, so participants have the right to withdraw their consent at any time during the research process without any consequences. The consent form was provided to all participants during all stages of the research in Arabic language (Appendix 6).

According to BERA (2018), researchers must ensure that all participants understand and agree to the process they are engaging in, including why they are participating, how important the process is, and how their participation will be used. To ensure this aspect, I personally administrated every stage of the data collection. I introduced myself, stated the purpose of the study, how important the research was for them and for me, both personally and academically. I also reinforced their right to withdraw at any time. Particular attention was given to the administration of the online observations, as participants usually lose interest

when they work apart from the teachers' presence, this action may hinder the findings. Therefore, I explained how their online collaboration would eventually be observed and how it would also benefit them. I also made sure they understood each section and each item, and I remained available throughout the whole session. Given that the research instruments (in this case, questions for a focus group and interviews) needed translation from English into Arabic, close consideration was given to potential ethical matters and the translations were subjected to expert review and validation to ensure that sense and meaning were maintained.

Finally, issues of confidentiality and anonymity were considered, and all possible steps were taken to ensure both aspects. All data were held anonymously with no reference to any particular participant, and pseudonyms were used for data analysis purposes only. The original list of the participants' names was only known by the researcher. The data was processed according to the data protection legislations of the University of Exeter. So, all hard data including copy documents, field notes, and samples of students' texts were securely stored in a locked cabinet at the researcher's home or at college. Digital data were stored on the researcher's personal laptop under the researcher's own account with a username and password only known by the researcher.

4.13 Trustworthiness

Researchers have responsibilities to the wider community of researchers regarding the trustworthiness of the research. Qualitative researchers, in particular, have a responsibility to demonstrate the reliability of their methods and the validity of their research claims. Hence, every effort was made to seek validity and reliability, or what Guba and Lincoln (1985) labelled as 'trustworthiness', to

ensure rigour and render this qualitative study valuable. They assert that the terms validity and reliability have been traditionally allied with quantitative research and are not appropriate for qualitative analysis. They provided one of the most influential attempts to identify a list of criteria 'that describes the characteristics of what constitutes good qualitative research' (Loh, 2013, p. 4). They suggested four alternative terms or a set of criteria to ensure the trustworthiness of qualitative studies: credibility, transferability, dependability, and confirmability. In what follows, the criteria that are commonly used to evaluate qualitative research and how they have been addressed throughout this research in order to demonstrate the trustworthiness of the research process are highlighted.

4.13.1 Credibility

Credibility is an essential standard that needs to be met in order to ensure the study's trustworthiness (Lincoln & Guba, 1985). It is related to 'the focus of the research and refers to confidence in how well the data and the processes of analysis address the intended focus' (Graneheim & Lundman, 2004, p. 109). Credibility can be achieved through many techniques, such as prolonged engagement, persistent observation, triangulation, peer debriefing, negative case analysis, and member checks. Therefore, in the current study, I have attempted to meet these criteria throughout all the stages of the study. First of all, I spent almost three months (one semester) in the field, observing EFL students online and in class in their writing classes, as well as researching, audio-recording, and interviewing a number of them. I believe that my previous familiarity with the educational setting as well as the present opportunity enabled me to interact with the students, engage in the class activities, gain adequate understanding of the

context, and establish relationships of trust with the participants as a teacher/researcher during the study period. As in qualitative research, it is the researcher who is the major instrument of data collection and analysis (Shenton, 2004); information on my past experiences and orientations as well as my role in the study could be invaluable for the readers. Indeed, it allowed them to understand my position and any biases or assumptions that influenced the inquiry and the conclusions.

Moreover, triangulation was one of the most essential techniques employed in this study that can contribute to the credibility of the research as it allowed me to study the phenomenon investigated from different perspectives. I believe that the data coming from a variety of sources added further weight to my arguments. As it is already stated, four methods of data collection were employed to confirm the clarity of research findings (Ritchie et al., 2003). Every effort was made to provide detailed descriptions of the research process as it provided the readers with an opportunity to trace the course of the investigation step-by-step. Therefore, a thorough understanding of the processes within the study enable them to assess the credibility of the interpretations and the results and to determine whether the conclusions can be applied to similar settings.

However, triangulation as a validation procedure has been criticised as it assumes that findings from various sources or acquired by different methods can be used to support each other. This assumption would seem to agree with a realist view that there can be a single definitive account. Moreover, triangulation fails to take account of the different social circumstances from which different sets of data are drawn (Bryman, 2004). Accordingly, in the current study, responses to focus groups conducted in the classroom cannot be assumed to meet with the views expressed in private interviews for obvious reasons of context. However,

triangulation was used to secure additional interpretation rather than to confirm a single meaning. Also, the findings from one dataset generated new questions to be pursued by another method or with another case, and therefore extended interpretive possibilities.

Furthermore, member checking was also adopted to contribute to the credibility of this research. Classroom observation notes and interview transcripts were showed to the participants in order to verify their contents and to see whether the conversation written in the transcript match what they actually intended (Shenton, 2004). Member checking is also questioned as a means of confirming conclusions drawn. The assumption that participants are necessarily in any better position than the analyst to validate the truth of research findings is clearly flawed (Silverman, 2019). However, member checking was used throughout the research process to assist interpretation. Clarification was sought from students, for example, when the initial analysis of comments made in interviews or revisions made to the text proved difficult to interpret.

In addition, peer review was also another technique that was employed to increase the credibility of the study. My data analysis and findings, in addition to the interpretation of these findings, were peer reviewed by academics and PhD candidates at several research events. Notably, I constantly met with my supervisors to discuss data analysis procedures and use their experiences and expertise to further assist me. Those meetings enabled me to decrease the probability of flaws, refine my assumptions and methods, develop a greater explanation of the research design, and strengthen my arguments.

Examining previous research findings was also a further technique employed in this study to increase its credibility. According to Shenton (2004), 'the ability of the researcher to relate his or her findings to an existing body of

knowledge is a key criterion for evaluating works of qualitative inquiry' (p. 69). Therefore, the previous literature was considered carefully in this study. I examined the reports of the previous studies which addressed comparable issues or had a similar focus, attended several conferences, and prepared two papers and published them in peer-reviewed journals within the field. The gap that this study attempts to fill was addressed through a deep review of the literature and the interpretation of the findings was developed with concurrent revisions of the existing knowledge.

4.13.2 Transferability

The second standard of research trustworthiness is transferability. It refers to the application or the relevance of the research findings to other contexts (Richards, 2009). Shenton (2004) argued that 'since the findings of a qualitative project are specific to a small number of particular environments and individuals, it is impossible to demonstrate that the findings and conclusions are applicable to other situations and populations' (p. 69).

Although it is argued that results from case studies cannot produce generalisation in general, it is claimed that this kind of research strategy can allow transferability from the instance to a wider class (Cohen et al., 2010). In this study, as discussed earlier, the case study type can be seen as an exploratory case study because it provides insights into the EFL students' understanding of the affordances and limitations related to the online collaboration in the writing classroom among all the EFL students in the whole country of the Sultanate of Oman, due to the similarities between educational policies and systems, and cultural backgrounds within the Omani context.

From the above discussion, I argue that, although this study can be seen as a unique case, some results might be transferred to other universities in the Sultanate of Oman that carry out similar Foundation Programmes. Furthermore, this study seems to be one of the first attempts to explore this issue in the Sultanate of Oman according to the sociocultural theory perspective which could reveal important findings. Therefore, the results of this study may provide an insight into the possibility of transferring any similarity in the impact of online collaboration on students' writing which could arise from the findings of this study, although generalising findings of the study was not a priority or a target in my current research.

4.13.3 Dependability

Dependability is another standard suggested by Lincoln and Guba (1985) to ensure the trustworthiness of qualitative research. It 'involves an interrogation of the context and the methods used to derive the data' (Richards, 2009, p. 159). It refers to the stability and logic of the research process employed.

In order to preserve dependability, the process of the current study was reported in clear detail which would allow other researchers to repeat the work in different situations considering the contextually unique factors of this study. Shenton (2004) argued that 'such in-depth coverage also allows the reader to assess the extent to which proper research practices have been followed... so as to enable readers of the research report to develop a thorough understanding of the methods and their effectiveness' (p. 71).

4.13.4 Confirmability

Finally, Richards (2009) disputed that confirmability depends on 'making the data available to the reader and this in turn depends on the transparency of representation' (p. 160). It is associated with the term 'objectivity' in scientific research. Researchers can apply many strategies to enhance the validity or reliability of the conclusions they draw from their qualitative data. Every effort was made to seek transparency about the procedures employed and the evidence used to reach conclusions. For example, sample interview transcripts, observation records, and coded texts were included to contribute to this transparency. Furthermore, the use of NVivo version 12 software for interview analysis also provides an auditable record of coding decisions which can be documented to strengthen confidence in the analysis. Importantly, the findings of the study were reported according to the participants' experiences and ideas rather than the experiences and ideas of the researcher to reduce the effect of the researcher's bias (Shenton, 2004).

Data analysis was a systematic and iterative process and involved going backwards and forwards between the data and emergent findings until pieces of the puzzle clearly fitted together. Moreover, data interpretation and research reports were well supported by evidence (Chapter 5). In order to demonstrate the trustworthiness of this account, it was essential to accurately and rigorously describe all 'the methodological procedures and sources used to establish a high level of harmony between the participants' expressions and the researcher's interpretations of them' (Given, 2008, p. 138). I believe the strategies outlined above are important steps by which I established the trustworthiness of my approach to data collection and analysis and the credibility of my interpretation. I also believe that this is further supported by efforts to be transparent and honest

in my accounts of the various stages of data generation, analysis, and interpretation.

4.14 Summary

This chapter has provided a detailed description of the research methodology and design followed to conduct this study. It has revisited the research aims and questions, as well as articulating the philosophical assumptions underpinning the research and the adoption of a single paradigm approach. It then presented the context of this research and elaborated on the choice of research design. After providing the rationale for the choice of a mixed methods research design and outlining the methods used for collecting data, the chapter culminated with the procedures adopted for analysing the data. I then presented the methodology of the study including a description of the sampling strategy, research methods and instrument, ethical issues, and the procedure of data collection. Finally, I brought the chapter to a conclusion by presenting the data analysis process and theoretical considerations related to the analysis and concluded the chapter by discussing the trustworthiness of the research including credibility, transferability, dependability, and confirmability. In the following chapter, I present the findings that emerged from the data collection where students tell their own stories of experiencing online collaboration in their writing.

Chapter 5: Findings

5.1 Introduction

The findings chapter presents the findings of my research by reporting and summarising the students' descriptions of the impact of online collaboration on their writing. The main research questions are answered in the four main sections of this chapter. Each section begins with the research question related to that section, to serve as a reminder of the purpose of the study and to reflect what guided the data collection and analysis processes. The findings chapter reflects areas which are based on analysis of different data types: texts written by students, observational logs, and interviews. These themes were coded using NVivo version 12. An outline of the analysis chapter is shown in Table 5.1. Each section outlines interrelated aspects that contribute to an understanding of the impact of the online collaboration of the EFL students' writing in the Omani context.

Table 5.1
Outline of the Sections of Analysis

Section	Main Themes
Section 5.3	The affordances and challenges of online collaboration in supporting EFL students' writing.
Section 5.4	The online peer feedback facilitates mutual scaffolding between EFL students.
Section 5.5	The impact of online peer feedback on students' writing performance.
Section 5.6	The impact of online peer feedback on students' revision behaviour.

As for the rest of this chapter, it delineates the three main themes related to both the affordances and limitations of online collaboration on students' writing, and the students' readiness to engage in online collaboration tasks on their writing. These three themes were explored initially through focus groups for the whole cohort. The next section highlights the cohort perceptions in detail.

5.2 Cohort Perceptions

5.2.1 Introduction

The primary purpose of the cohort focus groups was to identify prominent themes and questions to inform the case study research. The focus group questions addressed the students' understanding of the affordances and limitations of online collaboration on their writing, although these categories were not treated as discrete subsets because something might be both an affordance and a limitation depending on how it is perceived by the students. For example, some might be happy to share their ideas while others may see this as giving something away. Besides this, focus groups' discussions invited comments on the students' views and their readiness to engage in online collaboration tasks. Therefore, a high priority was given to interactions between students in the group rather than student-researcher interactions. Participants were prompted to talk primarily to each other in their own terms rather than to a researcher where the research setting, and data were more naturalistic than individual interview methods. The researcher took the role of a moderator and guided the discussion, but any interference was minimal. The intention was to explore patterns of response for the cohort as a whole and to select eight students for the individual interviews as a sample that represented the spread of opinion.

As anticipated, there were some clear themes that emerged from the students' responses. However, there were several apparent contradictions in the responses which raised questions for further investigation during the individual interviews. The analysis also showed some differences between the responses of students from different groups. Students in two of the groups, for example, appeared to value online collaboration more than those attending the other two groups; they were also more enthusiastic about taking part in the online collaboration task. Across the whole class, some differences were apparent and are reported below.

5.2.2 Findings From the Focus Group Questions

Four focus groups of five to six students were conducted to ask students to describe how they view and think about online collaboration in terms of writing classes and how they revise and redraft their piece of writing. Twenty-three students took part in the discussions. The sample represented a whole class at the intermediate level (Level 3) from the English Language Centre. All comments were coded using NVivo version 12. Most students' comments expressed thoughts or feelings about affordances, limitations, and their readiness to take part in the online collaboration tasks. Coding of responses to the questions revealed many sub-themes under the three key themes, hierarchically organised according to frequency of reference and number of cases, as shown in Table 5.2. Although fewer girls than boys responded, there was no apparent gender divide in students' comments regarding their understanding of the impact of online collaboration.

Table 5.2

Coding Framework for all Comments Relating to the Focus Groups Students' Perception of Online Collaboration

Level 1 codes	No. of refs.	No. of groups	Level 2 codes			
Affordances of online collaboration	34	4	offering a productive atmosphere for the students' interaction			
			improving their writings			
			improvement of their other language sub- skills, especially grammar and vocabulary.			
			variety of writings would be available to them			
			saving the drafts and feedback online			
			students could also access and refer back to their drafts at anytime and anywhere, depending on their preferences			
			improving their computer knowledge			
			developed their critical thinking skills			
			limitations of online collaboration	25	4	difficult for beginners in using the computer
						facilities are not available like Wi-Fi and enough computers'
they are not working properly						
using technology might affect our eyes negatively						
focus groups mentioned that low achievers' feedback might be ignored						
concern about the students' management through online collaboration						
it might need plenty of time as the students would still wait for the final feedback from the teacher						
Depending on the teachers' support						
Students' readiness to engage on online collaboration	23	4				interest in taking part in online collaboration tasks
						did not like using technology in their learning
			online collaboration represented an additional burden			
			writing in English was 'hard' and they were uncertain how to go about it			
			English needs a good knowledge of the language vocabulary and grammar'			
			lack of confidence in peers' feedback was also a factor:			
			online collaboration is enjoyable and attractive as students would interact directly.			
			the vast majority of the students showed a willingness to take part in the online writing task			

5.2.2.1 Affordances of Online Collaboration

It is clear that the participants had recognised the technical and pedagogical affordances of online collaboration in terms of their writing performance and revision behaviours. This raised the issue of the value of such collaboration in offering a productive atmosphere for the students' interaction.

The vast majority of comments endorsed the affordances of online collaboration for the writing classes. The predominant sentiment expressed students' awareness to the value of online collaboration concerning improving their writings, as in the following students' responses: 'using the computer helps correct the grammatical mistakes immediately' or 'helps us read more because it allows us to read our colleagues' writing' or helps students to 'learn from each other's mistakes'. Common descriptors in the students' responses included 'improve', 'enhance', and 'learn'. There seemed to be a connection made between the students' writing and the improvement of their other language sub-skills, especially grammar and vocabulary.

The sense in which online collaboration was perceived as 'useful' was often expressed in general expressions, such as 'allows to develop our reading and writing skills because these two skills are related to each other' or 'improves our language by learning new vocabulary from our colleagues'. Many students pointed to the substantial benefit of online collaboration through an online platform because a variety of writings would be available to them, as can be seen in this student's response: 'using an online platform helps students read more because it allows them to read their colleagues' writings'. Such availability would help them widen their knowledge of different language skills and allow them to be exposed to different styles of writing as well as to 'improve our language by learning new vocabulary from their colleagues', as one student put it. This seems to suggest a clear perception of the affordances of online peer feedback over traditional methods of providing feedback. Additionally, students could not claim that they had lost or misplaced their drafts or their peer feedback as all of the feedback are available online. It is not only saving the drafts and feedback online, but students could also access and refer back to their drafts at anytime and

anywhere, depending on their preferences. It could, therefore, be argued that the students recognised the vital role of the online platform in enabling them to be exposed to a variety of writings online. That is, online peer feedback means that students will read several essays and then provide feedback to them. Accordingly, they can enhance their language skills from reading and commenting on others' writings.

Where particular aspects of writing were specified, it was the surface-level improvement that was most frequently mentioned, which included the following: grammar, spelling, vocabulary, as can be read in these students' comments: 'using the computer allows to correct the grammatical mistakes immediately', or it 'improves our language by learning new vocabulary from our colleagues', or it 'detects the spelling mistakes'.

One aspect of noticing that was evident in the students' comments was their views and feelings about the significance of online tasks in improving their computer knowledge. For many, online collaboration was associated with the use of new technologies in writing, and for some, it is useful to develop their computer literacy: 'helps use the keyboard easily' or 'using the computer helps the students improve their computer skills'. For a few, its impact was more substantial: 'online collaboration helps students write research and reports'. A number of students identified the usefulness of online collaboration in terms of it being timesaving; it 'saves time and effort'. Being clear and neat in particular was seen as an automatic result of online writing: 'online collaboration makes our writing organised and clear as typing is used instead of handwriting'.

Some students considered that online collaboration developed their critical thinking skills because 'online collaboration enhances critical thinking as we have to decide on our colleagues' feedback and accordingly choose the right feedback

especially when we receive different feedback from our classmates'. Paying conscious attention to peers' mistakes, providing feedback to them, and then making a revision of their drafts, has been another central aspect of student noticing during the online collaboration tasks. That is, students reported that they might receive very different and varied feedback from their colleagues. Therefore, they should use their critical thinking skills by reading and deciding which feedback to act upon. Although the students pointed to the affordances of online collaboration, some challenges and limitations were addressed. The next section sheds light on the students' perceptions of the limitations of online collaboration.

5.2.2.2 Limitations of Online Collaboration

For the vast majority of students, the limitation of online collaboration was explicitly technical: 'It is difficult for beginners in using the computer to use the keyboard' or 'we faced some issues with the keyboard at the beginning of the course'. For some students the facilities are sometimes obstacles if they are not working properly; 'sometimes the facilities are not available like Wi-Fi and enough computers' or 'issues of facilities like the Internet and devices'. Surprisingly, one student pointed out to a health problem as a result of using technology; 'using technology might affect our eyes negatively as students spend most of their time on devices like mobile phones, iPad and computers'. Two focus groups mentioned that low achievers' feedback might be ignored: 'I would focus on feedback from the high-level student and ignore the ones from the low-level students'.

A sense of concern about the students' management through online collaboration task was apparent in two focus group responses: 'it would be difficult for the teacher to control the students' online interaction as they could

interact at any time and place'. In addition, some students pointed out that online peer feedback might be interesting, but they added it might need plenty of time as the students would still wait for the final feedback from the teacher. That is, they believed that they could not begin to write their second draft unless they received the teachers' feedback first, as in this example, 'online peer feedback is useful, but we still need the teachers' feedback to make sure that our feedback is correct. Therefore, I could not imagine writing a second draft without the teachers' feedback'.

Surprisingly, many participants tended to depend on their teachers even through the peer feedback process. More precisely, some students claimed that they would prefer sending their feedback on their peers' writing to the teacher before posting the feedback online. They preferred to ask their teachers for consideration and approval of their feedback, as this student's response shows, 'my feedback might not be correct unless being approved by the teacher as all of the students are at the same level. I would rather prefer to send my feedback on my peers' writing to the teacher to check the appropriateness of my feedback'. This indicates that some students are still depending on the teachers in most of their activities and referring to them before initiating any task. Such difficulties should be taken into the teachers' consideration to provide a productive atmosphere for the students' interaction. The next section highlights the students' readiness to engage in online collaboration through the online platform.

5.2.2.3 Students' Readiness to Engage in Online Collaboration

Almost all of the students expressed interest in taking part in online collaboration tasks, ranging from fully supported, 'I really like it', to the more conservative 'I think it is useful, but I am not sure'. Some students claimed they

did not like using technology in their learning. For them, online collaboration represented an additional burden: 'writing in English is difficult especially when using online platforms'. For a few students, writing in English was 'hard' and they were uncertain how to go about it: 'it is hard to find the appropriate vocabulary to express my meaning'; 'it is not easy to express your opinions in a foreign language'; 'it is hard because writing in English needs a good knowledge of the language vocabulary and grammar'. A lack of confidence in peers' feedback was also a factor: 'I think my level is higher than my colleagues, so they would not be able to benefit me'. For some students, online collaboration is enjoyable and attractive as students would interact directly; 'it is interesting to write to colleagues and read their writings as well'.

Overall, the vast majority of the students showed a willingness to take part in the online writing task regardless of the concerns they raised in the discussion. The concerns about the use of the online platform drove some students to feel reluctant in taking part in the online task. Therefore, offering enough training along with correction codes (Appendix 16) for the students might help make the online writing task more successful and to extend the learning process. The correction list of codes can be described as both technically grammatical and an organisational list. That is, it puts great emphasis on the missing parts of sentences, grammatical mistakes, organisation, and punctuation. However, students also can add these comments at the end of their peers' essays to provide an overall comment in terms of the content and the organisation to improve the essay. Consequently, the research process began with training sessions about how to provide peer feedback by using the given correction codes. This training informed how the task would be refined and how the learning process would take place. Additionally, before introducing a new genre, its

features were discussed, and students were provided with a couple of model papers. The teacher modelled how the students should provide feedback and act upon their peers' feedback. Certainly, adequate training, modelling, and supporting the students step-by-step during the process to be properly involved in online collaboration tasks not only improve students' revision skills, but also alleviate most of the practical and pedagogical issues. It seems that different focus groups had differing levels of positivity about online collaboration. Some of this might be a consequence of dominant voices within each group. These differences showed that there were concerns as well as a general willingness about the implementation of online collaboration tasks. The next section highlights incidental data from these observations in greater detail.

5.2.3 Incidental Data From Observations

Additional evidence was noted during the classroom discussions, which immediately preceded or followed completion of the individual interviews. It was evident that some students in the class were not familiar with the term online collaboration in relation to writing, and many students confused it with collaborative writing. These ad hoc conversations revealed more reservations and concerns than the focus groups did. A few students did not know how to provide appropriate online feedback, and when the teacher explained, they dismissed it as higher than their current level: 'I think the teacher is more appropriate to provide feedback because our level is the same. Therefore, we are not at a level to provide feedback to each other' (Group 2 student). Other students assumed that peer feedback meant correcting the mistakes directly, as this student stated, 'we will need to correct our peer's mistakes in our peer feedback' (Group 1 student). When asked to define the online peer feedback,

many students volunteered editing and proofreading functions, or 'checking' that requirements have been met, 'students need to go back over their peers' writings and check that you have met the criteria' (Group 2 student). One girl pointed out the importance of making the piece of writing interesting: 'to encourage students to provide feedback to your writing, it has to be attractive and interesting' (Group 4 student).

Some students positively objected when asked to provide feedback, suggesting that feedback would make writing worse: 'providing wrong peer feedback makes the second draft worse than the first' (Group 3 student). Others were concerned that online collaboration would make students' handwriting worse because they would not use their hands in writing: 'I think if students typed their writings on computers, it would affect their handwriting negatively. They need to use their handwriting in the exam. Therefore, I prefer to use handwriting over using computers or mobile phones in writing' (Group 1 student). Other students expressed concerns about the decrease of the role of the teacher in the online collaboration task: 'I think online collaboration tasks allow students to write in their pace, but it will be difficult for the teacher to control them as they will write in a different time and place' (Group 2 student). For them, the attendance of teachers should be dominant in all of the writing stages from the prewriting to the submission of the last draft.

5.2.4 Conclusion

The broad patterns of responses to the focus groups' questions would seem to indicate that these students' interpretations of online collaboration were narrowly conceived and limited in scope. Their understanding of the affordances and limitations of online collaboration were primarily surface-focused and

instrumental. Moreover, their claimed behaviours suggest they attach the most significance to online peer feedback and tend to learn from providing and receiving feedback as well.

On the other hand, aspects of the students' responses suggested their orientations towards deep and surface approaches together with concerns about the limitations of online collaboration. Whilst their responses showed their enthusiasm and interest in taking part in online collaboration activities, they also showed some concerns about the efficiency of the implementation of the online collaboration of their writing classes. They also showed concerns about the interaction with colleagues instead of direct communication which their teachers as they used to do. Furthermore, a concern for their readers was apparent, and perceptions of readership appear to extend beyond the teacher. There were also mixed views about the usefulness of their peers' feedback as they believe that the teachers are the only appropriate source for giving feedback.

These inconsistencies and contradictions might reflect a range of factors which were captured in focus group research. Students' overriding concerns to satisfy the assessment criteria, for example, alongside an apparently widespread uncertainty about the quality of their own feedback, gives a sense that they see it as an obligatory task to be done to satisfy their teachers. Furthermore, students believe that it is hard to provide feedback for writing at higher levels because they lack the skills and knowledge to do so. A perception of a lack of feedback skills might decrease their motivation to provide feedback to their classmates' writing. Besides this, an impression that they lack enough computer literacy might also make them hesitant to fully engage in an online task.

As a consequence of the research enquiry, students' responses to the focus groups questions raised more questions than they answered. However,

they suggested interesting lines of inquiry for the study, and also provided a useful focus for closer examination of individual rationales and the kinds of problems and opportunities students face when providing online peer feedback. Table 5.3 outlines the key questions arising from the focus groups that informed the initial case study interviews and observations of writing.

Table 5.3
Questions Arising From Focus Groups' Responses

Main Research Question	Subsidiary Questions Suggested by Focus Groups' Responses
<p>What are the affordances and limitations of online collaboration in supporting EFL students' writing?</p>	<ul style="list-style-type: none"> • How have you tried to develop strategies to develop your online writing activities? Has online peer feedback helped you to make better decisions? In what ways? • Have you tried to seek anyone's advice to help you with your drafts? What other sources of support do you use? • What was the focus of your peers' feedback? • What was your feedback focus when you were in the role of the reviewer? • Has this online course been different from any of your face-to-face English writing classes before? If yes, how?
<p>To what extent does online peer feedback as a collaborative learning technique used in EFL writing classes impact students' writing performance (quality)?</p>	<ul style="list-style-type: none"> • From your own experience, did you get benefits from the online peer feedback in your writing? How? • Did online peer feedback and learning logs help you check your progress towards your learning goals? • Is your ability in developing your ideas in your essay improving? In what ways? How have you understood this? • After all online peer feedback work, how do you feel about your writing ability in comparison to when you began working on this programme?

<p>To what extent does online peer feedback as a collaborative technique impact students' revision behaviour?</p>	<ul style="list-style-type: none"> • While writing your first draft, you knew your peer would be your audience. Did that have any effect on your writing or not? How? • How do you manage your emotional response to online peer feedback? What sorts of feelings do you go through when trying to deal with online peer feedback and further drafting of work? • How many revisions did you make during the composition process? What kinds of revisions did students make? • Do you go back to review your learning log? How frequently? In what ways has this been useful to you?
<p>How does online peer feedback facilitate mutual scaffolding between EFL students (contrasting the two roles of reviewer and receiver)?</p>	<ul style="list-style-type: none"> • What use did you make of your peers' comments? Did you use them in your revision? If so, how useful were they? If not, why not? • Did you benefit from reading a peer's work? • Did you benefit from giving comments on a peer's work? • How easy/difficult was it to offer feedback?

5.3 The Affordances and Limitations of Online Collaboration

5.3.1 Introduction

The eight cases of the focus students were designed to investigate individual students' understandings of online collaboration in the context of tertiary level writing. Evidence from their focus group responses, observed writing patterns, and text analysis were used to focus on a series of one-to-one interviews conducted over the writing course. These interviews formed the primary source of data for exploring the research questions posed.

The first research question addressed students' understanding of the impact of online collaboration: What do students understand about the affordances and challenges of online collaboration in supporting EFL students' writing? To investigate this question, students were asked to reflect upon their experiences in the context of an assigned classroom writing task. The assigned

task was an essay of 250 words about different genres (compare-contrast and cause-effect writing), and students were explicitly encouraged by the teachers to post their writing online and then provide feedback on their peers' essays. All interview comments that referred to the affordances and challenges of online collaboration in supporting EFL students' writing were coded under the broad heading of affordances and challenges of online collaboration. Within this, thematic categories and sub-codes were identified and refined over several iterations. That is, the broad themes were determined by the research questions, which fed into the interview design, while the more specific comments emerging from the data collection were categorised inductively. Employing the theme focus facilitated the interview texts coding (Cohen et al., 2007, p. 273).

5.3.2 Affordances of the Online Collaboration

This section is organised to reveal the main themes that emerged from analysis of the data, in order to consider the possible relationship between students' stated beliefs and their online practice. The analysis of the affordances revealed five top-level themes, hierarchically organised according to the number of cases, as shown in Table 5.4. These themes and the various views which contribute to them are considered below.

Table 5.4
Affordances of Online Collaboration

No.	Theme	Cases
1	Enhancing the learning process	Eight students
2	Improving computer literacy	Eight students
3	Providing the motivation to students	Seven students
4	Enhancing critical thinking	Five students
5	Interaction and communication beyond the classroom	Four students

5.3.2.1 Enhancing the Learning Process

The most prominent theme arising from the data concerned the detection and correction of errors or faults, which is perceived to enhance the learning process. That is, all of the eight participants believed that online collaboration enhanced their learning process because it allowed them to check the flaws (mistakes) and correct them. Peer feedback was described as a kind of detective work, whereby writing is examined and re-examined any number of times with a critical eye in order to spot deficiencies, as expressed by the following:

The value for the reviewer is that he\she knows the error and avoids it in their next writings which is important to develop their writing. The receiver of the feedback also learns about his/her mistakes and avoids them in their future writings. (Huda)

Furthermore, the students characterised the revising task as a useful exercise which enabled them to avoid mistakes in their future writing, as mentioned by the following student's comment:

I have learned from my mistakes so that I can avoid these mistakes in my future writings. Also, I have learned from my classmates' mistakes as I can avoid repeating those mistakes in my essays and pay attention to the common mistakes. (Sara)

She perceived that online peer feedback is not merely about error spotting and correcting but also about addressing the kinds of mistakes one might make and alerting the writer to where to give attention in future writing tasks. Although the issue is surface features of the text, it is still concerned with a level of self-knowledge as a writer. The online collaboration was further perceived to help focus on all elements of writing, as explained by the following:

Writing online helps us focus on all elements of an essay like spelling, grammar, organisation, etc., but writing in the class makes us focus on the spelling mistakes. It is important to develop our essays and make it clear to the readers. (Fahad)

This focus was regarded to support students to improve their final draft and minimise mistakes: 'peer feedback helped me detect my mistakes, and then improved my final draft of writing' (Sara). Likewise, Muna highlighted the significance of revision in developing the students' final draft: 'I have realised that I have to revise my work before posting it as most of my mistakes could be corrected if I made an effort to revise my writing'. This reveals that students recognised the need to focus on different language skills as all these skills would be evaluated and judged by their peers.

Although most of the comments related to error correction, other aspects of learning were evident in the comments. This task involved organising the writers' ideas, as Salim explained by stating the following:

I have learned how to organise my ideas in an essay. I have learned from reading my peers writings and their feedback. Also, I have learned how to attract readers to my essay by writing an attractive piece of writing.

For Salim, a well-written essay makes the students interested in reading the essay which motivates them to provide useful feedback: 'an attractive essay is important so students would read your essay and provide feedback to you'. Similarly, Ali asserted the significance of online collaboration in helping students learn from each other: 'students can learn new ideas from each other. They also can learn new vocabulary'.

The above quotes indicate that all of the eight participants made explicit connections between the online peer feedback and the enhancement of their process of learning. This reveals that the participants showed awareness of the value of online peer feedback on their writing. They elucidated that online collaboration enhanced their learning process in terms of acquiring new knowledge or modifying existing knowledge or skills. It is salient that while the emphasis of the students' feedback was often on error correction, the learning focus itself was more varied and touched on, idea generation, textual organisation, and the writer's self-knowledge.

5.3.2.2 Improving Computer Literacy

From the student perspective, an essential theme was related to the knowledge and ability to efficiently utilise computers and related technology. All the students emphasised the importance of online collaboration in enhancing their computer literacy. The elementary use of computers was mentioned most frequently: 'I learned how to write on the computer in English. Now, my typing is fast comparing to it at the outset of the course' (Ali); 'it helps me improve my typing skills in English using the computer' (Salim). There was a clear association in terms of writing as a highly significant skill for the students' computer literacy. All the students indicated the need to focus on developing their computer literacy through writing, especially in English as a foreign language. For instance, some students revealed more enthusiasm and related their understanding of computer literacy to their writing, as illustrated by Haitham's comment:

I think one of the most important values of online writing is improving my computer skills, especially working with the keyboard. In the beginning, I was slow when I write. Then, my skills have improved.

Also, I have learned how to log in to the college e-learning service. It was my first time to make use of the college services available for the students.

From the above view, it seems that Haitham linked the task to the development of his future study. He put forward the view that online collaboration could help him not only in the writing class but also in other courses. Moreover, Fahad spoke of the importance of computer literacy in order to be able to find a proper job in the future: 'we have learned how to use and type on the computer which is a significant skill in the job market'. Thus, the demands of a future job are visible in the motivation to improve writing. Fahad's reference to the job indicates his awareness of the association between the study and the job market. For him, computer literacy was perceived to offer a direct and more straightforward recruitment path. It is, as in the current context, regarded as being in high demand in the job market as it qualifies candidates who have functional computer literacy. Thus, the security of future employment seems essential for the current students, as finding a job is challenging nowadays and needs many skills related to technology. On this matter, Sara stressed the importance of mastering computer skills, as she listed many relevant reasons related to the future prospects of the graduates of the college, as she expressed by the following:

Computer literacy is vital for every student, especially in the future.

Most of the job interviews are conducted through the computer. Also, computers and other new technologies are used in most of the private and public sector all over the world.

Therefore, it seems that there is a need for the use of technology as it is related to the job market. The job itself is demanding and requires a high level of

skills to be successful, which means students have to be familiar with the demands of future jobs.

As noted during the classroom observations, the students' literacy is perceived to have improved throughout the course. Sara confirmed their improvement in terms of computer literacy through this comment:

I have developed my computer skills, especially typing. At the beginning of the course, it took me a long time to write my essay on the computer. Now, I feel things are better as writings take less time which is good.

It meant an improvement in the utilising of the computer has happened, as can be seen in the following statement: 'my computer skills have improved' (Haitham). It showed that the students realised the essence of computer literacy in their study as well; 'we develop our computer skills which are important in the next level (Level 4)' (Fahad). He highlighted the importance of using a computer in their study at the college as mentioned earlier. As most of the assignments and handouts are available in the e-learning service, students found it necessary to develop their understanding of using a computer properly.

The above evidence from the data suggests that the participants have become more aware of the need to be better prepared to integrate the technology in the learning process. They realised that keeping abreast of new technologies and the opportunities they offer is a pivotal method to learn as well as to interact with the world of today. It is crucial for them to make effective use of new tools and to find a way in which they can support learning in the language classroom. Such understanding of the value of online collaboration could contribute positively to the students' interaction through the online platform in their writings.

5.3.2.3 Online Collaboration Motivates Students

Online collaboration is perceived to be a supportive technique to raise awareness of the importance of the reader's interest through the selection of a topic the peers might want to read. This topic might be related to the students' daily experiences or related to their studying in college. In this sense, seven students shared the view that a vital affordance of online collaboration was to enhance the motivation of students to write, as read in the following comment:

I always try to write the best, whatever are the audiences. However, when I know that others would read my writing, it gives me more motivation to write better essays. Thus, I pay more attention to create an interesting essay to the readers. (Ali)

It appears that students feel more motivated to write for their classmates, as can be seen in Huda's response:

I try to be more accurate because more than one person would read my writings. Online collaboration gives us motivation as students to show our writings to our classmates. It is an interesting experience to share our writings with each other.

It seems that online collaboration among students encourages a sense of audience as more than one reader read their writing. Students tended to edit and re-edit to produce the best text they can when they know that their writing is displayed to other students in their class.

Related to the previous point is that students feel motivated as they write through a new platform: 'it is motivating for the students as they write in a new platform and environment' (Huda). Similarly, Muna asserted the importance of changing the learning atmosphere to boost their writing and construct a collaborative and supportive atmosphere among students: 'changing the

atmosphere can potentially motivate students to write in a more inspired way'. It seems that online writing supports habitual writing to take place more frequently than in the traditional setting. In this vein, working with their classmates was seen as an opportunity for the students to know each other, as can be read in the following:

It encourages collaboration among students which helped them know each other, especially at the beginning of the semester. Also, it can reduce the potentially high levels of embarrassment between students. In addition, online learning, in particular, has underscored the desirability of developing the habit of revising my writing before I take the ultimate step of posting it online. (Muna)

In addition, the students felt motivated and satisfied when they noticed the result of their peer feedback on their second writing: 'I feel that my second writings are better than the first ones. Also, I feel that my writings have been improved over subsequent drafts' (Ali). This helped provide a satisfying sense of progress which provided interest and energy in learning: 'I have learned a lot, especially in spelling. I have discovered that most of my mistakes were in spelling' (Salim). One student asserted that the motivation, which he derived from observing improvement in his online drafts, is required for the improvement of his writing, by stating the following comment:

There were a lot of situations where I got benefits from my colleagues' feedback. For example, I used to make some mistakes with the subject-verb agreement. Later, I felt better in writing when I noticed an improvement in my essay. (Haitham)

It can be immediately noticed that online collaboration activities motivated students writing as they can write for more than one reader as they used to do.

Additionally, writing in a new platform and atmosphere showed a positive impact on the students' motivation. Finally, noticing the result of their peer feedback on their second writing encourages more collaboration among learners, which in turn, eventually contributes to their motivation levels.

5.3.2.4 Boosting Critical Thinking

One of the main affordances given for online collaboration was to promote the students' critical thinking abilities which includes the skills of evaluating and judging the peers' work and feedback, as well. Sara, for example, stated that online collaboration: 'helps us improve critical thinking skills especially when I got different feedback from different colleagues'. For her, online collaboration makes her judge and evaluate her peers' feedback and then helps her make a decision on the correct feedback. Five students reported that online collaboration supported them to independently think about their colleagues' mistakes and to provide feedback which encouraged their critical thinking skills, as can be seen in the following:

I have learned how to assess others. Also, it helps me track the mistakes of the students. Also, it encourages my critical thinking skills and helps me think about others' work. I have to think about the type of error and the correct alternative. (Salim)

Furthermore, online peer feedback enabled students to consider various correction possibilities: 'I usually think before deciding which feedback to use' (Ali). It seems that in the online collaboration process, deep thinking about the peers' feedback can play a key role in bridging the gap between what students think should be correct and what is, in fact, appropriate, as demonstrated in this statement:

It is essential to think about my peer's feedback, as it helps in the process of learning. I should also think about my mistakes deeply and find the differences between what I had regarded as correct points and what peers' feedback told me were right. (Sara)

Additionally, online peer feedback helped students recall their memory and think of what they know about different language skills: 'helps to strengthen and reinforce my own internal memory' (Muna). Muna reported that when she was not sure about the definition of a particular term or disagreed about its suitability in that specific context, she recalled it from her memory to find the meaning of that particular word.

It appears that students considered online peer feedback as a valuable approach to judge and evaluate their peers' work. Judging and evaluating are essential aspects of critical thinking abilities. Besides this, students made an analysis of their peers' work by providing the appropriate correction codes to their mistakes or posting a short comment on their writings. All of these strategies contribute to the enhancement of the critical thinking abilities of the students.

5.3.2.5 Enhancing Interaction and Communication Beyond the Classroom

Online collaboration provides a diverse online environment to facilitate communications and interactions among learners. It is used to strengthen peer revision and feedback provision processes needed for writing. In this research, four students referred to the importance of online collaboration to support interaction and communication beyond the classroom. They believed that the online platform made the writing more accessible as they can write at any time and from any place; 'it is different and important as well. It makes the student ready to write at any time whether in college or later in the future in their jobs'

(Ali). This might contribute to the enhancement of the learners' autonomy as they take control of their learning, independently or in collaboration with their peers. Besides this, students also pointed out that interaction through an online platform encourages collaboration among them. Consequently, it would be easier for them to know and learn from each other as well: 'it encourages collaboration among students. Therefore, we know each other, and so we benefit from each other' (Haitham). Further still, students not only used their computers but also, they used their smartphones to write their essays: 'sometimes, I use my smartphone to write as the platform is flexible to be used whether on computers or phones' (Haitham). Such interaction and communication among students were seen as an essential skill for a future career: 'online collaboration encourages interaction and discussion among learners which are vital skills for a future job' (Ali). They also pointed out to a significant point which was that they could have the ability to access many writing examples through the platform as they can see their colleagues' writings, as can be seen by Sara's comment:

Using a computer helps students to have exposure to many writings from different students. It helps the students learn many topics and improve their writing skills. Also, they can learn new ideas and vocabulary from each other.

She claimed that online peer feedback exposed them to a greater number of writing styles, including different presentations of ideas and opinions.

To sum up the above findings, it can be said that the students perceived online peer feedback as a practical approach to consolidate interaction among students and between students and tutors-as-experts. They expressed a clear preference for such interaction as it provided invaluable insights into their understandings about particular features of writing. This strongly suggests that

online peer feedback promotes and encourages an inner desire for participation within the students. It also provides an excellent platform for communication, with less embarrassment and anxiety for students to give/receive feedback and share ideas beyond the classroom. This was perceived by students as a supportive atmosphere to help them to have exposure to a lot of writings from their peers. Consequently, they can learn many new topics and improve their writing skills.

5.3.3 Challenges of the Online Collaboration

This analysis of the challenges of the online collaboration revealed four top-level themes, hierarchically organised according to the number of cases, as shown in Table 5.5. These themes and the various views which contribute to them are considered below.

Table 5.5
Limitations of Online Collaboration

No.	Theme	Cases
1	Difficulties with the use of the platform	Seven students
2	Lack of time	Seven students
3	Negative responses to peers' feedback	Five students
4	Absence of the teacher's involvement	Four students

5.3.3.1 Difficulties with the use of the Platform

More extensive use of technology impacts the students' perceptions of the role of online collaboration in the classroom. All but one of the interview participants addressed a challenge associated with the use of the platform

generally, especially at the very outset of the course, as can be read in the following students' responses:

At the outset of the course, I faced some difficulties regarding the use of the platform and the computer in general. However, later on, I found it more comfortable and manageable. This was my first time to use the computer to write my essays, so I took some time to get used to it.

(Huda)

And:

At the beginning of the course, I faced some difficulties to use the platform, but later on, I became used to it and things went smoothly. I think the students can handle these difficulties by practicing using the computer in a regular basis. (Haitham)

Some students also suffered from their lack of knowledge of using a computer, as can be seen in Salim's comment:

Typing on the computer was the most challenge that we faced. Last time, I used my mobile to write the assignment and found it easier than the computer because I used to write on the mobile phone continuously. However, I think that students need to write on the computer as they will need the computer in their future job. They can develop their computer skills by practice, and I think that this course is a good environment to practice using the computer.

This could be attributed to the students' lack of using computers in schools and college. It was recognised that writing in English as a foreign language was more difficult than writing in the students' first language (Arabic): 'I think writing in English may be the only difficulty as it is new for me to write an essay in English'

(Sara). For these students, it took some time to type on the computer: 'I noticed that students are slow in writing on the computer' (Ali).

It certainly seems that most of the students suffered at the outset of the study in using the online platform. However, they perceived that they become productive users of the platform towards the end of the course period, which supported their use of technology in learning and promoted their understanding of different writing sub-skills.

5.3.3.2 Lack of Time

Most students – seven cases – reported that the time allocated for the online collaboration task in the classroom was not enough for writing a 250-word essay: 'I feel that the time given to the task in the class isn't enough. We write an essay of four paragraphs, so more time should be given to the task as we need to write, revise our writing, and post it at the end' (Fahad). More specifically, the students felt that the online writing classes should be given more time: 'the time allocated for the writing in the lab is not enough to write an essay' (Ahmed). The lack of time led the students to make some silly mistakes as they were in a rush to finish the task before the class ended, as can be seen in Huda's statement: 'we try to finish writing quickly so we might make some spelling mistakes' (Huda). She believed that she could improve her writing if she had enough time. Even though the students could do the task outside the classroom, most of them prefer to send the first draft during the class. It was like a challenge between them regarding who would submit his/her draft earlier than the others. Connected to the theme of difficulties in using the platform, one student attributes devoting more time to online assignments to her lack of computer skills, as stated by Huda:

Although I start writing immediately after the writing task assigned, it takes much time to write on the computer. The reason that it takes

time is that I don't use to write on the computer, especially writing in the English language.

For her, the lack of computer literacy leads to spending a vast amount of time on writing an essay as well as providing feedback on peer's writings. Noticeably, she linked the need for more time to the students' lack of computer literacy, especially in terms of English as a foreign language.

To summarise the above findings, the data highlighted the participants' concerns about their lack of time allocated for the writing task. It might be attributed to their interest to do the task in the online class period, which was two hours a week. Over the process of producing different drafts, students realised that they could do better writing if they make use of the time allocated for the task during and after the class period. Haitham asserted this trend by his statement: 'I have discovered that the task wasn't time-consuming, but it is much more flexible as I can review my work during a day, even at night or later, depending on my free time'. It seems that the issue of time could be overcome if the students make better use of the time allocated for the task.

5.3.3.3 Negative Responses to Peers' Feedback

Lack of trust in the accuracy of peers' feedback was also noticed during students' peer feedback. The most readily apparent evidence regarding distrust relationships between peers occurred when the participants did not act upon their peers' feedback or reacted to their feedback with scepticism. This was the case in the current research as most of the participants had some reservations about the accuracy and effectiveness of their peers' feedback: 'sometimes the feedback given by students is not correct. Therefore, I always check the feedback before applying it in my final draft' (Ahmed). This idea that feedback can be wrong (or

better or worse than other feedback) concerned some students, especially the high-achieving ones. They felt that feedback might help the receiver rather than the giver of the feedback so that the feedback might be a one-way transaction. For instance, Salim, who got a high grade in his writing, expressed his doubts about the low achievers' feedback on his essays, as can be read in his response:

Low achievers need support and feedback from others. I don't think that they can provide substantial feedback to my writings. It is not because I don't want to receive their feedback, but I know that they couldn't give profound feedback.

Furthermore, three other students believed that peer feedback was only useful when their partner had a good command of English and understood the purpose of providing and receiving feedback. They claimed that only the higher-achieving students could detect the mistakes: 'another problem is that my colleagues might not detect my mistakes, so I would not be able to correct all of my mistakes in this case' (Sara). She pointed out the difficulties in detecting the errors of her peers, especially the high-achieving students 'detecting the mistakes isn't easy, so we face some difficulties to find them. The low-achieving students find it challenging to identify the mistakes of the high-achieving student in all of the situations'. Another issue was related to the fear that providing negative feedback might affect the student's relationships with each other, as can be seen in the following:

The biggest challenge for me is that some students don't detect the mistakes, although they know that mistakes exist, right under their eyes. They don't want to embarrass their colleagues, so they don't actively engage in the process of learning to the extent that it can make a positive difference in their writing capability. (Muna)

The students' doubts and reservations about the value of their peers' feedback to their writings may be attributed to the fact that they were not native speakers of English. As well as this, coming from a teacher-centred culture may have prompted the students to feel that feedback received from classmates whose level of English proficiency were more or less the same as theirs, was a poor alternative to their teacher's comments and their peers were not qualified enough to comment on their work. Hence, they were reluctant to trust their partners.

5.3.3.4 Absence of the Teacher's Involvement

The teacher's role was seen as an essential means of support to aid the writing process and mediate the development of this skill as practised in the classroom. However, coming from a teacher-centred culture may make these students view the role of the teacher as being that of a facilitator, a provider of knowledge, and as able to offer critical feedback to their writing. Students described teachers with a particular emphasis on the role they took in marking and grading their work. For instance, Salim expressed his concern about grading, afraid he would not receive grades for his effort in the online task as the task was not graded, as can be seen in his comment:

I think if there were marks given to the online peer feedback, students would participate more effectively. I want to see that my work is graded and valued by the teacher as it encourages me to do my best in the next writings.

It is a piece of evidence which demonstrated that the practice of writing was not valued by the students as much as the graded tasks. Some students indicated that not assigning those tasks with marks meant that tasks were not

essential and that their time was better spent on completing obligatory assignments for other courses.

In addition, students were concerned about the lack of teacher interaction in the online task, as can be read in Ali's response:

I think that the teacher should interact with the students online to make all of the students feel accountable for their writings and feedback as well. I said that because I noticed that few students provided feedback as it was a course requirement without awareness of its significance.

Ali wanted the teacher to comment on the students' writings and their feedback to encourage more participation of the students. Students viewed the teacher as the source of knowledge in the classroom. Hence, they showed concerns and reservations as the teacher did not have any control over the peer feedback process. The teacher was seen as holding the role of supporting students in generating ideas for writing by directly telling them what ideas could fit in their essays, as can be read in the following:

Although it was a peer feedback task, I sometimes sought the teachers' advice before providing some feedback in order to make sure that I would provide correct feedback. I feel confident and safe when I get feedback from my teacher. (Fahad)

It is evident that students' practices are affected by their teacher's behaviour in terms of the engagement of their peer feedback. The students might not care about providing such feedback or at least comply with the needed requirements of the feedback if they feel that the teacher does not give attention to their online interaction. This put a significant role on the teacher to be totally explicit about the nature of his interactions with the students from the very beginning of the course.

There appeared to be a contradiction between what the students wanted (grades) and what the teachers aimed at. The teachers aimed at encouraging a student-centred approach in which students interact and collaborate to promote mutual scaffolding. This may suggest that the teacher's presence in the online task could make it obligatory to submit all the students' writings on time. Overall, the teacher was considered a cornerstone in facilitating the online task and writing behaviour. Teachers' influence is not only associated as facilitators of the students' interaction but also plays an active role in the process of writing the text by providing ideas and feedback.

5.3.4 Conclusion

In summary, all students showed positive views regarding the affordances of online collaboration, but some felt that online collaboration had some areas where improvements were needed. The most prominent theme arising from the data concerned the detection and correction of errors or faults, which eventually contributed to the enhancement of the learning process. All of the eight participants believed that online collaboration increased their learning process as it enabled them to check the flaws in their writing and correct them. Furthermore, students demonstrated more awareness of the essence to the readiness to be better prepared to integrate the technology in the learning process.

Regarding the students' motivation, it has been noticed that online collaboration activities contributed to the motivation of students' students' writing as they can write for more than one reader as they used to do. Furthermore, writing in a new platform and noticing the result of their peer feedback on their peers' second writing encourage them to actively engage in online collaboration which subsequently contributes to their motivation. Moreover, promoting the

students' critical thinking abilities was another main affordance given for online collaboration. Particularly, the judgement and evaluation of their peers' writings assisted the students to develop their critical thinking skills. In terms of the nature of the interaction, online peer feedback was viewed as a convenient approach to support interaction among students and between students and tutors-as-experts beyond the classroom.

Paradoxically, whilst students recognised the affordances of online collaboration, they revealed some concerns about some issues related to the task. It appears that most of the students suffered at the outset of the study in using the online platform. However, they became productive users of the platform towards the end of the course period, which supports their use of technology in learning and promotes their understanding of the English language. Their reasoning was that they suffered from a lack of time given to do the task in the language lab. Towards the end of the course, students realised that they could do better writing if they make better use of the time allocated for the task, not only inside the classroom but also outside the college environment. Concerning the peer feedback experience, the students revealed some doubts about the value of their peers' feedback. This perception tended to inhibit online peer feedback because students gave a higher priority to the teacher's feedback. This reservation may be attributed to the fact that they were not native speakers of English. Besides this, coming from a teacher-centred culture may have prompted the students to feel that feedback received from classmates whose level of English proficiency were more or less the same as their own, was a poor alternative to their teacher's comments and their peers were not qualified enough to comment on their work. Hence, they were reluctant to trust their partners. Connected to this point is the students' concerns about the absence of the

teacher during the online collaboration task. Whilst the teachers aim at promoting student-student interaction, students feel more secure when the teacher's comments and feedback are available online.

Despite their very different understandings and views, all students believed that online collaboration was useful and motivating at the same time. This suggests that online collaboration can create a supportive atmosphere for students' interaction and collaboration. The students should deal with the barriers effectively and exploit the unlimited opportunities of the task. Moreover, the role of teachers and educators is significant as they should clarify the aim of the task and the nature of the students' interaction from the outset of the course. As a new approach, teachers need to trace the students' participation regularly throughout the course to deal with any ambiguity or difficulty that the students might face in their use of the new platform. Moreover, they should encourage the students' interaction and lead their discussions to keep them active and engaged in learning. Teachers need to be aware and mindful of the students' concerns as well as taking them into account, in order to improve their pedagogy in relation to introducing these approaches.

5.4 Mutual Scaffolding

The second research question addressed students' understanding of the benefits of peer feedback for both the receiver and the reviewer in the composing and revising process: How does online peer feedback facilitate mutual scaffolding between EFL students? To investigate this question, students were asked to reflect on their revising processes and the impact of online peer feedback on their revisions in the online context. All comments that referred to the impact of peers' feedback as mutual scaffolding, the scaffolding behaviours, and the responding

behaviours were coded under the broad heading of mutual scaffolding. Furthermore, classroom observations and students' texts analysis were used in conjunction with the interview data to gain an insider look at students' interaction in class and online to get a more holistic picture and a thorough understanding of the investigated issue. This section is organised to pick up main themes that emerged from the analysis of the data, in order to understand the way in which online peer feedback contributes to the enhancement of mutual scaffolding. For the most part, I have looked for general trends, rather than attempting to follow through individual cases and thus have reported the origin of statements selectively. Thematic categories were identified and refined over several iterations. This analysis revealed three top-level themes related to the way in which online collaboration was perceived to promote mutual scaffolding, as shown in Table 5.6.

Table 5.6

Online Peer Feedback as Mutual Scaffolding

No.	Theme	Sub-themes
1	Peer feedback as mutual scaffolding	Reading peers' work Providing peer feedback Receiving peer feedback
2	Scaffolding behaviours	Pointing Advising Instructing
3	Responding behaviours	Accept advice Reject advice Clarification request Inability to receive advice Express concern

5.4.1 Peer Feedback as Mutual Scaffolding

Scaffolding in this study was related to the support provided to the students by their peers regardless of their writing and linguistic abilities to improve their writing. The analysed data brought together three situations where students' mutual scaffolding took place through their revision process. Mutual scaffolding could take place when students read their peers' writing, provide peer feedback, and receive peers' feedback. The following subsections present some examples of the three mentioned situations of mutual scaffolding as perceived by the students.

5.4.1.1 Reading Peers' Work

There was a consensus among the students about the significant advantages of reading their peers' writings. While all students talked about expanding their vocabulary and grammar knowledge, some high-achieving students described the reading of peers' work as an opportunity to be exposed to a wide range of writing styles and different ideas. Furthermore, the participants experienced a growth in their writing and revision skills. Analysis of the observational logs supported this finding. There were differences, however, in the degree to which students valued the significance of reading peers' texts.

On the one hand, four students perceived that reading peers' work drove them to learn different and new vocabulary that they were not familiar with, and there were several manifestations of this idea. Therefore, they would look for the meaning of that vocabulary: 'I learned new vocabulary and phrases' (Sara). For these students, learning from their classmates encouraged them to find out the use and the meaning of the new vocabulary: 'I try my best to understand every single word in my peers' work as I feel that these words are essential for me in

my writing' (Salim). Particular significance was therefore attached to 'new phrases' (Huda). For Huda, reading peers' work allows her to understand new phrases in the context, as can be read below in her comment:

I have learned many English phrases from reading my classmates' writings which were used later in improving my writing and making it more attractive to the readers. These phrases allowed me to develop my writing and make it interesting to the readers.

During the observed online writing task, Huda has added some phrases to her writing. She learned these phrases from her peers' writings and related to the improvement for her language like 'in other words' and 'on the other hand'. However, Huda cautioned against using every new phrase in a new context unless the student is fully aware of its use, as can be seen in the following:

Students have to use the new phrases in the correct context in order to make their writing clear. It is not just copying the attractive phrases to their writing, but students should be fully aware of the correct use of the phrases.

It appears that an apparent difficulty that emerged from the students' interview data lies in the misuse of new phrases and vocabulary. The intangible nature of 'the new phrases' posed a real problem for some students; not just because they might use the phrases wrongly, but also some learners might struggle to find their meaning and use within the context they were writing about.

Another promising finding was that students more readily understood and discovered their own mistakes when reading their peers' writing, for instance:

I might find something correct in my colleagues' writing, which I made wrong in my writings, so I try to avoid the committed mistakes in my

essays in my future writings. This is an important practice to improve my writing performance. (Haitham)

It was apparent during observations of the students' writing that all of the participants understood the value of reading peers' feedback on their writings. More precisely, students tended to learn new vocabulary and the correct use of grammar from reading their peers' writings. This suggests that those students were more concerned about surface-level issues as was conveyed at several points during the course of the study. This might be attributed to their limited language proficiency, so some students might find difficulties to identify and articulate textual level problems.

On the other hand, some high-achieving students believed that having exposure to peers' writings helped them generate new ideas in their future writings: 'I can learn or develop some new ideas which are not in my mind' (Muna). For her, idea-generation during writing was an essential factor in the writing process, as she mentioned in the following:

I believe that learning from my classmates' writing brought a lot of new ideas to my mind. Therefore, I can make use of some great ideas to develop the content of my writing and language. Therefore, I like to read my peers' writings and provide feedback to them.

An additional instance is of Ali who thought of reading peers' work as a great opportunity to have exposure to different ideas; 'I learned new ideas and also I learned new phrases and vocabulary'. This might suggest that reading peers' work was perceived as a useful technique that enabled the students to revise their writing style and organisation in order to improve their writing style, as can be read in the following comment: 'I learned from my colleagues' writing style to improve my style' (Salim). Comments made by several students referred

to the significance of reading peers' essays for helping the flow of the ideas for some students who articulated having this problem, for example:

I have learned a lot from my colleagues' writings. I learned from their style of writing. Also, it gave me new ideas about different topics which I didn't know before. It was a useful experience to learn a new writing style. (Fahad)

In this example, Fahad was fully aware of his issue that he had with a lack of the knowledge and ideas about some topics. Hence, he recognised that reading peers' essays could contribute positively to the improvement of his knowledge and writing. Moreover, he pointed out that reading peers' writings not only improved their writing style, but he went beyond that by saying that they might learn a new writing style: 'I learned new vocabulary and a new style of writing. Also, I learned from his organisation as well'. In this vein, Haitham linked the importance of the writing style to develop the organisation of their essays, as per his comment:

I can benefit from my classmates' style of writing and organisation to develop the organisation of my essay as well. I believe that it is an essential opportunity to learn from others' writings. I made many changes to my writing after reading my peers' writings.

It appears that although many students were novice writers, they showed an awareness of the significance of the content and the organisation of their texts. However, the observed online task revealed that students focused mainly on surface-level mistakes in their peer feedback although they talked about the content and the organisation parts in the interviews. This is probably because of their feelings that they were not competent enough to provide feedback in terms of the textual level issues, as they had limited knowledge of the features of good

writing. Furthermore, it might also be attributed to their focus on issues related to the language itself because they are learners of English as a foreign language.

The above evidence from the data suggests that the participants have become more aware of the great benefit of reading their peers' work. Although not all of the participants dwelled on their peers' feedback, they still regard it as a major scaffolding technique as it facilitates a mutual exchange of viewpoints and knowledge among learners. They expressed an understanding of its significance in expanding their vocabulary and grammar knowledge. Furthermore, high-achieving students pointed out to its impact on the improvement of their writing style and text organisation. Indeed, it is interesting that on numerous occasions, the students implied an awareness of the value of reading peers' writings.

5.4.1.2 Providing Peer Feedback

Providing peer feedback was also perceived by most of the participants as a major scaffolding technique which helps learners improve their writing. However, some students still regarded it as a strategy they felt they ought to use and which their teachers recommended at the outset of the study. Hence, they tried to match the provided feedback to their perception of what the teacher wanted in order to convince the teacher they deserved high marks. Later on, in the second writing cycle, students became more aware of its importance in improving their writing skills: 'I discovered the flaws of others and later on avoided the mistakes in my future writings' (Ali). Broadly speaking, some students believed that they benefited considerably from offering peer feedback in terms of avoiding the committed mistakes by their peers in their writing. Sometimes students could not see their own mistakes unless they first saw the same

mistakes in the writing of others: 'I did benefit as identifying the mistakes of my colleagues helped me avoid them in my future writing' (Huda). Similarly, Salim highlighted the significance of providing peer feedback for the provider of the feedback: 'I can detect my colleagues' mistakes and avoid repeating them in my writings'.

This indicates that students regarded providing online peer feedback as a beneficial learning experience and found themselves benefiting from this activity. They believed that providing peer feedback allowed them to learn from their peers' strengths. Moreover, it was perceived as an opportunity to avoid making mistakes that were made by their colleagues, which could contribute to raising the students' metalinguistic awareness of language errors.

Haitham opined that being a reviewer has developed his writing and revision behaviours. He clearly articulated that the peer feedback he provided, stimulated his reflection on his writing. The observations of his revisions reflected a growing reader awareness. For example, he added some sentences to the introductory and the body paragraph of his revised draft to make it more readable and clearer to the readers. He linked the improvement of his revised draft by providing feedback to his peers, as can be read in his comment:

Giving feedback helped me improve my writing. Also, I avoided the mistakes committed by myself or my classmates in my next writings. Hence, I believe that providing peer feedback has a great positive effect on the receiver and the giver of the feedback.

Connected to this point, the participants deemed providing feedback as a learning prompt for their next writings. For Muna, providing peer feedback makes her concentrate on every single word in her writing: 'finding and identifying mistakes takes a higher level of concentration'. She further added that providing

feedback to others' work activated her memory to think of all of the mistakes which might be committed by students: 'it helps to strengthen and reinforce my own internal memory'. Muna indicated the significance of retrieving content from memory to improve the students' writing where students activate their memory to provide appropriate feedback.

It appears that giving peer feedback can contribute to mutual scaffolding among learners. That is, it does not only enable the receivers of the feedback to correct their mistakes, but also rebounds the benefits and so helps the givers of feedback with the opportunity to revisit and develop their own writings. Providing peer feedback was considered as an invaluable process in improving the writing skills of both the giver and the receiver of the feedback. It was also perceived that providing peer feedback activates the students' memory as they need to recall prior knowledge from their memory and transfer them into their feedback.

5.4.1.3 Receiving Peer Feedback

Whilst all students regarded providing feedback as a crucial process to improve their writing, they also showed an awareness of the vital role of receiving peers' feedback towards the development of their writings. For them, receiving peers' feedback was an opportunity to improve their second draft before the final submission to the teacher: 'peers' feedback helped me improve my writing as my classmates highlighted all of my mistakes' (Ali). Additionally, some students reported that peers' feedback allowed them to provide contingent scaffolding to each other. For example, Fahad mentioned that he is good at 'the content' but not at 'the grammar'. Therefore, receiving feedback from his classmates whose strength might be in 'the grammar' seemed fruitful and more effective for all of them. Subsequently, students can mutually scaffold each other if they show

efforts during the revision of their work and act upon their peers' feedback. This indicates an evident example that the support afforded in the classroom can be extended beyond the teacher as the students work together to develop their texts.

It was also observed that some students tended to accept the feedback from their peers irrespective of the level of proficiency. They argued that the feedback provided by these students could help them identify the problems with their writing. For instance, Muna observed that many of her errors mainly occurred due to inattention rather than a lack of knowledge: 'One of the discoveries I have made is that the constraints of time, and meeting deadlines, can create the circumstances where it's much more common to make mistakes'. Besides this, some students revealed the concerns about their use of vocabulary and grammar in an essay although they knew the meaning of the vocabulary, as seen in the following:

I sometimes made some grammatical mistakes in my writing although I know the grammar. Also, I know the meaning of some vocabulary, but I don't know how to use it in a sentence. I have to pay more attention to my writing before posting it online. (Salim)

This illustrates that although the students might commit some mistakes in their writing, they showed metacognitive awareness of their own linguistic resources. There were many examples from lesson observations where students understood the grammar or the meaning of the vocabulary, but they still made mistakes in their writings in terms of grammar and vocabulary usage. This might be attributed to the teaching method, which was deductive, where the students were taught vocabulary and grammar in a separate way. Therefore, they encounter some problems to put the vocabulary or the grammar they know into a sentence, correctly.

It seems that there was a consensus among the learners about the significance of receiving peer feedback on their learning. Receiving such feedback online makes it more comfortable for the students. Students considered receiving feedback as a crucial process to identify their mistakes and then develop a better second draft. This finding revealed that students might commit some mistakes in their writings although they have the metacognitive awareness necessary for effective revision. This might be attributed to the deductive teaching approach, which taught different skills separately. As well as this, students might lack metalinguistic resources to express their meaning in their writing as they are learners of English as a foreign language.

5.4.2 Scaffolding Behaviours

As scaffolding, in this study, was related to the support that students received from their peers in writing, it is essential to explore how students engage in such behaviours. However, such support should draw peers' attention to their mistakes to enable them to improve their writing quality in order to be considered as scaffolding. Based on this operational definition, the analysis of the data illustrated three central students' behaviours which could be labelled as scaffolding. These are showed in Table 5.7 and analysed in the following sections to illuminate their characteristics.

Table 5.7
Students' Scaffolding Behaviour

	Cycle 1			Cycle 2		
	Pointing	Advising	Instructing	Pointing	Advising	Instructing
Muna	18	6	3	21	7	4
Sara	13	3	3	15	3	2
Huda	15	4	2	12	3	3
Ahmed	10	0	0	11	1	0
Haitham	17	5	2	15	4	1

Salim	9	0	0	8	1	0
Fahad	8	0	0	10	0	0
Ali	17	1	1	19	3	1

5.4.2.1 Pointing

Pointing was the first and the main scaffolding behaviour which was detected during the online tasks. It is an interactional strategy in which the reviewers just pointed to their peers' mistakes without taking any further actions. To do this, the students were asked to use the correction codes which they were trained to use during the training sessions at the beginning of the course. They were asked to underline the mistake and provide a correction code to this mistake, showing its type. It was observed that most of the students used the pointing strategy to provide their peer feedback. To do so, it is significant for the students to have an initial idea about the accurate way to provide feedback in order to make their feedback understandable to their classmates. In this respect, most of the participants revealed an awareness of the value of understanding the correction codes as these codes helped their peers identify the type of their mistakes and consequently write clear essays in the future, as can be read in the following:

I learned how to provide clear feedback to others using the correction codes given by the teacher. Providing the correct codes helped the students identify their mistakes. As a result, this helped the receivers track and avoid their mistakes in their writing. Besides this, it would help them understand the assessment criteria and get a good score in the exam. (Salim)

For Salim, the pointing strategy raised the students' understanding of the assessment criteria, which is essential for them in their future writings. This might suggest that understanding the assessment criteria was perceived to help

learners comply with classroom guidelines such as using new vocabulary, adopting specific organisation of essay parts, focusing on sentence structure, and the correct use of grammar. Furthermore, the observed task confirmed this opinion as the students put great emphasis on the evaluation. They concentrated on the task requirements and the assessment criteria because they regarded them as significant factors in obtaining a satisfactory score in their evaluation. Once again, this showed the high value that students granted to the exams and their assessment. Their focus was on the form more than the meaning as they believed that they should pay more attention to the language as they are learners of English as a foreign language. This was evident in their writings because they paid little attention to macro structural issues of their writings. This was probably because the teacher adopted the traditional product-based pedagogy, as noted during the classroom observation. That is, it seems that the teacher's emphasis was on the writing for achieving high scores, not on the learning process. Therefore, particular consideration and instruction are needed to shift their focus from form to content and from providing feedback for the grades to providing feedback to learn.

In terms of the difficulties of understanding the received correction codes, most of the students perceived that understanding their peers' feedback was not hard as they all used the computer to provide the correction codes in their feedback. Students made their efforts to understand every single comment and therefore tried to discuss the unclear comments with their classmates later: 'I think it is not difficult, however, if something is not clear, we ask our colleagues' (Haitham). This suggests that students might engage in a discussion about their peers' feedback if more clarification is needed. This has significant consequences

for the classroom, not least in finding the time within lessons for students to explain their conceptual understandings.

However, only two students claimed that they sometimes could not decide on the correct alternative, as can be seen in the following:

Sometimes I couldn't decide which correction code I should use. For example, when a classmate wrote 'my hometown is a toll city', I don't know whether to consider it as a spelling mistake or a wrong choice of the adjective 'tall'. I then discussed with him that he committed two errors in spelling and word choice as well. (Salim)

The difficulty for some students lies in the fact that some students might not use the correct correction code to point to the mistakes. This might be attributed to their limited language proficiency as some students might find difficulties indicating the type of mistake. Others felt that the feedback on the content and the organisation raised more questions than clarifications to their piece of work because the students have to make a judgement on the final learning outcome only. However, most students focused on the peers' feedback related to vocabulary and grammar: 'usually I can understand my colleagues' feedback, especially in vocabulary and grammar' (Huda). For her, understanding the feedback related to grammar and vocabulary does not take time to act upon. Sara came up with the same conclusion as she mentioned; 'of course, it is useful. I find it easy to understand the feedback, as most of the feedback is in vocabulary'.

The above examples show that pointing strategies used by the students drew their partners' attention to the errors, which were in turn, noticed in their writings. It is essential for the students to use the appropriate correction codes when they point to their peers' mistakes. This would enable their peers to

understand their mistakes and correct them easily. However, if the students still did not understand how to correct their mistakes, the advising strategy might be suitable to explain the ambiguity in the feedback. The next subsection highlights the employment of the advising strategy.

5.4.2.2 Advising

Advising is another interactional strategy which is involved in offering choices to revise the written essays in terms of form or meaning. It was a main scaffolding behaviour which was detected during both the online and in-class tasks to improve the students' writing quality. More precisely, it was observed that the advising strategy took place online through providing feedback at the end of the peers' essays as well as in class by providing oral advice. In both cases, the reviewers usually provided suggestions or clarifications to their classmates in order to make changes to produce a better piece of writing, especially feedback related to the content or the organisation of the text. Online peer feedback enabled students to offer choices to revise the written text in terms of form or meaning by the writer, as can be seen in Sara's response:

Providing feedback allows us to point out our classmates' mistakes by using the correction codes and also give advice to them when more clarification is needed. Advising is necessary if the students don't understand the correction codes provided to them.

In this example, Sara got the idea that she did not only provide the correction codes but also offered advice about the committed mistakes. Advising was a strategy used for scaffolding her peers on issues related to their writings.

Advising drove to another critical issue that emerged from the data related to the role of the advising process in the encouragement of collaboration and

interaction among learners. The online collaboration was perceived as a strategy to prevent misunderstanding and miscommunication between reviewers and writers since it provides opportunities for negotiation and discussion. For two students, the advising strategy 'breaks the ice' between students and therefore encourages collaboration among them: as students at the beginning of the course don't know each other, providing advice on peers' writing is a great opportunity to know each other' (Ali). Sara supported this view by confirming that: 'advising my colleagues about their writing is very important to encourage collaboration among colleagues'. Moreover, she believed that working with peers could enhance her cooperative spirit and enable her to overcome writing problems through online peer feedback. Although it was expected that students would address the lack of nonverbal communication in online collaboration settings, they perceived such collaboration as a motivating task that supports their engagement in the discussion. Such interactions between students encourages mutual scaffolding and makes a fruitful atmosphere for discussion. There was certainly a recognition that advising strategies opened up an invaluable platform for students' engagement and collaboration.

It appears that advising was perceived by most of the students as a major strategy which contributes to mutual scaffolding among learners regardless of the students' proficiency level. It was also regarded as an invaluable strategy in improving the writing skills of both the giver and the receiver of the feedback. That is, it does not only enable the receivers of the feedback to correct their mistakes, but also has rebound benefits that could help the givers with the development of their own writings. In addition, it helped students offer suggestions which could develop the quality of their peers' writing. It also enhanced the students' interaction and communication skills as they learn how to communicate their

message effectively. The interaction and collaboration were evident at the beginning of every writing class, as students discussed their feedback, shared their views about their peers' feedback, and received help to advance their writing skills. However, if the students still need more clarifications, the instructing strategy was perceived as appropriate to explain any ambiguous issues. The employment of the instructing strategy is highlighted in the next subsection.

5.4.2.3 Instructing

Instructing is an interactional strategy where the reviewers offer their peers short lessons on different issues in terms of vocabulary, grammar, content, and organisation. When the students felt their partners needed more clarifications on a point, they did not hesitate to offer it, as noted during the classroom observations. In such cases, they provided not only advice but also some instructions which could help their partners to avoid making those mistakes in their future writings. Sometimes, the peers needed to deliver instructions to support their suggestions and convince their partners. So, they used their knowledge and shared it with their classmates. Discussing the mistakes with classmates promoted mutual scaffolding among the students to improve their writing. As an example, it was observed that some students, especially high achievers, offered their classmates short lessons on issues related to their writings. Ali, for instance, noticed that some of his classmates did not write 'a concluding paragraph' in their essays. Hence, he patiently explained to them the importance of writing a concluding paragraph and suggested an easy strategy to write it. Indeed, he felt providing just the correction codes was not enough, and his classmates needed further support as they frequently made the same mistake. Moreover, Ali, could deeply understand the illustrated issue if he

explained it to someone else because explaining a topic is a valuable way to understand it oneself. Therefore, it is effective to create innovative ways for learners to engage in instruction.

It was also noted during the classroom observations that the teacher's advice was sought, especially on some specific topics students did not agree upon, as expressed in Muna's comment:

We sometimes ask the teacher for advice. For example, two weeks ago, we committed a common mistake about the use of the articles 'the' and 'a'. Then, we asked the teacher to explain the use of both articles. His explanation helped us avoid making the same mistake in our next writings.

In the above example, Muna explained to her classmates the correct use of the articles 'the' and 'a', but her explanation did not persuade them to correct their mistake by acting on this explanation. They demonstrated doubt in Muna's comment and then asked the teacher for more clarifications. It was observed that Muna explained her classmates' mistakes to them when she noted that her colleagues were reluctant to act upon her feedback. The reason was that she tried to create a collaborative atmosphere as well as not to hurt her classmates' feelings, as was observed during the classroom observations. It appears that instructing is not only helpful for the receiver, but it also helps the instructor as they would know the topic better when they teach it. The instructing strategy took place as a reaction and support to elaborate on the online collaboration task.

Another promising finding was that some students used their smartphone to provide instructions online, as can be seen in the following statement:

Two weeks ago, my colleague, Fahad, asked me to explain the structure of an essay. I sent him a WhatsApp message explaining the

main parts of a good essay. It was easy and more practical if students are not in the same place. (Ali)

Although most of the observed cases of instruction were face-to-face instructions, it seems that some students took the initiative to provide instructions online. Although those instructions were one to one through smartphone applications, this might drive students' attention to post their instructions online. This finding leads to good results about using multimedia in providing feedback when students need more clarifications. However, such practices should be monitored by the teacher and connected to the written text.

To sum up, the findings cast a new light on the scaffolding behaviours, which were detected during the online tasks. From the findings, it is clear that these behaviours were contingent and depended on the complexity and nature of the errors as well as the peers' needs. For example, the assistance sometimes moved beyond pointing to the mistakes as the students involved in providing advice or even short lessons. In such instances, by adopting interactional strategies such as advising or instructing, the students explained particular grammatical or punctuation rules, vocabulary, or other aspects of writing, which they thought could improve their peers' writing ability. The findings on these behaviours at least hint that most of the participants addressed micro-level errors more than macro-level concerns. More precisely, scaffolding behaviours were mainly focused on revising and editing the linguistic problems of the texts. However, these interactional strategies partly discussed the meaning level issues by which the feedback providers helped their peers to become aware of ambiguities in their drafts and provided them with some support to improve that aspect of their writings. In this vein, the responding behaviours to the scaffolding behaviours are noteworthy to gain a holistic picture of the mutual scaffolding

process. Thus, the next section discusses the responding behaviours detected from the students' online collaboration.

5.4.3 Responding Behaviours

Although responding behaviours were not directly involved in providing scaffolded feedback, they still contributed to the scaffolding behaviours. They are connected to the scaffolding behaviours because they were expressed as a practical reaction to the scaffold and advice offered by the peers and also involved concerns about the task. Besides this, responding behaviours are essential to understand the nature of the students' response to online peer feedback. The findings indicated two groups of instructional strategies in terms of responding behaviours.

The first group of interactional strategies were used to express the nature of students' reactions to the advice or scaffold provided by their peers. For instance, by using 'admit feedback', 'reject feedback', 'clarification request', and 'inability to collect feedback' strategies, students indicated their response to their peers' feedback.

The second group of interactional strategies were used to express the students' concerns about some behaviours during the online task. An interactional strategy such as 'expressing concerns' was used by the learners during the collaborative tasks to show their concerns about the probability of others exploiting the features of online collaboration in a negative way. More precisely, a few students expressed their concerns that their peers might copy the feedback of their peers and then post it as their feedback. Indeed, adopting such strategy together with the strategies explained in the sections above illustrate that the scaffolding mechanism existed through the online peer

feedback as the students actively shared their knowledge and supported each other to improve the quality of their writings in an online environment. The following subsections highlight the responding behaviours as perceived by the participants.

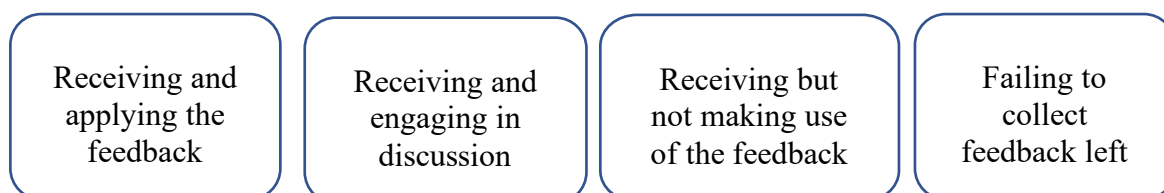
5.5.3.1 The Nature of Students' Practical Response to Their Peers'

Feedback

The most prominent theme emerging from the data concerned the nature of the students' response to their peers' feedback; the role of the feedback receiver revealed four ways or strategies to respond to the feedback received. These strategies can be illustrated as receiving and applying the feedback, receiving and engaging in discussion, receiving but not making use of the feedback, and failing to collect feedback left, as listed in Figure 5.1.

Figure 5.1

Strategies to Respond to Receiving Feedback



As the use of online peer feedback was the key theme emerging from the data, most of the students showed a positive interaction with their peers' feedback. They revealed that after reading the feedback from their peers, they took actions to apply the feedback in their revisions of their texts to improve their work: 'of course, I use the feedback. I can find my mistakes and then correct them' (Sara). While there was a high degree of individual consistency in the value of their peers' feedback, there was considerable variation between students,

evident in the different interpretations and importance that students accorded to the way in which they act upon the feedback. Students not only valued various aspects of their peers' feedback but experienced different degrees of agreement in their responses to their peers' feedback. For instance, some students reported that they referred to all of their peers' feedback and acted upon them, while others showed some concerns about the value of some feedback. Muna, for example, expressed her willingness to make use of her peers' feedback: 'Indeed, I was. Most of the comments that were offered to me involved spelling and grammar, specifically'. This shows that the feedback was often limited to evaluation of single word choices or grammatical mistakes, rather than referring to essay structure or its content. The analysis of the students' writing confirmed this opinion as it was found that most of the students' peer feedback was related to the surface level, like grammatical mistakes and spelling issues.

On the contrary, some participants – five cases – pointed out that they did read through the feedback from peers; however, for some reasons, they did not pay attention to some of the feedback and address the issues in their revision work. That is, they showed some reservations about using all of the received feedback. They claimed that they use the peers' feedback only if they had checked that the feedback was correct: 'I first check the feedback and then decide whether to use them or not' (Fahad). More decisively, Ahmed asserted that he accepted only the correct feedback; 'yes, I implement the feedback, if it is correct'. They made an effort to make sure that the provided feedback was accurate. This checking might itself have educative value. Furthermore, they indicated that students have to be critical and choose only the correct feedback, as expressed in Huda's comment:

I look at the mistakes detected by my colleagues and then decide whether to accept their feedback or not because not all of the feedback is correct, especially when I got different feedback from different students. I have to think before deciding on the correct feedback.

Likewise, Ali expressed his concerns about the usefulness of some of the feedback. His real concern was that his classmates did not always offer appropriate feedback to his essays, as can be seen in the following:

Yes, I use the feedback in my revision. However, some feedback is useful, but other is not. Therefore, I usually check the peers' feedback before deciding which feedback to use. I refer to the dictionary or some colleagues to make sure that the feedback is appropriate before making the change in my revised draft.

Students used different ways to check the appropriateness of their colleagues' feedback. The most common method to check the relevance of peers' feedback was using the online dictionaries: 'sometimes, I use the online dictionary to correct the spelling mistakes' (Haitham).

Other students preferred to seek advice from their classmates about any ambiguity they faced about receiving feedback. For Muna, her behaviour changed over the different drafts. While she used to seek advice from her classmates about any ambiguity, she later depended on herself in providing the feedback: 'I used to ask one of my colleagues for assistance in providing feedback at the beginning of the course, but later I did it myself'. She attributed the change in her behaviour to the experience she has gained over the drafts, as she later clarified by the following:

I was unsure about the appropriate way to provide the feedback at the outset of the study, so I used to seek my colleagues' advice. Later on,

I realised the correct way to provide feedback, and I also depended on myself in providing feedback.

Looking for more support was not unique to online resources as some students tended to seek their teachers' advice. Two students depended on their teachers if they faced any difficulties in providing feedback. As they may be unaccustomed to reporting on themselves, they thought that seeking the teacher is the easiest and fastest way to get the right answer: 'I sometimes asked the teacher, especially if I provided the feedback in the lab as the teacher was available' (Fahad). The students resisted attempts to change accustomed routines, and believed that the teacher could guide them to find the correct answer, as Ali expressed in his following statement:

Even if the teacher didn't give me the answer, he could direct me to the best way to find the correct answer. For example, he might tell me to look for the answer in Google or an online dictionary, etc.

It was evident during the interviews that some students claimed that the students' level of English proficiency in peer feedback appeared to mediate their engagement with learning in peer feedback. When deciding whether to incorporate peer comments into text revisions, some students focused on the English proficiency of their peer reviewers rather than the quality of peer feedback. More particularly, those students tended to focus on the feedback given from high-achieving students as they trust their feedback: 'I usually look at the feedback from the high achiever as I believe their feedback is almost correct and useful' (Fahad). Similarly, some students articulated that they don't trust their peers' feedback, especially the feedback received from low achievers. Here, a commonly expressed problem was whether, or how, low achievers could judge the work of high achievers, summed up by these views: 'how can a student with

poor English evaluate writing of a student with a high level of English?' (Sara). This comment shows how the students are cautious in terms of obtaining some of their peers' feedback.

On the other hand, although other students are in favour of taking the feedback from the high achievers, they agree that they need to make sure that the feedback is appropriate before acting upon it, as Salim explained in the following:

Sometimes, I don't trust some feedback, so I recheck my writing. Whether the student is a high achiever or not, I don't adopt his feedback immediately. I first check and then decide whether to accept the feedback or not. This helps me think about the feedback before any corrections or changes.

This illustrated that they did not show any bias toward the comments from high achievers, as can be read in Huda's comment:

I prefer to receive feedback from high-achieving students. However, I consider all feedback from other students with a low level of English. I read their feedback carefully and decide whether to use their feedback or not. It is an interesting process.

This might suggest that Huda would consider feedback from all of her colleagues during text revision, despite the differing levels of English across her peers. It seems that the difference in the students' level of English proficiency would not impact her acceptance of her peers' feedback. In the observed task, it was observed that she focused on the students' feedback itself rather than the giver of it.

Surprisingly, few students – three cases – reported that after receiving the feedback, they engaged in dialogue with their peers for negotiation or clarification

as translating codes into language was perceived as a struggle for them. There might indeed be a place for discussion which enhances mutual scaffolding. Therefore, they sought for more clarifications about the nature of mistakes they committed in their writing: 'sometimes, I ask my colleagues to explain their feedback if I don't understand it' (Haitham). Given such prominence, there were many examples from the classroom observations of the students' engagement in discussions and dialogues for more clarifications about the feedback. These discussions were used in the context of generic advice for improving writing as they were linked to specific examples of the students' essays. There were several observed occasions where students discussed their peers' feedback when they struggled to understand the meaning of the feedback or when they disagreed with their peers' feedback. Even though the students reacted very positively to their peers' feedback, they still believed they needed further discussions to clarify some ambiguity in the given feedback.

Finally, it was observed that one student (Ahmed) remained silent in most of the observed sessions and seldom interacted with his colleagues. Although he sometimes provided peer feedback to his classmates' writings, he did not seek explanations or clarifications from them. Furthermore, he expressed dissatisfaction for not receiving feedback on his drafts. In order to gain further understanding of his response, I asked him why he did not always receive sufficient feedback to his essays; he reported the following:

First, I rarely get feedback from my colleagues. Maybe, because I posted my essays a bit late. I don't interact with my peers because I rarely receive feedback from them to be discussed with them. However, if I got feedback, I first check whether the feedback is right

or wrong. Then, I use the correct feedback and ignore the wrong feedback.

He indicated that his colleagues did not always offer sufficient feedback for his essays. Fortunately, he showed an awareness that the reason behind the unsatisfactory peer feedback was attributed to his late submission of his writings. In the second writing cycle, he made an effort to post his writing before the deadline, as noted in the observations of his logs.

It is worth mentioning that the students' revision behaviour has also changed over time in terms of different writing skills. This change has happened after they have experienced the benefits of change. That is, while the focus of their feedback was on grammar and vocabulary at the outset of the course, they gradually focused on the organisation and the content of their essays in the second cycle. For Ali, he attributed the change in his writing behaviour to his gain in confidence over writings. He maintained that he became fully aware of the four sub-skills towards the end of the course, as can be read in the following comment:

At the beginning, I focused only on grammar and vocabulary. However, I tried to focus on the organisation and the content in the second writing cycle as I realised their importance in writing. I have to focus on all elements of the writing.

Conversely, some students' answers revealed that providing feedback to the organisation and the content was sometimes beyond their ZPD, for example:

I tried to provide feedback to my peers in terms of organisation and the content, but I felt that it was beyond my current level of English. I felt that I couldn't judge the content and the organisation of my classmates. (Huda)

As the students are learners of English as a foreign language, this might suggest that they come across some difficulties not only in writing as a skill but also in problems with the language. Consequently, they concentrated on minor changes related to the language like grammatical and spelling mistakes.

5.4.3.2 Students Concerns About the Nature of the Online Task

Although the online collaboration task was perceived as a valuable opportunity for the students to improve their writing, some concerns were raised in terms of the online task itself. Sara, for instance, raised a noticeable issue as she showed real concern about the nature of online peer feedback. That is to say; some students might have formed their answers from their classmates' previous posts because of the nature of online discussions, as she explained in the following statement:

The problem with online peer feedback is that students can easily read their peers' posts and change the wording, and then post them again and claim that these posts are their posts. This point should be taken into the teachers' consideration.

She further suggested that teachers have to be mindful of such behaviour and read the students' posts carefully, as she expressed in her further comment:

But the experienced instructor can identify that when it happened. If two students have similar answers, I think the teacher can identify those who copied from the other by checking who posted the feedback earlier. They need to track the students' posts.

It was observed during the online observations of the first writing cycle that some students did not give enough attention to their peers' writings. Although the task was well-organised and specific as each student was asked to provide feedback for at least four pieces of writing. The typical behaviour among the

observed group was that when they were asked to provide feedback on their peers' essays, some particular students waited until one high achiever took the responsibility to provide the first feedback. They, later on, paraphrased his feedback and posted it as their own feedback. This means that only this student is the one who thinks and decides what sort of feedback needed to be given to their peers' writing. This might indicate that in order to support this approach, students may need examples of what feedback might look like or for someone to kick-start the interaction or in-class modelling of the process, perhaps using sample writing from a previous year group. Practicing feedback and discussing its value before it happens may help with this problem before it actually takes hold in the feedback process.

However, it has been noted during the observations of the second writing cycle that there was no case of such an issue or any other related ethical issues. It was evident that there were no issues of similar posts during the students' online peer feedback. This is probably because of the students' awareness of the ethical issues in terms of plagiarism which was taken seriously from the beginning of the course. Moreover, the teacher clarified during classes throughout the course that students should post their views based on their own experience during the semester because they were not allowed to copy their peers' posts and rephrase them.

Students' response to their peers' feedback was apparent during the interviews and the observations of their writing. It was notable that in spite of their initial concerns for the uptake of feedback, they showed clearly that online peer feedback contributed to the improvement of their essays. That is, most of the students tended to adopt their peers' feedback in the revisions in a general sense. However, some of them asserted the significance of making sure that the

feedback was correct before making any changes in their writing. Particularly, they carefully considered the advice they received from their peers, evaluated it against their own knowledge and information, and then decided what to accept based on the validity of each comment. For this, they use different strategies to check the appropriateness of their peers' feedback like online dictionaries and both peers' and teacher's advice. Overall, it is evident that the students' revision behaviour has changed over the drafts throughout the course. They illustrated variations in the degree of acting upon their peers' feedback, ranging from the acceptance of all of the feedback to some having doubts about some of the peers' feedback. Such variations could be productive as evaluating feedback might itself be part of the process of becoming an independent writer.

5.4.4 Conclusion

In summary, students described online peer feedback to be very illuminating in terms of providing an in-depth understanding of their online collaboration and interaction. First, data analysis revealed that scaffolding was mutual with the students being capable of providing support to each other through providing and receiving feedback, irrespective of their level of writing proficiency.

Students had diverse views about the use of online peer feedback and the benefits of providing and receiving peer feedback. They also showed high levels of metacognitive awareness and were able to specify how they managed the correction codes provided by their classmates in their heads as they wrote, or to identify their decision-making as recursive. A few students, however, showed less awareness of the effective use of peers' feedback: 'I usually wait for the teacher's feedback instead of wasting my time on my peers' feedback' (Ali). Curiously, however, all students perceived peer feedback as a major scaffolding strategy

which helps them improve their work. The analysis of the data indicated three situations where students' mutual scaffolding took place through their revision process. Mutual scaffolding could take place when students read their peers' writing, provide peer feedback, and receive peers' feedback.

The analysis of students' peer feedback revealed that the students were overly concerned with micro-level errors rather than macro-level problems. This probably happened because they write in English, which is not their native language. It suggests difficulties in both the process of writing itself and the language. Generally speaking, peer feedback and scaffolding activities were mainly aimed at improving the different writing competencies of the students. In many situations, students engaged in discussions about the feedback which was perceived as a great chance for them to help their partners become aware of the ambiguities in their drafts and provide them with some support to improve that aspect of their writings, once they started the revision process. Paying less attention to content and organisation implicitly reveals that addressing such aspects was beyond the potential developmental level of the students, and they found it challenging to comment on both of these two aspects.

Scaffolding behaviours were investigated to explore the way in which students engage in such behaviour. The results demonstrate three main scaffolding behaviours. First, pointing was the main scaffolding behaviour which was detected during the online tasks. The students used the correction codes to point to the peers' mistakes and identify the type of mistakes. Second, advising was another interactional strategy involved in offering choices to revise the written essay in terms of form or meaning. The advising strategy took place online through providing feedback at the end of the peers' essays as well as in class by providing oral advice. Third, students sometimes offered instructions to their

classmates when they felt that their partners needed more clarifications on a point. Therefore, it is safe to say that the scaffolding behaviours are contingent and dependant on the complexity and nature of the errors as well as the peers' needs. More particularly, the assistance sometimes moved beyond pointing to the mistakes as the students involved also provided advice or even short lessons for their peers.

Conversely, responding behaviours contributed to the scaffolding process, although they did not directly become involved in providing scaffolded feedback. The reason behind this is that these behaviours were expressed in reaction to the scaffold and advice offered by the peers and also involved concerns about the task. Additionally, they are essential to understand the students' response during online peer feedback. Together, adopting the responding behaviours with the scaffolding strategies illustrate that scaffolding mechanisms existed through the online peer feedback as the students actively shared their knowledge and supported each other to improve the quality of their writings in an online environment.

5.5 Students' Writing Performance

5.5.1 Introduction

The third research question: 'To what extent does online peer feedback as a collaborative learning technique used in EFL writing classes impact students' writing performance?' sought to explore and understand the effects online collaboration had on students' writing quality over different drafts after their being given peer feedback. This study was not intended to discover a rigid causal link between online peer feedback and participants' writing performance as is normally the case in the positivist approach. However, my aim was to find any

sign of progress, however little, in the students' writing drafts in each of the two writing cycles. This section presents the findings of the students' writing performance in connection with their writing scores as a whole. Furthermore, the other findings arose through the research, in connection with the four writing sub-skills as emphasised. In addition, this section highlights the students' responses and clarifications in terms of their writing performance and the changes they made over their drafts.

As discussed in Chapter 4, Section 4.10, during the study, the students developed two 250-word writing tasks, one comparison and one cause-effect, individually in the class. Then, they were asked to post their writings online to receive feedback from their classmates. These writings were later peer-reviewed before the students developed their second drafts during two writing cycles (Appendices 13-15). What follows is the analysis of participants' writing performance over the different drafts and across two cycles of writing. Quantitative data sets about (both) overall scores and scores in the writing sub-skills were analysed. The students' mean scores were compared before and after receiving peer feedback. The eight selected students participated actively in providing and acting upon peers' feedback. It is worth noting that all student drafts were marked by the me and two other teachers from the same college. The two teachers were asked to mark the students' writing to ensure that students' texts were fairly evaluated over both drafts. They are experienced teachers who were familiar with the purpose of my study and had been teaching this module in the college for more than five years. Following an explanation of the rating scales, I asked them to double-mark all of the students' writings. The scores provided by the three markers showed a high agreement in terms of participants' overall writing due to the clarity of scoring criteria, detailed descriptors, and informative

supporting information. Importantly, the research question was not fully answered by relying on the statistical analysis results – quantitative data – but qualitative data from the students’ interviews and the observational logs were used to explain and clarify the obtained quantitative data findings, as well. Students’ interviews were used to enhance the interpretations of online collaboration. This involved selecting extracts from the students’ writings and asking the students to elaborate on some emergent issues in their writings. The aim of the interviews was to allow the students to provide interpretations of their own or others’ actions. The next sub-sections highlight the students’ writing performance in the two writing cycles.

5.5.2 Compare-Contrast Essay

The first writing cycle which focused on a compare-contrast essay lasted for two weeks. Prior to the start of the course, students were given some instructions on the nature, purpose, and features of this type of writing, along with practising and analysing some sample models. Prewriting strategies to generate and develop ideas and to plan before starting to write were emphasised. Students, then, were assigned a 250-word essay to be revised and submitted after receiving feedback from their peers. The essays need to have the following structure: an introduction, a minimum of two supporting paragraphs, and a conclusion on topics which are familiar or of personal interest, or on topics which a student is aiming to study at a college level and ought to be familiar with, which require a comparison and contrast approach. The prompt for the essay was the following: ‘Compare and contrast between the college and the school’ (Appendix 1). The prompt was within the students’ experience and related to what had been discussed and practised in class. Moreover, the audience of the essays had been

made clear, and the length and the submission date of the final draft (a fortnight) had been clarified. By selecting this topic, the teacher sought to elicit a particular style of writing from the students. More precisely, students were expected to demonstrate their awareness of the differences between the study at the college and schools, as well as their understanding of academic text organisation and structure, the content of the essays, and proper use of lexical items and grammar. Following the aforementioned procedure, a four-band, five-point scale, multiple-trait scoring rubric was developed considering the task achievement, essay organisation, and the knowledge of grammatical rules and vocabulary (Table 5.8). It is worth noting that the prompt and the rubric were carefully created and were clear, engaging, and reflected the objectives of the course. The scoring rubric in the current study was developed based on the one available in the selected college.

Table 5.8

Comparison Essay Multiple-Trait Scoring Rubric

SCORE	TASK ACHIEVEMENT (CONTENT)	ORGANISATION	GRAMMAR & RANGE OF STRUCTURES	VOCABULARY
5	All parts of the text are very clearly communicated as directed, or all questions are very clearly answered.	Logically organises information and ideas.	No grammatical or punctuation errors. A wide range of grammatical structures.	A correct choice of vocabulary and no spelling errors.
4	Most parts of the text are clearly communicated as directed, or most of the questions are clearly answered.	Arranges information, and ideas coherently and there is an overall progression.	Only rare grammatical or punctuation errors which do not impede communication. A fairly wide range of grammatical structures.	Only rare spelling errors or incorrect choice of vocabulary which does not impede communication.
3	Only some parts of the text are communicated as directed, or only some of the questions are answered.	Presents information with some organisation, but there may be a lack of overall progression.	Some grammatical or punctuation errors which may impede communication. A limited range of grammatical structures.	Some spelling errors and incorrect choice of vocabulary which may impede communication.
2	Only a few parts of the text are communicated as directed, or only a few of the questions are answered.	Ideas are disconnected, and there is no clear progression in the response.	Frequent grammatical or punctuation errors which usually impede communication. An extremely limited range of grammatical structures.	Frequent spelling errors and incorrect choice of vocabulary which usually impedes communication.

1	Only very few parts of the text are communicated as directed, or only very few of the questions are answered.	Has very little control of organisational features.	Grammatical and punctuation errors are so prevalent that hardly any communication takes place.	Spelling errors and incorrect choice of vocabulary occurs to such an extent that hardly any communication takes place.
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To begin with, the students' scores indicated small differences observed between the students' mean scores over the drafts. The second draft mean score appears to be slightly higher than that of the first draft mean score. As shown in Table 5.9, both mean scores are 6.41 and 7.4, respectively, in terms of the 'Overall Writing Skill' marks. As the table indicates, the results show an improvement in the overall quality of students' compositions. First, the comparison of the scores of student drafts revealed that while Fahad made the most significant overall progress, Salim and Ahmed displayed the lowest improvement in the final text they generated. Secondly, while Muna outperformed her classmates in terms of the overall score, Fahad gained the lowest score among the participants. Besides this, the positive changes that the final drafts went through were higher than the first drafts for all of the students.

Table 5.9

Participants' Overall Scores in the Students' Compare and Contrast Essays

Student Names	First Draft	Second Draft
Muna	7.83	8.58
Sara	7.50	8.08
Huda	7.17	8.08
Ahmed	5.83	6.50
Haitham	6.50	7.88
Salim	6.33	7.00
Fahad	4.50	6.25
Ali	5.67	6.83
Mean score	6.41	7.4

However, to claim that there is an improvement in the students' overall writing, a comparison between their scores were made. Therefore, the SPSS, a widely used programme in social sciences, software was carried out for statistical analysis of the students' scores. As the sample of the study was small ($n = 8$ students), normality test was used to obtain whether the data was normality distributed or not. Therefore, the Kolmogorov-Smirnov test of normality was applied to the first and second writing data. A normality test illustrated that the p-value was .0.22, which shows that: $P > .05$. This means that the data was not normally distributed (Table 5.10).

Table 5.10

Kolmogorov-Smirnov Normality Test (N = 8)

	Mean	Std.	Statistics	df	Sig.
First Draft	6.41	1.08	.130	8	.22
Second Draft	7.4	.85	.212		

Therefore, a decision was made to carry out a non-parametric test, as the data was not normality distributed (Pallant, 2020). A t-test would not be suitable and may have shown biased results as it is only applicable to normally distributed data. This result was expected and may be attributed to the small sample, which was eight students. Consequently, two related samples test of the students' overall scores in writing was carried out, with the first and second writing scores used to examine whether these differences were statistically significant. Particularly, the non-parametric Wilcoxon Signed Ranks Test was used to investigate whether there was a significant difference within the students' marks before and after the online peer feedback. A Wilcoxon Signed Ranks Test

revealed a statistically significant improvement in the students writing performance, $z = -2.52$, $p < 05$, with a large effect size ($d = 1.01$). That is, the Wilcoxon Test (shown in Table 5.11) revealed that the $p = 0.012$ was statistically significant. Table 5.11 shows the z-value and significance, and the mean difference to identify whether this difference is significant.

Table 5.11

Wilcoxon Signed Ranks Test

	Second Draft – First Draft
Z	-2.524
Asymp. Sig. (2-tailed)	.012

a. Wilcoxon Signed Ranks Test

To identify the extent of the difference, the effect size was calculated, which indicates the magnitude of the differences between the results of the first and second drafts. It was calculated by dividing the z-value by the square root of N (Pallant, 2020). In this respect, Cohen (1988) indicated the following for effect sizes: (0.2) small, (0.5) medium, (0.7) large, and (1.0) very large. As the study was of a small scale, it was unlikely to identify significant differences between the drafts unless the effect was large. However, this calculation is still valuable as it enables the data from this study to be included in any subsequent meta-analysis of the impact of online peer feedback on the students' writing performance. Furthermore, the calculation of the effect size (1.01) explains a high effect size of the peer collaboration on the students' writing performance on the whole.

To sum up, the analysis showed that the p-value was (.012). This means that the differences were significant at both the 0.05 and 0.01 statistical levels. This demonstrates that using the online peer feedback produced a statistically

significant difference in the writing performance of the students. The result of the analysis of students' overall writing scores indicated a small but statistically significant difference in favour of the second writing scores with a large effect size. Therefore, it could be claimed that online peer feedback contributed to the improvement of the students' writing performance.

Further analysis was done in relation to the four writing sub-skills. That is, the Wilcoxon Signed Ranks Test was applied to each of the four sub-skills adopted in this study. Wilcoxon Signed Ranks Test scores revealed, as Table 5.12 shows, statistically significant differences found in two of the writing sub-skills: 'Vocabulary': $p = 0.011$; and 'Grammar': $p = 0.011$; while non-significant differences were found for two sub-skills: 'Content': $p = 0.187$; and 'Organisation': $p = 0.054$, respectively.

Table 5.12

The Mean Difference

	Organisation	Vocabulary	Content	Grammar
Sig.	.054	.011	.187	.011

In addition, more details about the students' sub-skills scores are highlighted in Table 5.13.

Table 5.13

Local vs. Global Scores of Participants in Their Comparison Essays

Student Names	First Draft				Second Draft			
	Organisation	Content	Vocabulary	Grammar	Organisation	Content	Vocabulary	Grammar
Muna	7.50	7.83	7.50	6.83	8.00	8.00	8.83	9.00

Sara	7.00	6.83	6.00	5.67	6.83	7.00	7.33	8.00
Huda	7.33	7.33	6.50	6.33	7.50	7.50	8.00	8.83
Ahmed	6.50	6.67	5.83	5.33	6.50	7.00	7.17	7.83
Haitham	7.83	7.83	7.33	6.67	8.00	8.00	8.83	9.00
Salim	6.83	7.33	6.83	6.17	7.00	7.00	7.83	8.50
Fahad	6.17	6.33	5.83	5.50	6.50	6.50	7.33	7.67
Ali	6.83	7.00	6.17	5.67	7.00	7.00	7.50	8.17

More specifically, in terms of grammar and vocabulary, the above table indicates that all of the students made positive changes to such aspects of their texts as grammatical errors, punctuation, and incorrect choice of vocabulary in order to improve the quality of their drafts. However, Muna and Huda argued that they made a slight change in the first and second drafts in terms of grammar, although they are considered high achievers. They attributed this slight change to the fact that their language proficiency is higher than their colleagues, so it would be difficult for their colleagues to detect their flaws, as they explained here:

Unfortunately, I wasn't able to get an overwhelming amount of advice about grammar. One of the discoveries I made was that my absolute level of grammar is higher than theirs, and this informed me that not all feedback is constructive, or well-advised. (Muna)

And:

The issue is that my classmates don't imagine how they can detect my grammar flaws as they ask me for help in grammar in the class. Thus, I got less peer feedback comparing to my other classmates in their writing. (Huda)

In terms of vocabulary, it was once again found that all of the students made positive changes to such aspects of their texts as the use of lexical items, the correct choice of words, and the use of adjectives and adverbs. However, the vocabulary scores revealed, although Muna and Haitham outperformed their classmates in the vocabulary score, they only made a slight change in the first and second drafts. They attributed their few changes to the fact that their language proficiency is higher than their colleagues, so it would be difficult for their colleagues to detect their flaws, as mentioned earlier.

On the other hand, the least changes were detected in the organisation and content. Two cases gained the same marks through their drafts. Some students attributed this note by saying that organisation and contents are clear, as expressed here:

I did not make changes on the organisation and content of my second draft because the organisation was clear. The teacher asked us to write a four-paragraph essay. Also, the content was clear and was discussed deeply in the classroom before writing. (Sara)

Other students believe that providing feedback to the organisation and content is less important than grammar and vocabulary, as expressed here:

As a learner of a foreign language, I think that grammar and vocabulary are the most important skills to improve my language. Therefore, I focus my feedback on them and also want to receive feedback about them. (Haitham)

Surprisingly, most of the students focused on the word count regardless of the value of the content as they were required to develop a 250-word essay. For instance, this was noticed in Fahad's, Ahmed's and Ali's first and second drafts.

From offering the perspectives given above, the students indicated that there was a relationship between giving and receiving online feedback on their writing improvement. They further indicated that online peer feedback facilitated providing and receiving immediate peer feedback. It appears that online peer feedback allows students to write, increases their awareness and builds their vocabulary. The analysis of their writings provided evidence of the role of online peer feedback on texts that led to different engagement with the task and potentially improved the quality of texts (Appendices 13-15). However, students' scores analysis revealed positive changes at both local and global levels but mainly happened within a lower-level category. Students attributed the change they made in the surface level to their limited knowledge about macro-level skills. Additionally, they claimed that grammar and vocabulary are the most critical skills for them as EFL learners.

5.5.3 Cause-Effect Essay

Exactly the same procedures were followed for the second writing cycle. However, during this cycle a compare-contrast mode of writing was replaced by a cause-effect essay. That is, at the beginning of this phase, the new genre was introduced, its features were discussed, and students were provided with a couple of model papers. Afterwards, students were assigned a 250-word essay to be written in the classroom. Then, students were asked to post their writings online to be revised and resubmitted after receiving feedback from their peers. The prompt of the essay was 'Write a four-paragraph cause and effect essay about obesity. Be sure to back up your reasons with specific examples' (Appendix 2). Here again, there was a direct connection between what the students were taught and the prompt they were assigned as well as the rubric based on which

their writings were assessed. Following the same procedures as the compare-contrast essay task, a four-band, five-point scale, multiple-trait scoring rubric was developed which aimed to evaluate students' writing performance in terms of content, organisation and lexical items, and grammatical issues. The 'scoring criteria' table also remained the same as the one used for the comparison essay. To see whether between-draft changes had any effect on the overall quality of students' essays, all student drafts were first given a score and then another score was given to the writings after the students obtained peers' feedback, and the following results were obtained, as can be seen in Table 5.14.

Table 5.14

Participants' Overall Scores in Their Compare and Contrast Essays

Student Names	First Draft	Second Draft
Muna	7.50	8.80
Sara	6.50	8.30
Huda	7.00	8.50
Ahmed	6.17	7.20
Haitham	7.50	8.80
Salim	6.83	7.30
Fahad	6.00	7.50
Ali	6.50	7.80
Mean Score	6.75	8.02

As the figures in Table 5.14 illustrate, the students' scores demonstrated differences observed between the students' mean scores over the drafts. The mean score of the second draft appears to be higher than that of the first draft mean score. As shown in Table 5.14, both mean scores are 6.75 and 8.02, respectively, in terms of the 'Overall Writing Skill' marks. It could be inferred that

online peer feedback made a positive difference to the overall writing quality of all of the students' writings. First of all, the comparison of the scores of students' drafts revealed that whereas Sara demonstrated the greatest progress in terms of quality in her final draft, Salim displayed the lowest improvement in the final text he generated. Secondly, while Muna and Haitham outperformed their classmates in terms of the overall score, Ahmed gained the lowest score among the participants. In all cases, the overall scores of the second drafts increased compared to their first drafts. Therefore, it could easily be induced that students' score analyses indicated that the revisions the students made during peer-reviewing did upgrade the quality of their essays. A detailed picture of the students' sub-skills scores is highlighted in Table 5.15.

Table 5.15

Local vs. Global Scores of the Participants in Their Cause-Effect Essays

Student Names	First Draft				Second Draft			
	Organisation	Content	Vocabulary	Grammar	Organisation	Content	Vocabulary	Grammar
Muna	7.67	8.50	8.33	7.67	8.00	8.50	8.58	9.00
Sara	7.33	8.17	7.50	7.17	7.50	8.17	8.17	8.50
Huda	7.17	8.00	7.71	6.83	7.33	8.00	8.33	8.83
Ahmed	5.67	6.33	6.50	5.33	5.67	6.33	6.67	7.17
Haitham	6.33	7.33	7.88	5.83	6.50	7.50	8.33	9.00
Salim	6.33	7.17	6.67	5.83	6.33	7.17	7.00	7.33
Fahad	4.33	5.17	6.25	4.17	4.33	5.50	7.33	7.83
Ali	5.33	6.50	6.83	5.00	5.33	7.00	7.67	8.17

The statistics showed positive changes at both local and global levels of students' writings. For instance, in terms of the local level, all of the students showed overall progress over their drafts concerning the use of grammar and lexical items. Muna outperformed her classmates in terms of the overall score in terms of vocabulary and grammar. Surprisingly, Haitham gained the highest score in grammar – the same score with Muna – in his second draft, although his first draft was not the highest among the participants. Haitham felt that the peers' feedback helped him improve his second writing although he made slight changes, as he clarified here:

Although I made a few changes in my second draft, there are a lot of situations where I get benefits from my colleagues' feedback. For example, I used to make mistakes with the spelling of some words. Later, I corrected all of my mistakes based on my colleagues' feedback.

On the other hand, four out of eight cases made positive changes to the organisation aspect of their texts. Also, four cases remained the same over the first and second drafts. In addition, the content scores of only three of the participants demonstrated a slight positive change in their scores. In this respect, most of the participants pointed out that they did not focus on the content and the organisation of their peers' text. Salim, for example, confirmed that their main concern was on grammar and vocabulary, 'my main focus is on the grammatical and lexical mistakes'. He further confirmed, 'the learners of a foreign language should focus on the linguistic issues like grammar and vocabulary'. According to the above views, it seems that macro-level issues like the content and the organisation of the text might be beyond the students' ZPD.

However, to claim that there is an improvement in the students' overall writing, the same procedures of writing were followed to compare the students' scores. First of all, a normality test was used to obtain whether the data was normality distributed or not, due to the small sample of the study (n = 8 students). Then, the Kolmogorov-Smirnov test of normality was applied to the first writing and second writing data. A normality test demonstrated that the p-value was .0.20, which shows that: $p > .05$. This means that the data was not normally distributed (Table 5.16).

Table 5.16

The Kolmogorov-Smirnov Tests of Normality (N = 8)

	Mean	Std.	Statistics	df	Sig.
First Draft	6.75	.56	.172	8	.20
Second Draft	8.02	.65	.162		

Therefore, a non-parametric test was used as the data was not normality distributed (Pallant, 2020). Thus, two related samples test of the students' overall scores in writing was used, with the first writing score and second writing score was used to examine whether these differences were statistically significant. Particularly, the Wilcoxon Signed Ranks Test (shown in Table 5.17) revealed that $p = 0.011$ and was statistically significant. Table 5.17 shows the p-value and significance, the mean difference to identify whether this difference is significant. A Wilcoxon Signed Ranks Test revealed a statistically significant improvement in the students' writing performance, $z = -2.53$, $p < .05$, with a large effect size (d. 2.14).

Table 5.17

Wilcoxon Signed Ranks Test

Second Draft – First Draft	
Z	-2.536
Asymp. Sig. (2-tailed)	.011

a. Wilcoxon Signed Ranks Test

The effect size was calculated to identify the extent of the difference, which indicated the magnitude of the differences between the results of the first and second drafts. As the study was of a small scale, it was unlikely to identify significant differences between the drafts unless the effect was large. However, this calculation is still valuable as it enables the data from this study to be included in any subsequent meta-analysis of the impact of online peer feedback on the students' writing performance. Furthermore, the calculation of the effect size (2.14) explained a high effect size of the peer collaboration on the students' writing performance on the whole.

To sum up, the analysis shows that the p-value is (.011). This means that the differences are significant at both the 0.05 and 0.01 statistical levels. This also means that using the online peer feedback produced a statistically significant difference in the writing performance of the students. The result of the analysis of students' overall writing scores indicated a small but statistically significant difference in favour of the second writing scores, with a large effect size. Therefore, it could be claimed that there was an improvement in the students' writing performance.

Table 5.18

Wilcoxon Signed Ranks Test

	Organisation	Vocabulary	Content	Grammar
Sig.	.066	.012	.109	.012

Further analysis was done in relation to the four writing sub-skills. More specifically, the Wilcoxon Signed Ranks Test was applied to each of the four sub-skills adopted in this study. Wilcoxon Signed Ranks Test scores revealed, as Table 5.18 indicates, statistically significant differences found in two of the writing sub-skills: 'Vocabulary': $p = 0.012$; and 'Grammar': $p = 0.012$, while non-significant differences were found for two sub-skills: 'Content'; and 'Organisation': $p = 0.109$; and $p = 0.066$, respectively.

From the interviews' responses, it was relatively apparent that only one participant was inattentive to the feedback and comments he received and carelessly developed his drafts probably because of his unawareness of the significance of peer feedback – Ahmed, as he explained here:

I think that the feedback from the students is not of a high importance as they themselves need support from others. I prefer to wait for the teacher's feedback instead of taking peer feedback and then change my writing again when I received the teacher's feedback.

He also confirmed in one of the interview sessions that he did not spend enough time for redrafting and correcting the errors which were marked and commented on by his peers, 'writing the second draft doesn't take time as I just copy my first draft and make changes if needed'.

It seems that the students' writing performance has improved in the cause-effect essays. Moreover, the analysis of the students' scores revealed positive changes at both the surface-level category. However, there was a slight change in only a few students' essays in terms of the organisation and the content. As

explained in the first writing, the students claimed that grammar and vocabulary are the most important skills for them as learners of English as a foreign language. Furthermore, it might also be attributed to the students' lack of knowledge concerning the macro-level skills.

5.5.4 Compare-Contrast Essay vs. Cause-Effect Essay

In general, the findings pointed out that students' revision after receiving peer feedback tended to improve the students' writing performance. However, the differences noticed from the first draft to the second draft in their cause-effect essays were greater than their comparison essays in the majority of cases – seven out of eight – indicating that peer feedback and revision were more helpful in improving the quality of the students' final texts in their cause-effect essays. On the other hand, the overall scores participants gained in their cause-effect essays outperformed those of their comparison essays, in all of their essays. Comparing the essay lengths across the two writing cycles revealed that students normally tended to produce longer cause-effect texts, except Salim, whose comparison essay was longer than the other essays. So, better overall results could also be attributed not just to revisions made but also to the students' awareness of the significance of the cause-effect and the experience they gained whilst working on their drafts. Hence, it was decided to examine the scores in terms of their scope. More particularly, in terms of vocabulary, most students showed fewer errors in the 'vocabulary' type. The majority of participants – six cases – showed better or the same performance in comparison of cause-effect than in just comparison. It could be argued that the students were more competent in developing a cause-effect as it needed them to provide reasons and be more analytic in nature. Only two cases – Huda and Sara – did not make a

noticeable improvement in the mean scores of the lexical items over the cycles of their writings. Considering the fact that vocabulary is a local aspect of writing, it seems expected to reach similar results in these features. Vocabulary errors, whether missing or misusing or vocabulary richness, were reduced in the second draft of each writing cycle. The situation was totally different for grammar. The scores revealed that seven out of eight participants gained better marks in comparison than cause-effect. However, the level of grammar mistakes were also reduced more considerably in the second draft of both cycles.

Interestingly, most students showed an understanding of the four-paragraph parts and, accordingly, organised their paragraphs. The majority of cases – seven students – produced more accurate cause-effect essays compared to the comparison essays. Ahmed, on the other hand, was the only student who composed a more precise comparison essay than a cause-effect essay. This could be attributed to Ahmed's unawareness of the significance of peers' comments as mentioned previously. The number of mistakes to the number of words produced in each mode provided a shred of clear evidence about students' writings. Here again, it could be deduced that students were generally more familiar with the organisation of cause-effect essays than comparison essays. That is, they became more aware of the significance of these features as well as they became confident comparing to the compare-contrast writing style, as Huda expressed here:

I focused not only on grammar and vocabulary, but also on the organisation of the essay and the content was reviewed. Also, I made slight changes, but at least I looked at the essay from a wider angle.

In terms of content, half of the participants showed fewer errors in the 'content' type. That is, only four cases showed better in comparison cause-effect

than in comparison. This might be attributed to the students' focus on grammar and vocabulary aspects. In terms of essay length, it was observed that all of the eight participants produced shorter comparison essays compared to cause-effect essays.

Based on the data, the statistics revealed substantial differences between the first cycle score means and the second cycle in terms of the 'Overall Writing Skill' mark. The students' scores in both cycles give us an overall conclusion that online peer feedback can effectively enhance EFL students' writing performance in the general sense. In this vein, it is worth mentioning that the students' achievement level could be divided into two levels, namely high achievers and low achievers, based on their overall scores in writing. Muna, Haitham, Ali, Sara, and Huda could be put as high achievers, while Ahmed, Fahad, and Salim were considered as low achievers. Generally speaking, it was evident that the students made a bigger improvement in some areas like grammar and the use of lexical items. It could be deduced that the students' online collaboration tasks were more influential on two of the four micro-skills of writing.

5.5.5 Conclusion

Statistical analysis of the students' scores and insight from the student experiences in terms of the extent to which they found online collaboration to be a place to construct learning were sought to find its impact on students' writing performance. In this respect, the students' scores also demonstrated an overall conclusion that online peer feedback could effectively enhance their writing performance in the general sense. However, the students made a positive change in grammar and vocabulary as they believed that these two sub-skills are the most necessary skills for them as learners of English as a foreign language.

Moreover, the students demonstrated a lack of knowledge concerning the macro-level skills as they were considerably less assured in discussing the content and the organisation of their peers' writings.

Although students' texts improved over their drafts in both cycles, participants were more successful in writing cause-effect essays. It could be inferred that they were more capable of providing causes and effects rather than comparing and contrasting two issues. In other words, developing a comparison essay was more demanding as it required a high level of knowledge about the compared topics. Moreover, the greater positive changes over cause-effect drafts may not be merely due to the higher quality of feedback delivered by the reviewers but also the participants' having more familiarity with, and experience in, performing the tasks and in dealing with the indirect coded feedback method of feedback delivery. In other words, students internalised the expectations and requirements of the tasks and realised the affordances of online collaboration over time and through active engagement and practice. Further still, the greater positive changes in the majority of students' final drafts compared to the first drafts in both cycles can be attributed to the development of the students' awareness of the value of their peers' feedback, which could increase the incorporation rate and also the higher quality of feedback the peer provided. In other words, it could be presumed that online collaboration activities contributed to producing better quality essays. Finally, it is rational that most of the positive changes happened at the surface level as writing is a complex skill influenced by a number of individual, pedagogical, and contextual factors. Therefore, it is not reasonable to expect a swift change in students' writings just by writing two drafts of two essays, as acquiring writing competencies requires a lot of practice and experience.

5.6 Students' Revision Behaviour

5.6.1 Introduction

The fourth research question addressed students' understanding of the impact of online peer feedback on their revision behaviour: To what extent does online peer feedback as a collaborative learning technique used in EFL writing classes impact students' revision behaviours? To investigate this question, students were asked to reflect on their understanding of the impact of online peer feedback on their revision behaviour when working on their different drafts. My aim was to track the students' behaviours during the online collaboration task and the factors that might affect their behaviour during the task. My second aim was to observe whether receiving peer feedback produced different patterns of revision behaviours. More precisely, I was interested in analysing the extent to which students applied their peers' feedback into their subsequent drafts. The focus of the analysis was on the interviews, students' written drafts, and the nature of their writing behaviours over these drafts. For each writing cycle, students produced two drafts over two weeks. While the first drafts were posted online by the students, they were asked to develop the second drafts utilising the online peer feedback they had received from their peers. In the interviews, students were asked to reflect on their behaviours during and after completing the task. Besides this, the changes made by the students to their drafts were traced and analysed. This section presents the findings of the students' revision behaviour in connection with online collaboration task. All comments that referred to the students' views about their peers as their audience, students' emotional responses to their peers' feedback, or the students' use of the learning logs were coded under the broad heading of Students' Revision Behaviour. Thematic categories and sub-codes were identified and refined over several iterations. The

analysis of the written data and students' interviews yield three top-level themes, related to the impact of online peer feedback on the students' revision behaviour, hierarchically organised according to the number of cases, as shown in Table 5.19.

Table 5.19

The Impact of Online Peer Feedback on Students' Revision Behaviour

No.	Theme	Cases
1	Students as the audience	7
2	Students' emotional response to peers' feedback	7
3	The use of the learning logs	6

5.6.2 Students as the Audience

Students perceived writing for their classmates as a new approach for them as they used to write only for their teachers. While some students suggested that writing for different audiences did not make any difference to them, almost all students described it as a motivating activity. There were differences, however, in the degree to which students valued the significance of writing for their peers and its impact on their behaviour.

To begin with, many students expressed their interest in being able to write to their classmates as they felt relaxed and secure when they can write to audiences at their own level, as in these examples:

I feel more relaxed when I write to my classmates because they would just provide me with feedback. The teachers have marks and assessment, which might put some students under pressure. Also, the

teachers might keep a negative impression of the student who makes many mistakes. (Salim)

And:

When I know that my colleagues would read my writing, this makes me feel safe because they would provide me with feedback in order to improve my final draft before showing it to the teacher. I think that peer feedback makes the students feel confident of their writings. (Haitham)

There were, indeed, different views in the interviews about the influence of the audience on the students' revision behaviour. Regarding this, five students argued that writing for their peers as the audience, motivates and encourages them to do their best to make their piece of writing attractive to the readers: 'I try to be more accurate because more than one person would read my writings' (Huda). Similar to Huda, Salim emphasised the value of writing for peers, 'it is for me a motivated experience to write to my colleagues'.

However, a few students expressed that writing for their peers as an audience did not make any impact on their writing behaviour. They mentioned that they made an effort to use their ideas and to involve their personal knowledge in response to rhetorical demands of the task irrespective of the nature of the audience: 'it doesn't matter who would be the audience as I always do my best to write a perfect piece of writing which fits the demands of the task' (Sara). Ahmed supported what his colleague mentioned by his statement: 'for me, it doesn't matter who are the audiences. I do my best to finish the writing task'. This might suggest that some students look at writing as an obligatory task that has to be done. Hence, they focus on completing the task regardless of the readers of the writings. This implies an understanding of the text as having qualities separate from the reader, so the text is perceived to be good or bad rather than

relevant or reader appropriate. The inability to write with a known reader in mind might have consequences for later writing development.

Strikingly, Fahad's behaviour changed over the drafts, as noticed during the observations. As well as this, he stated in the first writing cycle: 'it doesn't matter who would be the reader of my writing'. However, his behaviour changed in the second writing cycle as he discovered that there was an exciting challenge among his classmates who would do better writing, as he clarified here:

Of course, I always try to do the best in my essays. However, writing for my colleagues' challenges and motivates me to make an extra effort in terms of the language and the nature of my writing to make it attractive to the readers.

This showed the change of students' behaviour over the cycles of their drafts and the impact of the online peer feedback on their behaviour. It was also observed during the observations of Fahad's writing that he made more changes to his drafts over the two-writing cycle. This might suggest that writing for peers as the audience supports the online exchange of ideas and reinforces synchronous and asynchronous discussions.

On the other hand, understanding the audience was perceived by the students as a vital issue in writing for their peers. Huda, for example, described writing for different audiences as an invaluable chance to write to 'authentic' readers who might be interested in reading texts, as she explained here:

I feel that writing for my peers is like writing for authentic readers who might want to gain some knowledge from my texts while writing for only the teachers is for the purposes of assessment and grades. Therefore, I like online collaboration.

Therefore, students showed awareness of addressing the written text to their classmates. That is, students expressed that they tried to impress their peers by focusing on what they perceived as exciting for the readers. For instance, they focused on issues that were relevant to their generation, which made their writing attractive to the readers. As an example, Fahad pointed to this issue by saying, 'writing an interesting text makes the students read it and then they provide excellent peer feedback'. This shows the students' considerations of their audience as they tried to concentrate on writing valuable essays to make the audience think it was a good piece of writing.

All these points make clear that writing for peers as the intended audience played a significant role in shaping the students' writing behaviour as was expressed by the students in the present study. This influence is not only associated with the motivation of the students but also plays an active role in the process of revision. That is, some students make a concerted effort to produce an interesting piece of writing to encourage the readers to provide useful peer feedback. It was observed that students' behaviour had changed positively towards the end of the course. However, some students demonstrated that their behaviour was not affected by the audience. This belief stems from their view that they do their utmost irrespective of the reader.

5.6.3 Students' Emotional Response to Peers' Feedback

Feedback receivers' response to feedback can arouse positive (e.g. pride or satisfaction) or negative (e.g. disappointed) reactions. For positive emotional reactions, seven of the participants pointed out that they appreciated and respected their peers' feedback and, consequently, applied it to improve their work: 'it is satisfactory if my colleague gives me feedback to correct my mistakes.

I learn from the feedback' (Huda). Similarly, Sara expressed her pleasure to receive peers' feedback: 'I feel happy to receive feedback because it is a good chance to correct and learn from my mistakes'. Another student showed his acceptance of the feedback: 'I accept any feedback because I learn from my mistakes' (Ali). This suggests that although Ali did not show enthusiasm for receiving peers' feedback, he did not however refuse the feedback as he acknowledged that he might learn from it. For Fahad, it is not only accepting the feedback but also, he stated that the feedback motivated him to make a better piece of writing, 'it gives me the motivation to develop my writing. The feedback helps me, so I accept it'.

A few students indicated that they were reluctant to disagree with or criticise classmates' post. They were worried they would make their classmates uncomfortable, or that their comments would be perceived as pointing out mistakes. Huda, for example, revealed that she tried to be considerate to her classmates' feelings when providing feedback, as she stated here:

When I commented on my colleagues' posts, I did not feel comfortable commenting on some classmates' posts whom I did not know personally, because I felt that they might not like my comments. I tried to be considerate to their emotions.

In the same context, Muna stated that she has observed that some of her classmates did not welcome the feedback that pointed to their errors: 'I have noticed that it may not be equally desirable or advisable for other writers to submit to that process'. It was firmly evident in several students' comments in the discussion board, therefore, that they were concerned about having a conflict or disagreement with other classmates. Some students were hesitant to comment on their classmates' posts. This might be because students felt that if they

disagreed with the content of other posts, it might hurt their classmates' emotions: 'I don't like to comment on the content part as I feel that my classmates might feel disappointed to critique the content of their work' (Sara). She tried to consider other students' emotional feelings and take account of alternative ways of giving feedback. She thought that commenting on or criticising the content of the students' writing might be understood by some students as a criticism of their knowledge and understanding of the topic of the essay. This reluctance to critique or disagree with another student could have been due to the students not being as familiar with online discussions as with face-to-face discussions. That is, some students stated that they prefer to express their feedback in terms of content in face-to-face discussions due to the lack of body language and facial expressions in the online discussions. Students could also be hesitant and careful with their posts because discussions in the online discussion board are documented, and they are available to be read by the instructor and classmates throughout the semester.

Some students felt that their classmates felt embarrassed to give them negative feedback, as stated here:

For me, I think it is fine to receive negative feedback, but some students feel intimidated about the prospect of pointing out lots of mistakes on their peers' writings. I try not to allow myself to be affectively influenced by negative feedback. (Muna)

Muna referred to the feedback that pointed to the students' mistakes as being perceived as negative feedback. In this respect, she indicated that she wanted the negative feedback more than the positive ones as she would learn from her mistakes in her future writings: 'I believe it is being offered with my best interests at heart, and that it can help me to learn and expand my abilities in future

writings'. Sara assured the view of Muna and said that the feedback helped her in the learning process: 'it is fine with me to receive any kind of feedback because by the end of the day I will learn'. It is evident that while most students prefer their peers' feedback regardless of the kind of feedback, some of them still feel reluctant to provide some feedback in order not to hurt their peers' feelings.

A further novel finding was that Salim revealed his disappointment with only himself if he received a lot of feedback, as he expressed here:

I feel disappointed with myself if I made lots of mistakes. However, I don't have any negative feeling towards my colleagues who provided the feedback. I have learned from their feedback. Their feedback allows me to improve my future writing.

He realised that the feedback is positive for him, but he felt disappointed because of the errors he committed in his writing. In addition, he believed that the uptake of peers' feedback could boost their confidence in their ability to provide constructive feedback.

As for reacting through negative emotions, only one student stated that he felt dissatisfied if he received a lot of negative feedback, especially at the first writing cycle: 'frankly speaking yes. In the beginning, I felt disappointed' (Haitham). However, he realised over the cycle of drafts, that the feedback, whether positive or negative, is provided to support him, as he explained here:

Later on, I realised that I should understand that I need to learn from my mistakes to develop my writing in the future. So, students should be proud of themselves and look at the positive side of the issue as they would change and correct their mistakes in their final draft.

This might suggest that the students' awareness of the benefits of peer feedback is an essential factor in welcoming their peers' feedback. Therefore, the

role of the teacher is crucial to raise the students' awareness in terms of the value of their peers' feedback, irrespective to the type of feedback received.

Another critical issue connected to the students' emotional response to their peers' feedback is related to the time allocated to provide the feedback. That is, some students might feel dissatisfied with receiving late feedback. Hence, the time students spend on providing feedback to the peers' piece of writing was perceived to affect their peers' emotions. In this respect, most of the students – six cases – believed that providing feedback did not take too much time. Ali, for example, stated that using the computer and the correction codes makes providing feedback accurate and fast, as he revealed here:

Since we use the computer and the correction codes, it doesn't take much time. What we need is only to underline the mistakes and put the appropriate correction code next to it. The students have to act upon their peers' feedback.

However, two high-achieving students agreed that providing feedback takes some time as the essay needs to be read more than once, as expressed in the examples here:

Yes, it takes some time because I read it more than once. First, I focus on grammar. The second reading concentrates on the spelling mistakes. Finally, I focus on the organisation. In each reading, I focus on one component. (Haitham)

Similarly, Muna added:

In the beginning, I concentrate on spelling mistakes. Later on, I shift towards punctuation. To maximise the potential of receiving benefits from it, it's something you have to resolve doing on multiple occasions.

It can be noticed that most of the students perceived that providing feedback does not take too much time as the online task allows them to use the technology to send their feedback immediately. However, some high achievers mentioned that providing feedback takes some time as they prefer to read their peers' writing more than once to make sure that their feedback is appropriate. This shows discrepancies between the students' perception of the time allocated for peer feedback in order to satisfy their classmates. It seems that high-achieving students took more time than other students. This result ties well with previous findings wherein low achievers concentrated mostly on surface-level mistakes, so they took less time to provide their feedback. However, all of them worked towards providing the feedback within the period allotted for the feedback.

In line with the previous point, students' text analysis also revealed some inconsistencies in participants' revision behaviours. For instance, it was noticed that only half of the cases made positive changes to the content and the organisation aspects of their essays. On the other hand, in terms of vocabulary and grammar, all of the eight cases showed progress over their different drafts. It was evident that most of the time allocated to online peer feedback was spent pointing to the surface-level issues and a vast majority of revision focused on linguistic aspects of the student. That is, an overemphasis on form and restricting feedback to linguistic issues prompted the majority of the students to feel they could improve this aspect of their writing skill.

Another common reference made by students was to the 'essay length' which is not a discrete revision behaviour from the student's emotional response to their peers' feedback. As for the essay length, most students wrote essays longer than the minimum limit. It was observed during the online observations that some students reduced their errors by shortening their drafts, but it did not

necessarily mean a better quality of writing. In such cases, the lower number of mistakes was not necessarily the result of the effective or positive changes the participants made in their drafts, but it was due to the shortening of the size of the texts. Further, deleting the erroneous portion or even the whole paragraph in response to the feedback was identified in some cases. This tendency, for instance, was observed in Ahmed's revision behaviour as he deleted one of the body paragraphs in response to the comment delivered by his peers. Indeed, he avoided the problem instead of dealing with it, as he expressed here:

The best way to deal with some feedback is to delete the erroneous sentences. I remembered I deleted a paragraph as the peers' feedback stated that the paragraph was not clear, and some sentences were not related to the topic.

Ahmed took this action to satisfy himself in believing that his writing does not have any mistakes. It shows that he focused on the form rather than the meaning. Although he realised that deleting some portions from the text would affect its meaning, he tried to convince his colleagues that he did not commit many mistakes in his final draft. Besides this, he wanted to show them that he acted upon their feedback to please them as he believed that if he did not implement their feedback, they might feel disappointed of him.

On the whole, the analysis showed a high degree of individual consistency in students' understanding of emotional response to peers' feedback. There was considerable variation between students, evident in the different interpretations and importance that students accorded to peers' feedback. The findings revealed a reluctance from some students to provide negative feedback as such feedback might hurt their peers' emotions. Additionally, some students tended to accept their peers' feedback uncritically in order to satisfy them.

Most of the students believed that providing feedback to the peers' piece of writing does not take much time as using technology and correction codes make it a simple and relatively straightforward process. While all of the eight cases showed progress over their different drafts in terms of vocabulary and grammar, only half of them made positive changes to the content and the organisation aspects of their essays.

5.6.4 The Use of the Learning Logs

A learning log is a space where students can post their writing, provide and receive feedback, edit their essays and provide questions about what they are studying. The online learning logs in the current study were in the form of online threads where other students from the same group can reply to it. The log contents were accessible to the teacher and the students from the same group only, ensuring privacy from other students. However, all of the students in the class could have access to the other students' writings after the end of the task without making any change to them. The aim of the availability of the texts to all students after the completion of the task was to allow them to learn from their classmates' work.

Participants in this research maintained that learning logs were useful for their writing in terms of motivating them and enhancing their knowledge of different writing skills. However, only six of the participants talked about visiting the learning log on a regular basis. For example, Haitham revealed that he usually uses the college labs to complete his work, as he expressed here:

I usually go to the lab in the break between classes. I go there to complete my writings and provide feedback on my colleagues' writings. Last time, I gave feedback to one of my colleagues who wrote

a compare and contrast essay between two cities in Oman in the break between classes. It is interesting and motivating to do such an exercise. Also, it is useful as I learn a new thing every day.

In the same vein, Ali added that he checked the log at home as well: 'sometimes, I go back to them at home and in the break time between classes'. This indicated that students could log in to the online task not only in the classroom but also at home or any other place, with access to the appropriate technology. It is a crucial strategy to extend learning beyond the classroom where students can trace and manage their own learning through the online task. Broadly speaking, most of the students showed an understanding of the value of using the learning log in promoting their writing. Other students perceived reviewing the learning log as a critical factor of improving their overall writing performance and revising experience, as represented here:

I do review my learning log. Reviewing the learning log allowed me to improve my writing skills, especially in terms of grammar and the choice of lexical items. As a result, I can track my progress and develop my writings. (Huda)

Other students' perceptions were also indicative of their metacognitive processing and analysis of their learning process: 'I go back to the learning log of the course at least once a week so that I can understand my mistakes and my peers' errors as well' (Salim). Returning to their learning logs enabled the learners to understand the way they learn and gain awareness of their own knowledge. Hence, the learning log was perceived as an efficient tool to track the students' progress over the course: 'I can observe my progress and compare my current level to my level at the outset of the course' (Huda).

For some students, they referred to the learning log only before the exams or if they wanted to complete a task which they could not finish in the classroom: 'I returned to the learning log before the exam' (Ahmed). A similar pattern of findings was obtained in Sara's response who stated: 'sometimes I have to return to it to submit a writing task or provide a piece of feedback on an essay'. This might suggest that those students perceived the task as a useful task for the assessment. Therefore, they just returned to the task before the exams to prepare for them by revising their writing.

Some students returned to the learning log but only if they had a class in the language lab: 'I don't return to it because I just log in to the website in the classroom' (Fahad). Ahmed added that, 'I write in the class and then leave the online task till the next classes'. This might suggest that some students perceived the online task as an extra task which they have to do to impress their teachers.

Fortunately, students' behaviour has changed over the period of the course. That is, they gradually understand the significance of reviewing the learning log, as represented here:

I realised that reviewing my learning log was important to improve my writing. In my second writing cycle, I went back to my learning log of the class, and I found it very useful for me. Therefore, I think that reviewing the learning log is a part of the learning process. (Haitham)

This might suggest that log writing helped students see the positive change in their writing habits and writing power as well as their feelings. The learning logs, in fact, enabled the students to check how the learning process proceeded. Observing their progress via learning logs motivated the students: 'I feel motivated when I see any progress in my writings' (Sara). This might suggest that referencing the learning log allowed the students to monitor their progress

and record their perceptions on not only their writing development but also their learning behaviour and changes throughout the course. The possibility to review and make comparisons appeared to have provided the learners with the opportunity to trace their work both through observing the immediate outcomes and the way such outcomes related to their previous efforts.

Extensive results carried out show that students might use different technological tools to go back to their learning logs. In this respect, some students maintained that they found it easier to use their mobile phones instead of the computers to go back to the learning logs and post their writings, as Haitham expressed here:

Yes, sometimes, I prefer to use the mobile phone than the computer because it is flexible, and the letters are close to each other. Sometimes, I use my mobile phone to send feedback to my classmates. I can use it at home and in the class.

As smartphones were available, the students' use of mobile phones has gradually developed over the course. They reported that using smartphones was more comfortable and accessible to them, as mentioned here:

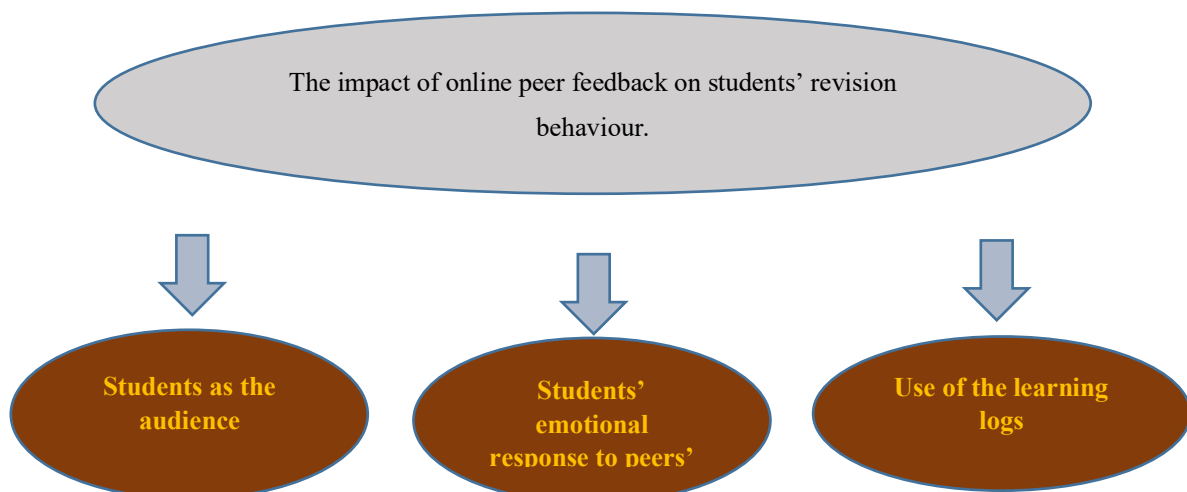
At the outset of the course, I used only the computer in the language lab. Then, I used my mobile phone in the break and at home to send my feedback and to read my classmates' writings. (Sara)

Sara found that using smartphones was more comfortable than computers as they were available to the students almost all of the time. This point is crucial for the students as they can use their smartphones effectively by using them in their learning. Besides this, using smartphones could contribute to an extension of the learning process beyond the classroom.

To sum up, it appears that there was a consensus among the participants regarding the advantages of reviewing the learning log for the students. However, students' writing behaviour illustrated that only half of the participants used to visit the learning log on a regular basis. Other students reported that they went back to the learning log only before the exams or if they wanted to complete a task, while a few students indicated that they did not return to the learning log after the class. Amazingly, students' behaviour has changed over the period of the course as they began to gradually understand the significance of reviewing their learning logs. This suggests the significance of the learning logs in helping the students trace how much improvement was made. Some students tended to use their smartphones to log in to their logs as they found it easier and more accessible to do it this way. Figure 5.2 sums up the way in which online peer feedback impacted students' revision behaviour.

Figure 5.2

The Impact of Online Peer Feedback on Students' Revision Behaviour



5.6.5 Conclusion

To conclude, a detailed account of the analysis of the data collected from different sources (semi-structured interviews, in-class and online observations) was presented in this section. Similarities and differences between the data generated from these various sources were analysed to enrich the interpretation and presentation of the findings which sought to address the fourth research question in my study. The opportunity given to the learners to express their revision behaviour was an invaluable experience that revealed their progress throughout the course. However, writing for their peers as the audience, students' emotional response to their peers' feedback, and the students' review of their learning logs were the main situations that indicated the students' revision behaviour.

To begin with, writing for peers as the audience was perceived as a significant way in shaping their writing behaviour. This influence is not only associated with the motivation of the students but also plays an active role in the process of revision. While some students' behaviour has changed positively towards the end of the course, some demonstrated that their behaviour was not affected by the audience. This belief might be attributed to their tendency to do their best, irrespective of the reader.

Secondly, the analysis of the data indicated conflict findings regarding the students' perception of their emotional response towards their peers' feedback. That is to say, most of the students showed positive reactions to their peers' feedback while a few revealed disappointments towards some feedback. More particularly, most of the respondents reacted positively to their peers' feedback and disclosed that they were pleased to see their peers appreciate and respect their feedback. Consequently, they applied their peers' feedback on their essays

to improve their work. Nevertheless, some students showed a reluctance to disagree with or criticise their classmates' writings. Furthermore, the results illustrated some students did not welcome the feedback that highlighted their mistakes. This perception tended to inhibit the students' use of peers' feedback because of their negative emotional responses to it. Generally speaking, the findings indicated a high degree of individual consistency in students' understanding of emotional responses to peers' feedback, although there was considerable variation between the students. The variation was evident in the different interpretations and importance that students accorded to peers' feedback. That is, students not only valued various aspects of peers' feedback but experienced different degrees of agreement or conflict between their constructs of response to their peers' feedback.

In terms of using the learning logs, the participants revealed an awareness of the value of reviewing the learning logs for themselves. Nevertheless, only half of them mentioned that they visited their logs on a regular basis. Other students expressed that they went back to their logs only before the exams or if they wanted to complete a task. Conversely, a few students illustrated that they did not return to their learning logs after the class had finished. Surprisingly, students' behaviour has changed over the period of the course as they gradually understood the value of going back to their learning logs. Allowing the learners to log in to their learning logs at any time and place means providing them with the opportunity to use their smartphones in addition to their computers to go back to their logs. This seemed to provide the students with a sense of belonging to a broader community in which they aimed to share ideas and information with their classmates.

5.7 Summary of the Chapter

This chapter has presented the findings and the analysis of my research by reporting and summarising the students' understanding of the impact of online collaboration on their writing. I presented various elements within the practice settings that the participants described to be important factors influencing their writing performance and revision behaviours related to the students' online collaboration. I also presented findings related to the students' understandings of the affordances and limitations of online collaboration.

The analysis chapter reflects these areas which are based on the analysis of different data types: texts written by students, observational logs, focus groups, and semi-structured interviews. These different methods of data collection concerned the perceptions, writing performance, revision behaviours, experiences of students regarding the affordances and limitations of online collaboration. Similarities and differences between the data generated from these various sources were perceived to support the interpretation and presentation of the findings which sought to address the investigated issue. The students confirmed that collaboration was indeed necessary because it was a practical approach to consolidate the interaction among students and between students and tutors-as-experts. Nevertheless, the results showed that participants held different perceptions about the affordances and limitations of online collaboration. That is, they expressed a clear preference for such an interaction as it promoted and encouraged an inner desire for participation within the students. Online peer feedback also provides a promising platform for communication, with less embarrassment and anxiety for students to interact and share ideas beyond the classroom. It was perceived as a supportive atmosphere that allows the learners to be exposed to a variety of writings from their peers. Consequently, they can

learn many new topics and improve their writing skills at the same time. In contrast, some difficulties and challenges have been addressed in the online collaboration task namely, difficulties with the use of the platform, lack of time, negative responses from peers, and the absence of the teacher's involvement. The students need to deal with these barriers effectively and exploit the unlimited opportunities of the task. The students emphasised the significant role of the teachers, as they should clarify the aim of the task and the nature of the students' interaction from the outset of the course.

The analysis revealed that online collaboration promotes mutual scaffolding between students through providing and receiving feedback, irrespective of their level of writing proficiency. In this respect, pointing, advising, and instructing seem to be the most prominent scaffolding behaviours throughout the students' online collaboration tasks. On the contrary, the findings indicate some responding behaviours. For instance, by using 'admit feedback', 'reject feedback', 'clarification request', 'express concern', and 'inability to collect feedback' strategies, students indicated their response to their peers' feedback. Nonetheless, responding behaviours are still crucial to better understand the nature of the students' response to online peer feedback.

The analysis demonstrated that online collaboration activities contributed to producing a better quality of the students' writings. However, most of the students' improvement was related to surface-level changes like grammatical and lexical items. It is rational that most of the positive changes happened at the surface level as writing is a complex skill influenced by a number of individual, pedagogical, and contextual factors. Therefore, it is not expected to be able to observe a swift change in students' writings just by writing two drafts of two

essays, as acquiring writing competencies requires a lot of practice and experience.

The final part of the analysis showed that the learners expressed their revision behaviour as an invaluable experience that revealed their progress throughout the course. However, writing for peers as the audience, students' emotional response to their peers' feedback, and the students' use of their learning logs were the main situations that revealed the students' revision behaviour. Overall, it is argued that the effective use of online collaboration could help in improving the students' writing. However, online collaboration is considered as a precursor and a bridge for enhancing the students' writing. Students need to have cognitive skills, knowledge, and social awareness to write a good piece of writing. Writing in a foreign language tends to be more challenging and less natural for students. Therefore, online collaboration is perceived to be a supportive tool to help students overcome many challenges.

Chapter 6: Discussion

6.1 Organisation of the Chapter: Overview

This study sought to explore Omani EFL students' understandings about the impact of online collaboration on their writing. In particular, it posed questions about the affordances and limitations of online collaboration, its impact on the students' writing performance, and their revision behaviours. The findings provide a complex picture, reflecting several apparent dichotomies in students' thinking and some distinct differences between their perceptions and their practice.

This chapter presents the discussion of the overarching themes emerging as a result of qualitative and quantitative data analysis. It indicates the extent to which the findings were supported in previous research studies. In addition, these findings are compared with the findings of the related literature and linked theoretically with the sociocultural theory in terms of the impact of collaboration and mutual scaffolding on EFL students' writing quality. After an introduction, the chapter begins with the discussion on the students' perception of the affordances of online collaboration and their relationship to students' writing practice. This is followed by a discussion on some factors that might hinder online collaboration among students, and thereby contribute to making it less successful. These factors are associated with both the cultural expectations and slight misunderstanding of the value of collaboration. This discussion of the affordances and limitations leads to the debate about the pedagogical issues of online peer feedback and the nature of students' interaction and reaction to peers' feedback. After this, the question of how online peer feedback facilitates mutual scaffolding is addressed. In the next section, the role of the teacher is also highlighted as some changes have impacted their role in the technological era. Finally, a discussion of how to teach writing in light of the rapid changes in the educational

systems is addressed. Throughout this chapter, new theoretical insights are developed, which can contribute to the existing knowledge in the field of technology-enhanced language learning, L2 writing response context, and related research and practice.

6.2 Introduction

With the changing dynamic in today's world, the new generation of students tends to understand and use new technological tools on a daily basis (Akhiar, 2019; Al Yafaei & Attamimi, 2019; Yadegaridehkordi et al., 2019). Therefore, teaching strategies should be consistent with the rapid proliferation of technological revolutions within the sphere of education. Although pedagogical practices are changing, the speed of change is posing a new set of challenges to the roles of both the teachers and students. Notably, three substantive changes in the educational field seem to contribute to the shape of the pedagogical process. Firstly, teaching approaches have moved from teacher-centred to student-centred approaches, where the student has become an active agent of learning and responsible for learning while the teacher is responsible for facilitating the learning (Lee & Choi, 2017; Purwaningrum & Yusuf, 2019). Secondly, new learning environments have emerged, especially with the growth and use of the Internet among other ICT tools and innovations (Bottino, 2004; Chen et al., 2016; Stockleben et al., 2017). Thirdly, as online learning is becoming an integral part of the students' learning experience, teaching, assessment, and feedback models have increasingly been shaped by the students using these new tools (Kahn et al., 2017). These changes all call for a reconsideration of the role of online collaboration in students' writing development, and the nature of

students' collaboration on EFL writing to investigate the impact of such collaboration in the students' writing quality and their revision behaviour.

A number of research studies have argued for greater attention to be paid to the impact of online collaboration on the students' writing performance and their revision behaviour. It has been noted that online collaboration encourages learners to react spontaneously, comment on their opinions, and write at their own pace (DiGiovanni & Nagaswami, 2001). Moreover, online collaboration could underpin different levels of interaction and collaboration (Hauck & Youngs, 2008). That is, it allows students to establish contact with target language learners and native speakers through online communication. Furthermore, it allows students to combine different modes of communication in one single environment. The question is how online collaboration could impact students' writing performance and revision behaviours, and how it could contribute to the mutual scaffolding among learners in particular.

It is crucial to understand the affordances and limitations of online collaboration, especially in the process of online peer feedback provision, from the perspective of students who are, in fact, important stakeholders in the feedback process: 'teachers should carefully listen to their students' perceptions and preferences as they consider how to design their feedback and error treatment strategies' (Ferris, 2003, p. 46). As a result of blended learning, Challob et al. (2016) believed that new dynamic properties can come into existence and therefore provide more atmosphere for interaction in and outside the classroom, thus enhancing the students' learning experience. Hence, teachers and students need to become more familiar with the affordances and limitations of technology integration. Moreover, it is essential to explain why and how online peer feedback as a tool for online collaboration could help the students in their writing

improvement. This approach made it possible to assess the impact of online collaboration on EFL students' writing development when the comparison was made between the students' first draft and second draft. Furthermore, it enabled the exploration of the students' revision behaviour.

To address the questions of how to make best use of the opportunities afforded by new technology' in the field of writing (Sharples, 1999, p. 113), how online collaboration contribute to students' mutual scaffolding (Laal & Ghodsi, 2012), how individual students perceive the impact of online collaboration in their writing performance (Al-Mansour & Al-Shorman, 2012; Borokhovski et al., 2016; Fidaoui et al., 2010; Wollscheid et al., 2016; Zheng & Warschauer, 2017), and how they conceptualise the challenges of utilising online platform in their learning (Razak & Saeed, 2014), the present study embarked on finding the areas in which the online collaboration was perceived and found to promote, or limit, students' writing pedagogy, as discussed in the following sections.

6.3 Perceived Understanding of the Affordances of Online Collaboration

Previous understanding of online collaboration as a platform for students' interaction in order to improve their learning was confirmed from the perspectives of the participants in this study. While most students had ready answers to the question of the affordances of online collaboration, they were aware that descriptions of these affordances were subject to a range of factors. In this respect, the body of literature has covered various elements in terms of the affordances, but I will discuss the most critical affordances from my study and their relationship with the students' writing development and revision behaviour, based on the findings from the observations and interviews in the light of the sociocultural theory. The way in which these affordances practically contribute to

the students' writing performance are highlighted later in Section 6.4. The findings demonstrated online collaboration as a platform which supports the students' learning process, a motivating factor that enhances collaboration and participation, a space to improve the students' attitude towards writing, and practice which boosts the students' critical thinking. In what follows, what these affordances mean and how online collaboration helps to achieve these perceived affordances in relation to the students' writing are discussed.

6.3.1 Online Collaboration Enhances the Learning Process

The fact that collaboration via online platforms enhances the learning process (Kong, 2003) or provides an environment for learning (Hauck & Youngs, 2008) was echoed almost directly by those students in this study who spoke of promoting the learning process as the main affordance. It seems that these findings might lend support to the findings of the current study, from the interviews and observations, which indicate that the students emphasised that online collaboration enhances the process of learning. It is worth foregrounding the fact that students talk about learning as a process here, rather than a product. Being an effective learner has wider implications than simply being successful at a particular task. As mentioned, the most prominent theme arising from the data concerned the detection and correction of errors or faults, which eventually contribute to the enhancement of the learning process. The enhancement of the learning process comes through acquiring new knowledge or modifying existing knowledge or skills. It demonstrates an internal development of the learners and an active engagement in their own learning process. Furthermore, students have choices over their own learning. Therefore, online collaboration could facilitate blended learning where in-class and online instruction were combined to ensure

more interaction both inside and outside of the classroom, thus enhancing students' learning experience (Challob et al., 2016).

There was evidence in the study that students were well aware that online peer feedback is not merely about error spotting and correcting but also about addressing the kinds of mistakes one might make and alerting the writer to where to give attention to in their future writing tasks. Although the issue is surface features of the text, it is still concerned with a level of self-knowledge as a writer. It is salient that while the emphasis of the students' feedback was often on error correction, the learning focus itself was more varied and touched on, idea generation, textual organisation, and the writer's self-knowledge. This focus was regarded to lend support to students to improve their final draft and minimise mistakes. This reveals that students recognised the need to focus on different language skills as all of these skills would be evaluated and judged by their peers. That is, although most of the comments revolved around error correction, other aspects of learning were evident in the comments. This task involved organising the writers' ideas. A well-written essay makes the students interested in reading the essay, which in turn, motivates them to provide convenient feedback to their peers.

The findings suggest that online collaboration was further perceived to help focus on all elements of writing. As some online platforms automatically correct misspellings and common typos, it might encourage students to think of the content of their essays as well as metalinguistic issues associated with their writings. This corroborates with the findings of Dzekoe, (2017); Heift and Hegelheimer, (2017); and Vorobel and Kim, (2014), who stressed that online collaboration helped students develop their language and voice to convey ideas that they were struggling to express using the handwriting mode alone.

Furthermore, students did more content-level than surface-level revisions in the online collaborative activity as their linguistic mistakes would be corrected automatically (Dzekoe, 2017). Furthermore, Lee (2017) found that online collaboration facilitated the L2 writing process and the way students viewed online collaborative writing instruction and peer feedback. The results of the current study showed that novice writers expressed that online collaborative tasks gave them agency over their learning and engaged them in the co-construction of knowledge with their peers. This helped them make an improvement on their written content and increase their language accuracy. However, teachers are strongly advised to ensure the successful implementation of the task by incorporating it into their teaching methods to further support collaborative interaction within socially-bounded online learning environments. On the contrary, Yu and Lee (2014) found that EFL students used their L1 to give peer feedback, which focused more on content and organisation than that in L2. In this regard, I argue that even if students use their L1, they still learn and look beyond the surface level. It was observed in my current study, that students did not use their L1 during the online task, yet they rarely used their L1 in face-to-face discussion in the classroom. It is the teachers' role to encourage students' interaction using L2.

A number of research studies have emphasised the great attention to be paid to how students' value the utilising of online collaboration. This provides educators with a clear picture of the students' needs and demands, which leads to designing a suitable online platform that is commensurate with the students' needs and experiences. As students have different levels of knowledge and understanding, they will also end up with various levels of competency. Therefore, students should not be treated like one and the same. Cresswell

(2016) has argued that 'fixed procedures for teaching are insufficient because learning is not a one-way process' (p. 32). This is consistent with this research which views learning as a process instead of a product, as the goal is the internal development on the learner rather than focus on the final product. Therefore, students were given the choice to complete the task at the appropriate time and place. Furthermore, they were allowed to choose topics to write about and discuss their topics with their peers because learners have diverse needs and interests. This encouraged the participants to think of the content of their essays as well as metalinguistic issues associated with their writings. Such flexibility is needed for students to choose within well-defined limits and choose activities that they are interested in writing about. In this vein, Weller et al. (2005) suggested that students showed positive experiences working collaboratively through different technological tools. Additionally, the results indicated that each stressed the importance of technology in supporting the students' learning phases. The online collaboration has been seen as a crucial tool to motivate students in their learning process. The way in which online collaboration functions as an incentive to students is discussed in the next section.

6.3.2 Writing for a Different Audience is Motivating

Of particular note is the fact that the participants in this study pointed out that one of the main affordances of online collaboration is that it promotes their motivation. It can be immediately noticed that online collaborative activities motivated students' writing because they can write for more than one reader as they used to do. Additionally, writing in a new platform and atmosphere showed a positive impact on the students' motivation. Finally, noticing the result of their peer feedback on their second writing encouraged more collaboration among

learners which subsequently contribute to their motivation levels. Writing for peers as the audience was perceived as a significant way in shaping their writing behaviour. This result is in accordance with Ahn et al. (2016), who suggested that individuals in collectivistic cultures actively pay much greater attention to, and are more influenced by others' opinions, expectations, and behaviours than those in individualistic cultures. The findings of this study indicated that learners enjoyed reading attractive writings, thereby encouraging them to read the whole paragraph. Therefore, writing topics to the students' interest then posting them online reinforced their motivation to learn and write regularly (Jewitt, 2013). Consequently, reader motivation would increase, which then meant that the writer received better feedback.

According to Owens et al. (2017), the move from the traditional teacher-centred approach in which teachers are the sole authority in class to the students-centred approach could offer support in promoting the students' motivation and communication skills. Additionally, Al-Ani (2013) stressed the powerful impact of the usage of discussion forums on students' achievement, motivation, and collaboration. Moreover, such motivation contributes to the students' active participation in collaborative works (Al-Khalifa, 2008; Huang & Nakazawa, 2010). Writing in an online platform promoted students' awareness and understanding of their peers and vice versa (Deng & Tavares, 2013). Such an atmosphere allowed the students to share information, engage in online peer feedback, and support students to freely express their ideas in various forms.

The findings from this study have shown that understanding the audience was perceived as an important issue in the students' writing. It was found that previously, nearly all the students' perception of the audience came from their direct interaction with their teacher inside the classroom. Therefore, an

understanding of the audience used to be restricted to the teacher who taught the writing course. However, writing in an online platform is considered as a real sphere where any authentic reader who was interested could read the text. Therefore, the students in the present study referred to trying to 'impress' their colleagues by focusing on what they perceived as interesting topics for their generation. They made an effort to write attractive essays in order to get enough feedback as they articulated. To do so, they used different strategies like introducing cultural topics and issues that are relevant to their generation, which they felt as interesting for their classmates as they expected the readers to provide feedback on the quality and how interesting the topic was to them. Therefore, writers need to understand the readers' possible reception of their writing (Myhill & Jones, 2007). Writers should bear in mind the interests and expectations of the potential readers of their texts.

Although purposes for writing at the tertiary level are inevitably distinct from those that writers might pursue in the real world, students showed their interest to write in a virtual space to express their opinions to their classmates and to learn from their peers' writings. The online collaboration was viewed to overcome the issue of the limited exposure to a variety of writings which led to limiting the students' understandings of real audiences. More specifically, online peer feedback was regarded as a convenient approach to encourage interaction among students beyond the classroom. Thus, it promotes collaboration and communication among the learners where they were connected synchronously and asynchronously. Such collaboration expands and encourages an inner aspiration for participation within the students. Overall, there was an agreement among the participants on the significance of the online collaboration task to extend the typical offline classroom and improve their writing. Such collaboration

could contribute to the reinforcement of the students' motivation to take an active role in online tasks.

6.3.3 Online Collaboration Promoted the Students' Critical Thinking Skills

One of the main affordances given for online collaboration was to promote the students' critical thinking skills. The findings indicate that students conceptualised online peer feedback as a valuable approach to judge, interpret and evaluate their peers' work and feedback as well. Judging and evaluating are essential aspects of critical thinking skills. Besides this, students made an analysis of their peers' work by providing the appropriate correction codes to their mistakes or posting short comments on their writings. All of these strategies contribute to the enhancement of the critical thinking abilities of the students.

This concurs with several studies which found that students' collaboration and interaction contributes to the enhancement of the critical thinking skills of the students. For example, Hyland (2003) argued that feedback enhances students' critical thinking and evaluation. Furthermore, Andrade and Bunker (2011) emphasised the significance of the appropriate implementation of online collaboration tasks in order to support students' critical thinking. To do so, Valdez (2005) argued that technology applications can support critical thinking skills by engaging students in authentic, complex tasks within a collaborative learning environment. Nicol and Macfarlane-Dick (2006) moved beyond that and stressed that peer feedback is not merely helpful for those who receive it but also beneficial to those who provide it, since students need to read critically when they are engaged in the peer feedback process. If they can help their peers edit their writing drafts, it means they can also edit their own writings. Moreover, Chang

(2012) reported that online peer feedback can serve as a less pressured platform for students to make critical comments.

This calls for a need for more consideration of the construction of online courses as online collaboration eventually results in shifting the locus of decision-making from the teacher to the students (Dang et al., 2011). To do so, the online task should be designed to support sustainable learning in students by inducing desirable effects, (e.g. online collaboration, peer feedback, critical thinking, and active engagement with ideas). The online collaborative activity needs to enable students and the teacher to reach learning objectives to ensure an effective use of the online task. It seems that the online platform provides a dynamic atmosphere for the students to interact and collaborate. It is noticeable during this study that students showed signs of collaboration and interaction like providing correction codes to their peers' mistakes and posting a short comment on their writings. Such collaboration is perceived to promote critical thinking of the students as they need to reflect on their peers' writings and decide upon how to implement their peers' feedback. The online platform is expected to set up an atmosphere distinct from the pressures of time and place in a traditional classroom setting.

Although there is no agreed-upon test to measure the development of critical thinking skills, it was observed that there is an improvement in the students' critical thinking skills in their writings and discussion in the current study. The students became aware of judging and evaluating their peers' essays which is a good indicator for the development of their critical thinking skills, as perceived in this study. However, more work is needed in this vein and teachers should provide the support needed. This finding lends support to the results of a number of previous studies conducted in at least some Middle Eastern nations. To

illustrate this, it was reported that there is a lack of teacher training in how to teach critical thinking in some Middle Eastern nations, although there is an awareness of the importance of developing learners' critical thinking skills and that this is increasing among the instructors in the educational systems of these nations (Chouari & Nachit, 2016). The integration of technology is inevitably vital in providing frontline and cutting-edge tools that might allow students to further develop their critical thinking skills, as it offers a dynamic atmosphere for both interaction and collaboration.

The above discussion apparently shows that online peer feedback was perceived as an excellent platform for communication, with less embarrassment and anxiety for students to give/receive feedback and share ideas beyond the classroom. The students considered online collaboration as a supportive atmosphere that enabled them to have exposure to a wide range of writings from their peers. Consequently, they can learn many new topics and improve their writing skills at the same time. In this context, Krashen (1989) pointed to exposure as being essential prior to production in his input hypothesis. Although collaboration can obviously take place in a paper-based interactive classroom, this study indicates that online collaboration is an effective way to support the learners to interact and learn in a way which can occur within or outside the classroom. Today's generation of learners generally prefers using digital technology in a social interactional learning environment (Pinkman, 2005). In this respect, this study suggests that online collaboration can facilitate the learning process and enhance students' motivation to develop a sense of audience in their writing. Moreover, online collaborative activities can play a role in boosting the students' critical thinking skills. Notably, the perceived affordances were supported by the affordances I have found from the students' texts analysis which

all go together in supporting the value of online collaboration. The study has made a salient contribution by beginning to explore some of the ways in which students' perceptions relate to their practice within the implementation of online collaboration in teaching writing. I have evidence that shows there is some improvement in the students' writing competencies which are discussed in the next section.

6.4 The Influence of Online Collaboration on EFL Students' Writing

Performance

The findings from the students' interviews and observations demonstrated the positive impact of the students' online peer feedback on their peers' writing performance. Additionally, statistical analysis of the students' scores and insights from their experiences were sought to find the impact of online peer feedback on their writing performance. In this respect, the students' scores yielded an overall conclusion that online peer feedback could effectively enhance their writing performance, in a general sense. However, the students made a positive change in grammar and vocabulary as they believed that these two sub-skills are the most necessary skills for them as EFL students. The effective use of online peer feedback improved students' writing skills, as shown in the mean scores (6.41 and 7.4) in the results of the students' first and second drafts in their first writing topic. Moreover, the results of the first and last drafts of their second assignments showed that there was a significant difference in the mean scores (6.75 and 8.02). The participants have stressed that online peer feedback offers opportunities for collaboration in and out of the classroom, which supports the idea that writing is a social practice (Myhill, 2005). Therefore, it seems that this improvement in the students' second writings and their response to the use of online collaboration as

a platform for teaching and learning writing was, on the whole, positive. This was apparent in the data gathered statistically from the students' text analysis.

The voices of participants in this study have, in many respects, confirmed the findings of recent studies (AbuSeileek & Abualsha'r, 2014; Levi Altstaedter, 2018; Noroozi et al., 2016; Sánchez-Naranjo, 2019) which found that online peer feedback had a beneficial influence on the writing ability of English learners. Furthermore, learners could develop new strategies and approaches to writing in English, like imitating good writers and participating in discussions about their writing topics. It appears that online collaboration could provide students with more opportunities where they can read more, search for topics related to writing their homework in order to compare and learn new ideas. It also allows the students to communicate and share their ideas to solve problems and complete tasks together. The online platform as a pedagogical method in teaching and learning English writing supported the students to improve their writing skills, based on the analysis of the texts. Besides this, students perceived that online collaboration was extremely beneficial in learning English language skills and writing in particular. In this sense the evidence of the texts and of the students' perceptions are in accord.

The students emphasised that their writing improved because of the combination of online peer feedback in their essays. Moreover, this process enabled them to read their peers' work, learn from each other, and compare their writing with their peers. Therefore, this allowed them to use a wider range of vocabulary in their writing instead of repeating the same words, and to use a variety of sentences rather than just simple sentences. The students revealed that they could write longer paragraphs, using a greater variety of academic vocabulary, and were able to use a mixture of simple, compound, and a few,

complex sentences. On the contrary, the students showed a lack of knowledge concerning the macro-level skills as they were considerably less assured in discussing the content and the organisation of their peers' writings.

This finding corroborates earlier studies performed in this domain that found that L2 learners focus more on editing form rather than on content even in face-to-face peer review studies (Deni & Zainal, 2009; Sharples, 1999; Villamil & De Guerrero, 1996; Zaini & Mazdayasna, 2015). This might be attributed to the fact that students may have experienced cognitive overload and difficulty in commenting on or discussing macro-text changes, such as changing ideas using English (Tsui & Ng, 2000). In addition, the way of teaching writing in this particular sociocultural teaching context, and the way the teacher modelled how the students should edit the text might be another reason (Alexander, 2008). As Arnold et al. (2012) argued, focusing on editing form over the content may be related to the 'students' educational experience where L2 writing assignments are mainly seen as a way to assess mastery of linguistic code as opposed to a communicative act' (p. 441). Therefore, it seems rational that most of the positive changes happened at the surface level as writing is a complex skill influenced by many individual, pedagogical, and contextual factors.

The analysis of the students' essays demonstrated that the greater positive changes over subsequent drafts may merely reflect not only the higher quality of feedback delivered by the reviewers but also the participants' greater familiarity with and experience in performing the tasks and in dealing with the indirect coded feedback method of feedback delivery. In other words, students internalised the expectations and requirements of the tasks and realised the affordances of online collaboration over time and through active engagement and practice. Further still, the greater positive changes in the majority of the students'

final drafts compared to the first drafts in both cycles could be attributed to the development of the students' awareness of the value of their peers' feedback, which could increase the incorporation rate and also the higher quality of peer feedback. It could be presumed that online collaboration activities contributed to producing a better quality of writing. Therefore, it is not reasonable to expect such a swift change in students' writings just by writing two drafts of two essays, because acquiring writing competencies requires a lot of practice and experience. On the contrary, some studies in the EFL context demonstrated no significant differences between the students' first and second drafts, after receiving peer feedback (Cao, Yu, & Huang, 2019; Inceçay & Genc, 2014; Zhou, 2015). They concluded that online peer feedback had no impact on the students' writing performance. In this regard, I argue that the inconsistency between the findings of the current study and what is reported in the literature might be attributed to the difference in the context and the method of implementing the online platform in teaching and learning English writing.

In brief, both the quantitative and qualitative findings of this study suggest that the writing skills of students had improved over their different drafts, so that writing in a social environment could help students to be more aware of their audience and they could benefit from drafting, revising, and editing their writing content before sharing it in the online platform. This was evident in a number of comments that suggested that the online collaboration helped students provide better writing as they learned from their peers' writings and developed their drafts based on their peers' feedback. In addition, they believed that online peer feedback could support them in improving their essays especially in terms of the use of a variety of vocabulary and the use of correct grammatical sentences. It is evident that most of the students' correction focus revolved around grammar and

vocabulary as they believed that these two sub-skills are the most essential skills for them as EFL learners. Furthermore, they showed a lack of knowledge concerning the macro-level skills as they were considerably less assured in discussing the content and the organisation of their peers' writings as they articulated. It appears that they suffer from metalinguistic problems as they think in L1 and write in L2. Such an approach might cause some problems for them. For example, it was observed in many texts that the students wrote the noun before the adjective as the case in their L1 such as they wrote 'city wonderful' instead of 'wonderful city'. This mistake shows the interference of L1 in their writing in L2. This finding is in keeping with the findings of Stapleton (2010) who revealed that such interference is understandable as L2 students need extra steps to literally translate their ideas from their native tongue into L2. Moreover, the pedagogical context might impact the students writing as they are used to following product writing in their L1, so they find some difficulties to shift to process writing in L2. It could also be possibly attributed to the fact that they do not usually write in a social context as they usually write only to their teachers as the sole audience of their writings. Finally, the teaching method might contribute to it as the teacher modelled and emphasised editing the grammatical mistakes rather than encouraging students to change their ideas or meanings. The teachers showed concern with accuracy over content. This corroborates earlier studies performed in this domain which found that teachers focus predominantly on correcting the grammar of the students' texts rather than providing feedback on how to improve the content (Truscott, 1996; Yang et al., 2006).

From the above discussion, it is apparently evident that there are a lot of potentials for online collaboration to improve the students' writing. As well as this, the students liked the online collaborative activity, and the outcome showed some

evidence about that. However, culture and perceptions about online collaboration got in the way, and there is a big conversation around that. Moreover, the connection between the cultural aspects and the value of the collaboration has consequences for the teachers' role in the nature of collaboration. That is, there is a caveat which is the slight misunderstanding of online collaboration which does not come from the students' perception, but it was observed in their behaviours and essays. In spite of the fact they have a positive view, cultural expectations and the misunderstanding of the value of online collaboration were contributing to making it less successful. It seems that students were partly aware of such a caveat as they talked about it. The next section tackles the factors which might hinder online collaboration as perceived by students.

6.5 Factors That Hinder the Students' Online Collaboration

Whilst students recognised the affordances of online collaboration, they demonstrated concerns about some issues related to the given task. It appears that most of the students suffered at the outset of the study in using the educational online platform. However, they became more effective users of the platform towards the end of the course period, which as the data showed, supported their use of technology in learning and enhanced the development of their writing skills. The students pointed to some factors that might have hindered their online collaboration and involvement, and thereby contributed to making it possibly less successful than anticipated. Although students have alluded to some of these factors, other observed indications exclusive of those dutifully reported, have also been included, these were factors that emerged from the analysis. The main factors that arose from these comprehensive findings are discussed in the next sub-sections.

6.5.1 Mistrust Between Students

The present study identifies that some learners indicated doubts about the value of their peers' feedback as they believe that their peers are not knowledgeable enough to detect and correct their writing mistakes. Therefore, the students felt that their peers could not properly support them enough in their writing tasks. These findings are supported by other previous studies that reveal that students are less comfortable with receiving feedback from other students than from their teachers (Hamouda, 2011; Yang et al., 2006). Although a few participants in this study indicated that receiving encouraging words from their peers could motivate them to keep going, on the correction side of their homework assignments, they did not trust their peers' comments because of their possible lack of accuracy might lead them to offer wrong corrections and advice. However, the prevailing argument to be examined is that online peer feedback plays a critical role in guiding learners towards developing their writing by saluting their motivation and lauding their work (Deng & Tavares, 2013; Jewitt, 2013; Vurdien, 2013). As a result, this process will help students practise their writing in different ways to become good writers due to the interaction and exposure to various writings.

The findings have shown that coming from a teacher-centred culture may have prompted the students to feel that feedback received from classmates whose level of English proficiency were more or less the same as theirs was a poor alternative to their teacher's comments. This perception tended to inhibit online peer feedback because students gave a higher priority to the teacher's feedback. This reservation may be attributed to the fact that they were not native speakers of English. This cannot be seen as surprising as students themselves

can be insecure about their language level due to their 'inadequate linguistic and cognitive maturity to evaluate' (Sengupta, 1998, p. 25). Hence, they were reluctant to trust their partners. Additionally, they made frequent use of procrastination in acting upon their peers' feedback preferring to wait to receive feedback from their teachers.

The findings of the present study are consistent with previous studies conducted by Tsui and Ng (2000) and Hamouda (2011). Tsui and Ng (2000) found that L2 students' scepticism about the accuracy of peer's feedback could be considered from different perspectives including socio-political and sociocultural frameworks, educational and pedagogical structure, as well as students' English proficiency level and personal characteristics. More specifically, it was found that students from collectivistically oriented cultures tend to rate their academic self-efficacy lower compared to their counterparts in individualistic countries (Mahat et al., 2014), although they often outperform students in individualistic countries (Lee, 2009). This might be attributed to the fact that they prioritise the teacher's feedback and view the teachers as representatives of authority, who have the right to act on their texts as mentioned earlier. In line with the studies of Paulus (1999) and Deni and Zainal (2009), the students in the current study doubted their peers' absolute language proficiency. Some of them took part in the task because they wanted to please the teacher and present themselves as good learners, while still being sceptical of its benefits. This finding concurs with the findings of the study of Nelson and Carson (1998) with Chinese and Spanish ESL learners, and Sengupta (1998) with ESL secondary school students in Hong Kong which showed that students tended to value the teachers' feedback over their peers.

In the Omani context, Kasanga (2004) conducted a study on 250 students at the tertiary level and found that students placed little faith in their peers' feedback despite the positive view they held of having their texts peer-reviewed. In fact, each one was rarely able to make more than surface-level changes as discussed in Section 6.6, in response to teachers' feedback on their texts. Even when they have their teacher's feedback, their response to it often focuses on surface-level changes. In a wider global context where English is taught as a second language, the same results were corroborated, where peer feedback was limited only to the choice of tense, spelling errors, or vocabulary, as in Connor and Asenavage's (1994) study. Similarly, Salih and Rahman (2013) concentrated on the focus of providing peer feedback on ideas. However, the results showed prominence given to the structure and clarity of content.

The students need to look at the pedagogical issues of their peer feedback instead of comparing their peers' feedback to their teachers' feedback. In this vein, Caulk (1994) confirmed that only 19% of peer feedback was similar to teachers' feedback. However, Riazi and Rezaii (2011), in an experimental study, provided an identifiable threshold of evidence that peers' scaffolding types are similar to those given by the teachers, even though they are given less frequently by students. Additionally, it should be emphasised that peer feedback and teacher support do not have to be mutually exclusive. Clearly, teacher feedback is rightly considered to be more accurate and more trustworthy for learners of English (Connor & Asenavage, 1994). Therefore, a teacher should be available to provide a system of organising peers' work in order to help the students work collaboratively within an arrangement that maximises the learning opportunity for the given students at hand (Van Lier, 2014).

6.5.2 Lack of Technology Literacy

A more extensive use of technology impacts the students' perceptions of the role of online collaboration in the classroom. All but one of the interview participants addressed a challenge associated with the use of the online platform generally, especially at the very outset of the writing course. Some students also suffered from their lack of knowledge and ability to use computers and related technology efficiently because they were more accustomed to using pen and paper in their writings. Therefore, they articulated that typing on the computer in English and using online correction codes were the most difficult challenges that they faced. Such findings have also been reported in other online collaboration research (Al-Ani, 2013; Perez & Medallon, 2015). They found that barriers such as poor Internet connections, technical problems, and lack of knowledge are the main obstacles facing students while engaging with online platforms. This could be attributed to the students' lack of using computers in schools and colleges. It was recognised that writing in L2 was definitely more difficult than writing in the students' L1. Over time, this issue has been overcome in two ways. That is, some students found that practice is helpful to improve their use of the computer. Others preferred to use their smartphones to post their writings and feedback, as smartphones are accessible and available to them most of the time.

It was apparently found that the longer the students' experience, the more positive their perceptions were toward the value of online collaboration. This concurs with the findings of the study of Fageeh and Mekheimer (2013), in terms of students' experiences of using technology in their learning. They unveiled that the students with more experiences of using technology tended to become more positive toward the use of technology to develop academic literacy. They showed a more positive attitude towards the factors of productivity, collaboration, and

participation. In the same respect, Walker and White (2013) argued that the use of online platforms helps students with no previous experience of using them in their studies, as it will be used as one of their basic study tools. In addition, Nair and Wider (2020) carried out a recent study to investigate the role of smartphones in motivating and improving students' English writing skills in Pakistan. The study revealed that mobile phones had not only motivated the learners but also helped them develop their writing performance.

Related to their lack of technological literacy, the students pointed to the issue that they suffered from a lack of time given to do the task in the language laboratory. They reported that they preferred to complete the task during the class time where the teacher was available to provide support, when needed. It was evident that they focused on the time allocated for the task in the language laboratory, and thereby complained about the lack of time. Towards the end of the course, some students realised that they could do better writing if they made use of the time allocated for the task, not only inside the classroom but also outside the college environment. It seems that the issue of time could be overcome if the students made better use of the time allocated for the task. Saeed and Ghazali (2017) argued that the option of asynchronous text-based discussions has gained great attention as it gives students more opportunities to interact with each other, and they also have more time to reflect, think, and search for extra information before contributing to the discussion. Recently, the outbreak of COVID-19 has revealed that online learning is not a luxury, but a necessity for the students as schools and universities over the world have closed to slow the pandemic down. Online collaboration transcends chronological and geographical barriers by providing learning anytime and anywhere. As the students reported, they can post their writings, provide feedback to their peers, and have instant

access to a massive amount of information from the Internet relevant to their studies, both day and night.

The results about the students' lack of technological literacy might affect their implementation of the task corroborate the findings of a study conducted by Denman and Al-Mahrooqi (2014), which investigated the perceptions and practices of Omani EFL university students of peer feedback in their English writing classrooms, but in more detail about the value of the effective implementation of the activity. Although the results revealed mostly favourable perspectives of peer feedback, a number of limitations were identified as impacting upon its effective implementation. This calls for a need for more procedures and guidelines that can lead to making peer feedback more effective in Omani university writing classrooms. The efficient implementation of online peer feedback is crucial to make effective use of the online collaboration task. Teachers and students are requested to deal with such obstacles and seek other solutions to overcome any other problems that might arise during the online activity.

6.5.3 The Absence of the Teacher

The interview data suggests that the students revealed a real concern about the absence of the teacher in their online collaborative activity. Whilst the teachers aimed at promoting student-student interaction, most students demonstrated commitment and contribution to the task requirements only if the teacher commented and provided oral or written comments and feedback to their work. This may suggest that the teacher's presence in the online task could make it obligatory to submit all the students' writings on time. The students considered their teacher as a cornerstone in facilitating the online task and writing behaviour.

Teachers' influence is not only associated as a facilitating component of the students' interaction but also plays a core role in the process of writing the text by providing them with ideas and feedback. Coming from a collectivist culture, students prefer to do the task under the direct supervision of the teacher. They want the teacher to comment on every discussion. It seems that their perception of the value of collaboration is associated with collaboration in one way, which is with the teacher. Although they revealed a promising perspective about online collaboration, their practice demonstrated that in order to make this collaboration both effective and seen to have value, they would need more understanding of the value of online collaboration and its role in enhancing their learning in general and improving their writing, more specifically.

The results of this study are supported by other studies in the field of CALL. For example, Choi (2008) conducted a study in Hong Kong about online collaboration and found that the participants in the study felt a sense of uncertainty without the instructor's comments on their work, as they tended to wait for the teacher for guidelines or comments on their work. The results showed that they appeared not to trust their peers' comments and wanted more input from the teacher. Agreeing with Choi (2008), the findings of the present study reflected the participants' belief that the support from the instructor was unsatisfactory. The students argued that the teacher should have been more interactive with them by giving comments on their works in progress and adding summarising comments before sending out their final drafts, thus demonstrating a continuing dependence on teacher approval.

Despite their very different understandings and views, students believed that online collaboration was useful and motivating at the same time. This suggests that online collaboration can create supportive prospects for students'

interaction and collaboration. The students need to deal with the barriers effectively and exploit the opportunities of the task. As well as this, the role of teachers and educators is salient. Accordingly, they should clarify the aim of the task and the nature of the students' interaction from the outset of the course. As a new approach, teachers need to trace the students' participation regularly throughout the course to deal with any ambiguity or difficulty that the students might face in their use of the new platform. Moreover, they should encourage the students' interaction and lead their discussions to keep them active and engaged in their learning. There may be a place for teachers to model effective collaboration and feedback so that learning is not only focussed on the written task but on the collaborative skills needed to build a learning culture. They ought to take the students' voiced concerns under their collective considerations, in order to improve their pedagogy in relation to introducing these approaches. The role of the online teacher will be further highlighted in more details later in Section 6.10.

6.6 The Influence of Online Collaboration on EFL Students' Revision

Behaviour

Emerging very strongly from the findings is the influence of online collaboration on EFL students' revision behaviour. The learners expressed that their revision behaviour was an invaluable experience that revealed their progress throughout the course. The qualitative data cast new light on students' behaviours, suggesting that writing for peers as the audience, students' emotional response to their peers' feedback, and the students' use of their learning logs were the most prominent issues that impacted the students' revision behaviour.

As mentioned earlier in the preceding sections, writing for peers as the audience was perceived as a substantial way in shaping the students' writing behaviour. This influence is not only associated with the motivation of the students but also plays an active role in the process of revision. The current study supports the conclusion that an understanding of the teacher as the only audience can potentially limit the quality of the texts they receive. That is, the students focused their attention to shaping texts in accordance with their perceptions of teacher approved organisation and representation of their texts which restricted and limited their focus on the content. Therefore, having only a teacher as a reader to judge the quality of texts seems to be insufficient. In the literature, this finding resonates with Ross (2014), who reiterated that the students tend to focus on some strategies that adapt to both the teacher and the assessment criteria. They pay great attention to what they think pleases their teachers in order to gain satisfied results in their writings (Chang, 2005). To address this, it seems that the role of a teacher who is both the provider of knowledge and the assessor of the students' writing inaccurately led to the mixture of both the audience and teacher in the mind of the writer. As will be discussed later, teachers might usefully prompt thinking about the intended audience and writing purposes as part of their support in developing a better understanding of the rhetorical demands of their students' writings.

In this study, the students reflected clearly about the audience only after they started using online collaboration. They viewed online collaboration as a sphere for practising and exploring self and engagement with others who have both similar and different interests. Online collaboration has affected the way in which students read, write, and disseminate their texts (Sorapure, 2006). That is, it offers an alternative audience to the traditional classroom audience which all

too often is comprised of only the attending teacher. This shows the prominence of placing a text within the social context of the intended readers. Thus, drawing on the sociocultural perspectives of writing can shed light on the affordances of the online collaborative activity. The qualitative data of the current study revealed that clarity of the audience and the need to adapt texts in order to suit a given audience are essential components of the students' online collaborative task.

A number of researchers have also reported similar findings and have argued that the explicit needs and direct response of the audience are considered as main affordances of online collaboration (Boch, 2007; Chen & Brown, 2012). It was also found that L2 students who develop an awareness of the audience can develop their writing and become more confident in their writing abilities (Choi, 2008). The present study demonstrated that writing for peers as the audience allowed students to think differently about their messages and ideas with their audience more directly in mind. This extended the space for readers who also benefited from reading their peers' texts. This potential for blurring the boundaries between being the reader and being the writer are particularly well supported by online collaborative platforms. Hence, online texts became more interactive than those texts written for evaluation purposes. It seems that such an interactive environment would encourage students to think beyond the surface level of grammar and vocabulary. They might think of their ideas and the text organisation to impress their peers. However, not all students were able to articulate a vision of a clear audience as often their texts looked similar to texts written for teachers and for assessment purposes. The inability to write with a clear reader in mind might have consequences for later writing development as it might result in some poor audience-oriented texts.

The analysis of the qualitative data also indicated conflicting findings regarding the students' perception of their emotional response towards their peers' feedback. It was evident that most of the respondents reacted positively to their peers' feedback and disclosed that they were pleased to see their peers appreciate and respect their feedback. However, students tended to avoid posting any criticism or negative feedback on each other's language mistakes or weak ideas. They indicated that they wanted to avoid hurting each other's feelings or embarrassing others in front of the rest of their peers. This concurs with the finding in collectivist cultures like China and Vietnam (Li, 2012; Lin & Yang, 2011; Nguyen, 2011) as students in such cultures rarely disagreed or criticised each other's ideas (Ho, 2015; Nelson & Carson, 1998). In consistency with such findings, Ellis (2013) found that negative feedback might affect the ESL students' emotional feelings and can negatively affect their willingness to learn. A noticeable issue evident in the present study was that some students altered their drafts according to their peers' feedback, but the degree of incorporation greatly depended on the proficiency level of their classmates. That is, while they showed a tendency towards the incorporation of the feedback provided by high achievers into their revisions, they paid less attention to the feedback provided by low achievers. They claimed that low achievers do not possess the capability to revise at higher levels of writing.

In terms of using the learning logs, although all of the participants revealed an awareness of the value of reviewing the logs for the development of their writing skills, only half of them declared that they visited these logs, regularly. According to their available correspondence and self-monitoring, they revisited their logs only before the exams or if they wanted to complete a task. The students perceived that the learning log provided the opportunity to archive their

posts. It could be used as an online electronic portfolio through which learners could return to previous work. In addition, findings from the interviews indicated that students used the learning log to read their peers' work, comments, discussions, and sharing useful knowledge and links that helped them improve their writing. It seems that online collaboration encourages students to interact in a social space in a more interactional way, and thereby, as a result, improves their writing. As the students have exposure to a variety of writings in the online context, it appears that online collaboration could be a useful interactional approach to help students develop not only their writing but also their reading. In addition, it could help overcome the issue of Englishness: a space to practise language authentically other than just the classroom setting, that faced Omani students. Many studies have found that Omani students, overall, need additional social support as they lacked Englishness (Al-Mahrooqi, 2012; Al-Mahrooqi et al., 2016). The present study revealed that online collaboration could overcome this issue as the students should have the opportunity to produce the target language authentically outside the classroom, and community.

It would be easy to reveal that the students' behaviour has altered throughout the period of the course as they gradually understood the value of revisiting the learning log. Allowing the learners to visit the learning log at any time and place allows them to use their smartphones in addition to their computers to go back to their logs. This seemed to provide the students with a sense of belonging to a broader community in which they aimed to share ideas and information with their classmates.

6.7 The Perceived Nature of the Scaffolding Behaviours

In light of what was presented in the findings chapter, the scaffolding observed was mutual and reciprocal with both partners being capable of providing guided support to one another through providing and receiving feedback. Techniques related to mutual scaffolding are crucial to support effective redrafting of texts. Examining the interaction data revealed that both partners assisted each other using such interactional strategies as pointing, advising, and instructing. The bilateral support observed during discussions is an indication of the fact that L2 writers at similar stages of development could build on each other's knowledge in an attempt to improve the quality of their essays. Such strategies show students' attempts to explain, defend, and clarify their messages and viewpoints on the one hand, and reviewers' efforts to justify and support their comments through online and face-to-face discussion on the other hand. Application of another group of interactional strategies like accepting advice, rejecting advice, and showing concerns of peers' feedback also demonstrates the nature of students' responses to their peers' feedback and how it contributes to the scaffolding process.

The findings indicated that online peer feedback allowed students to build on their knowledge and construct higher quality texts through online collaboration. Several researchers (Clark, 2010; Devolder et al., 2012; Hyland & Hyland, 2006; Sun et al., 2011; Villamil & De Guerrero, 1996) have also reported similar findings, arguing that scaffolding could occur during peer interaction. L2 students benefited from the ensuing collaboration and interaction. In order to support learners, Van Lier (2014) suggested that students need to be provided with contextual support which encompasses providing a rationale, goal, and technological support. Thus, students received regular online peer feedback

pointing to their mistakes and suggesting some alternatives and advice. This is a typical example of setting up a virtual writing classroom.

The findings also revealed that peer feedback supported all students, even though the amount of scaffolding was different for each individual student. Most students still perceived that the feedback being giving by their peers was useful, whether it was technically/grammatically correct or not, as it contributed to the learning process and promoted mutual scaffolding. They were able to move through their ZPDs beyond their current levels of development to higher levels of achievement by generating better quality final drafts. In this respect, Villamil and Guerrero (1998) confirmed that L2 students' collaboration in a supportive atmosphere led to internalisation of the cognitive processes that were required for successful task completion and eventual self-regulation (independent problem-solving). Agreeing with Devolder et al. (2012) and Villamil and De Guerrero (1996), the participants confirmed the reciprocal nature of assistance. They reported that online collaboration had provided a valuable opportunity to learn from one another by giving and receiving instant feedback. They also maintained that due to their varying levels of skills and competencies, peers could provide the support they needed in order to improve their writing performance. In other words, most students felt that online collaboration helped them generate their ideas and knowledge, as well as share their writing expertise. In this respect, the findings of the investigation are similar to the results reported in earlier studies (De Guerrero & Villamil, 1994; Min, 2006; Storch, 2002; Tsui & Ng, 2000). Finally, reading peers' work critically could be a great opportunity to expand the students' language skills as well as inform their future writing practise, in reference to Vygotsky's Zone Proximal Development. Furthermore, high-achieving students associated the construction of writing with generating new ideas, which could

help them improve the content and organisation of their future writings. This case was reported among some students in this study who reported that reading peers' work helped them improve their own writing and understand how to write more effectively. The online platform creates real prospects for optimising such experiences of learners through online discussions. The findings corroborate with the findings of other researchers (Chang, 2012; Hughes & Burke, 2014; Min, 2006), who argued that reading peers' writings and noticing their errors could help L2 writers monitor their own texts and avoid making the same mistakes.

It was found that most of the support provided by peers was 'dialogic', 'contingent', and 'gradual', which conformed with the three main characteristics of scaffolding proposed by Aljaafreh and Lantolf (1994, p.495). Indeed, L2 students in this study tailored their feedback according to their partners' needs, types of errors, and level of development. For example, at times, feedback not only included explicit advising and providing solutions, but also, if necessary, encompassed mini-lessons and instructions on either micro or macro aspects of writing. From this perspective, the findings are consistent with the findings of a study carried out by Aljaafreh and Lantolf (1994), which suggested that there were different ZPDs for various learners and differing types of errors/problems. Therefore, it seems necessary to provide feedback that suits their peers' needs and their respective and offered levels of development.

However, there were also some cases where peers failed to optimally scaffold each other, probably because some errors were beyond or above individual ZPD boundaries or the potential developmental level of the learners and they were unable to move beyond that level. The online peer feedback was sometimes inadequate and did not accommodate the potential developmental level of the students and they failed to correct the errors. Limited English

proficiency could have been the cause of these errors. It was found that some students failed to provide efficient assistance and misled their partners as certain writing features were beyond their actual developmental level. In such cases, the students indicated their lack of prerequisite linguistic resources to suggest appropriate revisions or the right choice, despite their attempts and even when they originally intended to achieve these outcomes. Therefore, they either referred to external resources such as online dictionaries, classmates, instructors, or even merely overlooked the errors. This led some students to focus on the feedback given by high achievers as they believed that low achievers suffered from limited English proficiency and a lack of skills needed for providing useful feedback. In the same vein, some high-achieving students complained about the disproportionate benefits of the tasks and claimed that they benefited from the tasks less than their partners did. That is, the findings indicated that some high-achieving students claimed that their peers were not qualified enough to provide peer feedback as their language proficiency was unsuitably low.

The analysis of students' peer feedback revealed that the students were overly concerned with micro-level errors rather than macro-level problems. That is, peer feedback and revisions focused on local issues, and consequently, progress in students' drafts at the surface level was higher than the contextual aspects of the written texts. This suggests difficulties in both the process of writing itself and the language. These findings are consistent with the results of Stapleton (2010), who found that the composition process in L2 is compounded as writers need extra steps to decode their thoughts into language before the text finally appears on the page or screen. The over-emphasis on surface-level features can be explained in terms of corresponding levels of ZPD notions held by participating students as well. That is, since macro-level issues are more cognitively

demanding and addressing them requires a higher level of expertise, these participants were not skilled enough to identify them in their discussions and revision practices. In other words, resolving text-based issues were beyond the current ZPD of the affected learners, and they were less effective in coping with such concerns. Besides this, some of the errors had not yet been corrected in the second drafts despite previous online peer feedback. Failure to successfully address some of the errors, even though they have been comprehensively identified and addressed by peers, can also confirm the fact that learners can only revise to the extent of their abilities. Most of the difficulties faced by students were related to the content and organisation of the text. Since such problems were beyond the participants' immediate ZPD, they were unable to produce accurate and fluent drafts no matter how much additional help they were given and by whom. It would, therefore, be unrealistic and inappropriate to expect the revised drafts to be free from errors for novice writers.

Concerns about the effects of peer feedback were investigated to find out whether the mutual peer assistance goes in both directions, or in the traditional linear way, as borne out by studies on expert-novice assistance. The issue of mutual scaffolding was explored in-depth in this study, relating to its impact on both the receiver and the provider of the feedback. It was found that, even when two novice learners interacted collaboratively, they could scaffold each other's learning and benefited from peer feedback and revision activities (see Section 5.4). Indeed, the students in the present study learned from each other and gained mutual support regardless of their writing levels. These findings are supported in some previous literature by some researchers (Azevedo et al., 2004; De Guerrero & Villamil, 2000; Lee, 2008). For example, De Guerrero and Villamil (2000) revealed that even the ability of two novice students to provide support in

each other's learning and peer revision helped both of them to make observable adjustment upward within their ZPDs, as the writer became gradually more self-regulated and the reader could practice and enhance their assistance strategies and collaboration. However, Pawan (2008) and Pea (2004) warned against considering scaffolding as a one-way communication process between the expert and the novice writers. Moreover, Liang (2007) alluded to the need for providing flexible and systematic language guidance to the students throughout the writing process until they gain confidence and competence in their writing process. This leads to a critical debate on the extent to which scaffolding techniques are helpful in developing students' writing skills. That is, while the failure to provide feedback was addressed, receiving too much support can also make it a one-sided process through the venue of classroom teaching.

It is noticeable that the interaction was not limited to one-to-one, but rather it was one-to-many. More particularly, it was multidirectional and student-centred, as a student could provide feedback to more than one classmate, as well as receive feedback from more than one partner. This finding concurs with other findings in the area of CALL (Lee, 2010; Li, 2013; Nami & Marandi, 2014). Gutiérrez (2006, p. 238) called such interaction 'high-quality collaboration' as there were examples of assistance between more than two students in the process of peer feedback. The sharing of linguistic knowledge transformed individual knowledge into distributed knowledge (Nami & Marandi, 2014). The students in the current study worked as a collective group and interacted in a collectively and mutually supportive pattern. They contributed to the activity and engaged mutually with what others wrote and suggested. In this vein, it appears that the effective implementation of online collaboration could provide an incentivised atmosphere for mutual scaffolding. To do so, teachers and the taught

curriculum should place a great emphasis on the student's ability to take the initiative over their learning. Such an approach of independent learning relates to a student's natural interest and motivation to acquire a skill and eventually become self-motivated lifelong learners (Hasan & Rezaul Karim, 2019).

6.8 What it Means to Learn From Peers

Teacher-centred learning pictures an expert passing on knowledge to a novice. Student-centred approaches imagine learning moving between participants, raising the question of whether it is possible to learn from a less knowledgeable other. This was a concern raised by the participants in this study and explored here in light of the literature.

This study showed that the students' degree of incorporation of peer feedback prominently depended on their beliefs about the proficiency level of their classmates. Indeed, whilst the majority of the students tended to incorporate the feedback provided by high achievers into their revisions, they paid less attention to the feedback provided by low achievers. Such a discrepancy might be attributed, at least partially, to the lack of trust between students and their preference for the teachers' comments, as was highlighted in Section 5.4. A number of students claimed that the peers' level of English proficiency appeared to mediate their engagement with their feedback. However, the findings of both quantitative and qualitative data revealed that writers of all abilities have improved their own ability to offer and act on feedback the more experience they have of engaging with it and evaluating it. While the effort to offer feedback supported low-achieving writers, the evaluation of feedback regardless of its worth supported high-achieving writers (see Subsection 5.3.1.1). In this vein, there is a strong case for an increased classroom emphasis aimed at developing

an understanding of what supports learning as well as seeing the benefits of engagement over simply focusing on content. The literature has well documented the importance of engaging students in the learning process to increase their attention and focus, motivating them to practice higher-level critical thinking skills, and promoting their learning experiences (Nicol & Macfarlane-Dick, 2006; Winstone et al., 2017). Besides this, the student-centred approach to instruction, where students have choices over their own learning, increases opportunities for student engagement. The progress of the learning process reveals an internal development of the learners and active engagement in their own learning process. Online collaboration has a high potential for supporting student engagement in creative and innovative ways. Given that online collaboration makes learning more student-centred through instructional scaffolding, it inevitably promotes learning and enhances student's interaction skills.

In spite of the pedagogical affordances of peer feedback, some high-achieving students questioned the effectiveness of the task and claimed that they benefited from the tasks less than their partners did. They claimed that their peers were not qualified enough to provide peer feedback as their language proficiency was unsuitably low as mentioned in Section 5.4. This result is also supported by a study in the Omani context by Denman and Al-Mahrooqi (2014), which raised concerns about the nature of students' feedback as some students were recorded as providing incorrect feedback, or only feedback on the surface level. Although L2 proficiency impact on peer feedback has rarely been investigated, the limited body of research suggests that when high achievers are involved, there are more active negotiations and engagement during peer feedback (Mendonca & Johnson, 1994; Suzuki, 2008). It was also found that high achievers could provide more suggestions on their peers' writing than students with low proficiency.

Conversely, low achievers could benefit by receiving feedback from high achievers and high achievers can learn from giving feedback to low achievers (Allen & Mills, 2016; Lundstrom & Baker, 2009). This illustrates the extent to which peer feedback is helpful in developing students' writing skills irrespective of their proficiency level. The voices of participants in this study have, in many respects, confirmed the findings of previous research that the acts of offering feedback, interpreting feedback and responding to feedback may each reflect the language skills of the participants but that the ongoing act of engaging in these tasks is itself educative. The findings revealed that all of the students have improved their writing performance after engaging in peer feedback.

It appears that the improvement of the students' writing is linked to engagement. Considering L2 proficiency, Allen and Mills (2016) highlighted the significance of L2 proficiency in the process of offering peer feedback as increased L2 proficiency leads to more negotiations and engagement. This result suggests that the providers of feedback made significantly greater gains in their writing ability than those who received feedback because of their high engagement. If we consider this result in light of the previous research discussed above, high achievers should benefit more from the peer feedback process than lower proficiency peers as they should be able to give more feedback than low achievers. This finding provided evidence about the role low achievers can play in peer feedback. They contribute to the improvement of their peers' writings by providing a range of comments on different aspects of writing. As instructing is an interactional strategy in the current study, some high-achieving students reported that they understand concepts better when they provide instructions or short lessons to those who know less. They argued that, in some ways, working alongside those whose understanding or skills are less than their own can

reinforce and clarify what they know or what they think they know. This finding contributes to ongoing discussions on how L2 proficiency can impact peer feedback. That is, although previous studies show that low achievers mainly learn from their peers (Allen & Mills, 2016; Johnson et al., 1994), the current study reveals that they can also contribute to peer feedback in heterogeneous groups. It seems that peer feedback activities can be used with students who vary in their language proficiency irrespective of their proficiency level. The findings of this study drive the attention to the students' initiatives to make effective use of the technological facilities to provide instructions. Although those instructions were one-to-one through smartphones applications, this appears to be a sign of progress in the students' perceptions of the value of online collaboration. Teachers are therefore advised to support such interactions among students in offering feedback and discussing and evaluating feedback, which might be a necessary part of this development.

In spite of the aforementioned concerns raised in terms of L2 proficiency, the wider point here is that learning can occur at different points and that peer feedback can offer a range of various perspectives. It is essential to clarify that the peer feedback process is not only the giving of feedback but also the revisions that are made on the basis of this. It includes writing, then rewriting a text, reading a peer's text, and providing feedback on that text. The giving of feedback, the interpreting of feedback, and the acting on feedback are all learning opportunities. If they are perceived as simply providing correction, then there are two points of undervaluing the learning opportunities presented. Firstly, feedback itself communicates a range of different information not just correction. Some of this requires interpretation, evaluation, and reflection which are inevitably useful learning skills. Thus, reducing feedback simply to an act of correction misses the

point regarding its value whether students offer or receive it. Secondly, learning develops in doing these skills not simply in the noting of the content of the texts. It is essential to understand that the students need an opportunity to consider the pedagogical value of developing peer feedback skills. Additionally, it should be emphasised that peer feedback and teacher support do not have to be mutually exclusive. Clearly, teacher's feedback is rightly considered to be more accurate and more trustworthy for learners of English (Connor & Asenavage, 1994). This suggests that much work needs to be done by the teachers to help students understand the wider value of engaging in this process rather than the content of the feedback itself.

6.9 Group Formation

Concerns about group formation and uncertainty about how to tackle it effectively in the classroom were raised during the observations and interviews of the focus groups. That is, the collaborative groups of students were randomly assigned: either students chose their peers or on alphabetical order basis that runs counter to Vygotsky's ZPD theory. Within the context of this theory, an important lesson learned from this practice is the need for structured online collaboration activities, where peers are allocated positions in tasks according to their ability to meet the task requirements. Prior to asking students to engage in an online setting, teachers need to allocate students to groups in order to foster collaboration among them. In the present study, the students were assigned to groups of four or five with varying collaborative behaviours and language proficiency levels. However, the five girls were assigned together in one group as it was found out in the focus groups that the girls were hesitant to engage with

the boys because they were accustomed to a gender segregated system at the school level.

The findings provide evidence that combining students with different language skills and levels could be an effective approach to fostering collaboration. It was found that more linguistically competent writers can be resourceful to others. As Van Steendam et al. (2014) put it, L2 students benefit from peers if those less skilled are matched with others of different abilities while some students are more able to benefit from working with others of the same level. Agreeing with Arnold et al. (2009), it was found in some of the online interaction excerpts that although students had different language skills, they were able to share their expertise. Therefore, I argue that formation of the online heterogeneous group allowed each student to share their weaknesses and strengths in the service of achieving a common goal. This result is consistent with the findings of Li and Zhu (2013) who found that it also helped to improve the students' social relationships. The qualitative data demonstrated that online collaboration strengthened the students' commitment to making social relationships, which positively affected their engagement and interaction. It was found that heterogeneous groups could enhance collaborative learning. However, students who differ greatly in their L2 proficiency should not be assigned to the same group in order to give both learners the opportunity to provide adequate feedback and thus promote their own learning. Such groups play a crucial role in the social construction of knowledge and community building within the group. In this context, too much familiarity among students could also negatively impact peer feedback.

Having emphasised the role of teachers in the formation of groups, it is essential to reiterate that even with groups of students with different behaviours

and proficiency, simply asking them to interact together cannot guarantee their collaboration. The results indicate that teachers should participate in student experiences in such a way as to encourage collaboration among them. They should consider how best to group students, when and how to put students in small groups to conduct peer feedback, taking into account factors like language proficiency and student relationships.

6.10 Teachers' Role in the Online Activity

A further particularly contentious issue is the role that the teacher might play in ensuring a successful implementation of the online activity. As mentioned earlier, the absence of the teachers was one of the main factors that students believed had hindered their engagement in the online task. It is essential to realise that the peer feedback is not a substitute for teacher feedback. It offers a different resource to teacher feedback not a replacement for it. The teachers could not simply set a collaborative task and ask students to work through that task, but they need to play an active role in facilitating collaborative online activity (van Leeuwen & Janssen, 2019). As well as this, learning should take place in the learner's ZPD. To do that, the teacher needs to be aware of the learner's current level of knowledge and then work to a certain extent beyond that level. The support provided by the teacher should be gradually removed as the learner becomes more proficient and independent. The teacher was realised as being necessary to assist the learners on their writing assignments and other informal writing tasks. This finding resonates with the results of other researchers (Alsamadani, 2018; Fageeh, 2011; Storch, 2013; Vurdien, 2013) in their studies on the salient role of the instructor in the online platforms and peer feedback on developing learners' writing.

With the advent of digital technologies, more opportunities are being offered to crucially integrate imagery, voice, sound, written text, and other approaches which traditional tools do not offer (Nelson, 2006). Subsequent changes in communication and interaction strategies give rise to new learning opportunities and have led CALL researchers to see the role of teachers through a new lens that enables learners to learn the target language in an interactive way (Berge, 2008). The findings of the present study have provided more detailed examples of the students' expectation from the teachers in the online task. The majority of the participants have emphasised the changing role of the teacher in the online environment. They perceived the role of the teacher as being that of a supporter, a provider of knowledge, and as able to offer a critical eye on their writing. Previous understanding of the role of the teacher in the online task as a facilitator and guide has been verified from the perspectives of the participants in this study. That is, most of the students were sceptical about the absence of the teacher in the online task. They sought teachers' feedback even though they received peer feedback. It seems that online collaboration can provide opportunities for additional teacher feedback, but this requires more work for teachers to ensure a successful implementation of the online task. The teacher was identified with particular emphasis on the role he/she played in marking and grading the students' work.

This study has shown that the practice of writing has not been valued as much by the students as the graded tasks. It seems that there appeared to be a disparity between what the students wanted (grades) and what they actually did. The findings indicate that students appeared to pay less attention to ungraded tasks because they regarded such tasks as not significant and that their time was better spent on completing mandatory assignments for other courses because of

their heavy workloads. They wanted the teacher to comment on their writings and feedback in order to encourage more involvement. As a result, doubts and concerns were raised, as the instructor had no control over the peer feedback process. Coming from a teacher-centred culture, it seems that students see the teacher as the sole authority in the classroom who can provide knowledge and critical feedback on students' work. It is, therefore, the responsibility of teachers to provide students with an extrinsic motivation to continue to keep progressing in their performance. In addition, teachers should encourage students to submit assignments on time. As the online platform enables teachers to monitor the date of submission, they can monitor the exact time the assignments were submitted. Teachers should value the practice of writing whether or not it is marked.

The findings indicate that the involvement of teachers inspires and has significance for the students. Teachers should, however, choose the appropriate time and the manner in which to join in the discussion. They should engage only if and when necessary to prompt or model student engagement and remove their involvement should the students show signs of collaboration. In line with the sociocultural theory perspective, they need to start minimising the number of their interventions gradually once students have begun to collaborate. Chiu (2004) suggested that teachers should adapt their interventions to the level of progress and needs of the students. Hence, teachers need to participate in a way that encourages students to take part in the activity. Further, teachers are encouraged to post positive reviews and support the work of the students. They also have an important role to play in promoting collaboration and interaction between students.

Amongst my participants, there was a clear vision of the teacher as the source of knowledge in the classroom. The teacher was seen to have the function

of assisting students in generating ideas for writing by asking them explicitly what ideas would work in the academic essay. The teacher was expected to facilitate the task by providing specific information in terms of the requirements of the task and providing information around the topic of the text before starting the actual writing. In accordance with the sociocultural theory viewpoint, teachers should make it clear that they are not the only source of knowledge and should inspire their students to be active knowledge-constructors. They have to accept the fact that online collaboration activity is a student-centred activity, in which they have to minimise their authoritative roles. They are encouraged to trust students' experience and to give them the opportunity to learn from each other. Teachers should, however, monitor the process and guide students where and when appropriate. They should provide less support for ideas and more as a resolver of the grammatical and structural mistakes to encourage the students to present their voice in their writings. These findings are consistent with the results of previous studies that show that teachers need to closely monitor the process (Lee, 2010; Storch, 2013).

Another important role is that the teacher should guide students to interact and collaborate with the additional objective to instil in students, the procedures as a generalised tool, to be used in future contexts, whether or not the teachers themselves are physically present to facilitate the exchange. However, it has been observed, in many situations, that the students' view of collaboration does not necessarily make things collaborative; on the contrary, it appears to be valued because it exists among a collective body of knowledge that has been imparted by the teacher. The ideal teacher should not only help the students make things collaborative but also give students the opportunity to understand the intrinsic value in engaging in that collaborative activity. Furthermore, learners need to

understand that the value of collaboration is not simply to implement it, but to also practise it in an appropriate way. This interaction should be collaborative in order to be effective (Meyer & Turner, 2002). It is, that not all teacher interventions in online collaborative writing activities would eventually encourage collaboration between students, although they might promote participation. In this respect, Pifarré and Li (2012) argued that:

The role of the teacher in wikis is not simply about stepping back, or controlling and directing learners' work. Learners have to learn how to participate and collaborate, and teachers need to play a role in facilitating and guiding this process. (p. 112)

It seems, therefore, that teachers themselves need to be cautious in their interventions. The main issue is not the process of collaboration, rather, to do it well, because learning is not guaranteed to happen if learners merely comment on or speak to each other, but the chance for learning to happen increases if there is a good, absolute amount and level and appropriate degree of collaboration. Therefore, teachers should teach and train the students to acquire collaborative skills; it cannot be automatically assumed that collaboration would spontaneously begin to take place.

Students' lack of training in the implementation of online collaboration was perceived to hinder students' engagement in the task. Therefore, the findings suggest that the instructor should provide the students with enough training to carry out any online activities. They should allow students to play an active role in the learning process and to value their peers' contributions and knowledge. It might be helpful to teach students how to get involved in the process before introducing the online task (Mercer, 2003; Pifarré & Staarman, 2011). This can be achieved by arranging sessions to enhance teamwork as part of a broader

classroom culture. Training should take place over the duration of the course, not just at the early start of the course (Sluismans et al., 2002). Students should be trained on what to do with collaboration. The teacher should help them make things cohesive and to understand the value of that collaborative activity.

Collaborative learning must first be implemented and incorporated as part of the classroom culture prior to the introduction of the activity. The concept of collaboration and the intent of collaborative learning should be explained clearly. Some classroom periods should be spent discussing the advantages and challenges of collaborative learning on a regular basis. Students should understand that constructive engagement can help them gain new knowledge and learn from others. Moreover, they should learn how to provide online peer feedback and understand how they can share their writing online. In addition, they need to understand the importance of acting upon peer feedback and how it complements the act of writing.

The findings in the current study indicate that the students still see teachers as authoritative; thus, teachers themselves may play a vital role in cultivating a sense of collaboration (Mercer, 1996). Teachers are encouraged to arrange orientation sessions and explore with their students the notion of collaboration. They should explicitly ask students to participate in a variety of social activities in the classroom. Then they have to explain the concept of collaborative writing and ask students to involve themselves in collaborative writing. One way to help students understand these behaviours is by sharing these behaviours with other students. For example, a teacher might model what it looks like to be a collaborative partner in a collaborative writing activity (de Jong, 2012; Storch, 2013). Modelling activities in this study seemed to help students participate in collaborative work with each other's texts. This was evident not only from their

initiatives to correct each other's texts, but also from their acceptance of each other's edits. Nevertheless, when teacher-dominated editing behaviours were apparent, the degree of peers' collaboration decreased. This means that students need not only to develop basic rules that clearly guide them in the way they edit each other's texts, but that they also need teacher modelling, as well. Teachers should model these behaviours and then step back to give students the opportunity to identify and correct errors themselves. Although the modelling of editing behaviours in this study was limited to editing the form (grammatical aspects of the text), teachers are also encouraged to model revision (i.e. revision of the content and meaning of the text). Such types of modelling may encourage the notion of collective ownership of the text, which is important for collaborative writing (Storch, 2005).

Once teachers ensure that students have thoroughly grasped the concept of collaboration in general and especially in the sense of collaborative writing activities, online collaboration activities can be implemented. Teachers are advised to help students understand the purpose of using the online task and how it can benefit their learning (Reinders, 2009). Students need to realise that online collaboration is not just about participating; it's about communicating with what others have written and said. In addition to orientation training sessions on how to be collaborative, teachers are encouraged to participate in the online collaborative task to remind students of expected / non-expected behaviours. In this study, it was found that the sharing of some ground rules with students at the initial stage allowed to encourage the level of their collaboration. To do so, teachers could post these rules on the main page of the online collaborative task to be discussed with all classes as was done in the current study.

The above discussion indicates the salient role of teachers in promoting and encouraging online collaboration to enhance students' writing. In addition, online collaboration offers a space of interaction and collaboration through the use of the Internet with its ease of access to a wide range of options available, making it easy to reveal a wide range of essays that allow to attract the readers' attention. Relevant to this, teachers are encouraged to look beyond the final product in order to assess the writing process. That is, to determine to what degree their students participated in collaborative behaviour; did their engagement include aspects of scaffolding behaviour, did they revise their writing on the basis of input from their peers, and did they provide appropriate feedback to their peers? Teachers should encourage students to participate in constructive interaction that not only strengthens the final text but also facilitates language learning between students. Teachers should not perceive integrating technology into their classrooms as an evaluation practice imposed on them by their institutions but should be a part of sustained changes to pedagogical practice. They should recognise that these changes could contribute to the enhancement of the pedagogical process as 'unless they are accepted by the staff, the only relevance of those schemes is likely to be to accountability' (Cosh, 1999, p. 23).

6.11 The Teaching of Writing

Previous conceptualisations of writing as a complex and demanding act were confirmed from the perspectives of students in this study. The results confirmed that the students need support in order to construct their piece of writing. The lack of support means that students are expected to immediately know how to reconstruct their texts, which may be more characteristic of an experienced writer. In this context, Seow (2002) argued that the process writing

is 'a programme of instruction which provides students with a series of planned learning experiences to help them understand the nature of writing at every point' (p. 316). Seow also warned against another concern about the method of the individual teaching process in classrooms, which means teaching it in individual phases or coordinated series of stages. The present study revealed that process writing took considerable time as the students needed to go through all the stages of the writing process. Sustaining writing intentions across this prolonged period may be an additional challenge for L2 writers. Therefore, teachers may find difficulties in working with students through the different stages of the writing process due to time pressures. It was found that the writing process was affected by different forms of genres. The demands of each form of genre do not require the same writing process in practise. Moreover, the process approach focuses on the development of students' writing strategies rather than the text itself. Therefore, the teaching of writing as a social act should address the needs of writers and the context in which they are writing: the process should provide opportunities for authentic learning experiences. In accordance with this, Jones (2014) explained that the process of putting words on paper is not only complicated but also shapes the final text, as she states:

Our ideas are shaped by the sentences that hold them, and so their purpose, meaning and impact can appear to emerge from the process of writing itself – a meaning that did not exist in such a crystallised form until it was shaped by the written text. (p. 53)

Jones argued that writers do not always know what they want to say before they write but discover it as they write. Thus, any process needs to take this development of content and ideas into account. Ongoing peer collaboration throughout the writing process is one way that students might put ideas into words

before, during, and after successive drafts are written. Keeping this in mind, it is important not to over-simplify the writing process by excessively staging or irretrievably altering it, but rather to approach it by showing the student how final texts are constructed via instruction and substantive reconstruction in various drafts.

In this respect, works dealing with the cognitive aspects of writing (Flower & Hayes, 1980; 1981; Scardamalia & Bereiter, 1987) considered writing as a solution to the cognitive demands of the writing task. Therefore, students are addressed individually at each stage of the writing process. This shows teachers the development of students' communicative skills in writing and the differences between novices and expert writers. However, this approach also happens to focus on isolated individual writers as well as cognitive and decontextualised dimensions of writing skills by those who hold more socially-oriented views of writing (Hyland, 2003). It, therefore, fails to provide students with enough input that enables them to write successfully. Moreover, process writing has been criticised for ignoring the context in which writing occurs (Badger & White, 2000) and the social context in which the writing is produced (Prior, 2006). This shows unclear understanding and application of process writing within EFL writers which leads to overlooked perceptions of writing that refer to space outside the classroom, both in terms of cognitive and sociocultural theories. From cognitive models of writing, writing goes through stages. It is a matter of putting cultural knowledge and writing together to translate this into sociocultural models accordingly. Nevertheless, it is important to note the link provided by teachers for writing, especially on how writing is carried out.

This shows a pressing need to reform the teaching method of writing within the unique dimensions of the EFL context. That is, the teaching method needs to

tailor students' abilities in order to be able to respond effectively to the rhetorical demands of the proffered writing task. Students should, therefore, be given the opportunity to write for the intended reception of a wider range of readers. They can concentrate on the understanding of the compound variables in text composition, rather than on the production of a single writing process or personal language and voice which would better prepare them to perform writing tasks in academic essay writing classrooms. They need to develop an understanding of the compound variables in text construction that is as similar to what is happening in the real context of L1, and an awareness of cultural differences. In this domain, Myhill (2005) identifies the following:

Developing metalinguistic awareness about linguistic choices made in the design of a piece of writing, at lexical, syntactic and textual levels, as having a potential role within a socio-cultural view of writing as social practice. At the heart of such a theoretical perspective is the importance of making connections between grammar and meaning.

(p. 85)

Myhill emphasises that metalinguistic awareness about writing is socially constructed. Besides this, students need to have a meaning to express or a purpose to convey as a way of evaluating the effectiveness of linguistic choices. The discussion with the teacher supports the students' understanding of linguistic use in communication. These results call for a three-dimensional approach: language awareness, cognitive representation of writing as a process, and the social context. The three dimensions are not expressed in a particular approach to teaching writing, as each dimension focuses on various aspects of development. In order to create a connection between the sociocultural theory, cognitive theory, and linguistic teaching theory, the process approach needs to

be reviewed from ideas and practises that are closely associated with the sociocultural teaching theory as in genre-based approaches. To do so, a comprehensive understanding of and guidelines for the teaching of writing for an L2 novice writer is needed, in line with a process genre approach to the teaching of writing. This approach allows the student to write in distinctive contexts by using different linguistic and rhetorical options (Hyland, 2003). It, therefore, broadens the concepts of process writing as contextually implemented. Moreover, it lies beyond thinking simply about linguistic accuracy and fluency that might be included in professional practice for teaching authentic writing. Importantly, the incorporation of the three approaches of writing should be adopted by starting with one approach and then adapting it as the writing situation demands (Badger & White, 2000). The process genre approach concentrates on the knowledge about language, the skills in using language, and the purpose for the writing. This could underpin the students to gain the skills from each approach, transfer them to different learning modes, and encourage them to achieve better writing performance (Pasand & Haghi, 2013).

The results of the current study demonstrate that online collaboration is a promising sphere that supports interaction amongst students which is essential in the teaching practice in the process-based approach. Furthermore, it does not overlook the social context of the writing as it views writing as a set of social, linguistic, and cognitive processes that are culturally instilled in the students by incorporating four elements of form, the writer, content, and the reader (Raimes, 1991). Moreover, combining both the genre and process approaches might help develop cognitive and metacognitive dimensions of writing which can promote the linguistic awareness of the L2 learners. For these reasons, this study calls for a process genre approach in order to fulfil the students' needs for skills of writing

different genres and give equally high attention to the process of writing with available supporting technology tools in the EFL writing class, in a particular context. A process genre approach allows EFL students to acquire necessary skills for academic purposes, such as writing various essays for different courses. The teachers are advised to encourage students to write in a social context to achieve a particular purpose before proceeding to a process of multiple drafts and ending it with a finished product (Nordin, 2017). Additionally, they need to ensure that students have the correct linguistic fundamentals, and also to ensure that this teaching becomes contextually situated. Myhill and Watson (2011) stressed that teachers should teach students writing strategies to help them manage and think about the composing process as successful writers are also successful thinkers about writing.

Chapter 7: Conclusion and Recommendations

7.1 Introduction

This chapter concludes the thesis by offering an overview of the study and its main findings. It discusses the study's contribution to knowledge, including theoretical, practical, and methodological contributions. It also outlines the limitations of the study and presents justifications for these limitations. This chapter also proposes some implications including implications for policymakers and writing teachers who are engaged in the EFL context. Recommendations for future research, practices, and policies are also presented. I conclude the chapter with my own reflection on doing this research as part of my own professional development.

7.2 Overview of the Study and its Findings

In relation to the original research questions posed, this study has revealed that the Omani EFL students perceived online collaboration as a valuable platform for communication and interaction between students to provide/receive feedback and share ideas beyond the classroom. In essence, their experiences suggest that online collaboration can provide a supportive atmosphere that enables the students to become exposed to a wide range of writings from their peers which can enhance and upgrade the students' final drafts.

Several issues have emerged in light of the findings reported in this study. First of all, online collaboration has had a constructive impact on the learning of EFL writing skills among the Omani students who took part in this study. In addition, online collaboration appeared to have the greatest level of benefits in relation to facilitating writing outside the classroom, particularly in creating a

social writing space in which students are able to discuss topics related to writing. The students' interaction and collaboration within this particular context of writing instruction appears to have developed numerous opportunities for students which can lead to measurable improvements in writing outcomes. The affordances of online collaboration centre on the opportunity it offers to promote the students' critical thinking abilities, to motivate students to practise writing in the social environment, and to reinforce the learning process. The key to the effectiveness of online collaboration lies in improving the quality of the students' writing performance and revision behaviours. Online peer feedback enabled the necessary interaction between students and highlighted the powerful role of students in learning. The positive outcome of this social writing environment was observed improvement in students' writing performance in general, with individual expanded breadth of vocabulary and grammatical accuracy and text length, in particularly outstanding individual cases. This improvement was evident in comparing the students second draft to their first draft, showing a clear impact of the online peer feedback on the students' second draft.

In spite of the fact that EFL students view the online model positively, cultural expectations and misunderstandings of the value of online collaboration were contributing to making it less successful than it could have been. Moreover, the connection between the cultural aspects and the value of the collaboration has consequences for the teachers' role in the nature of collaboration. It seems that students were partly aware of such caveats as they talked about it. As Truscott (2010) put it, awareness is itself a step forward towards overcoming the challenges. The findings suggest a number of factors that hinder the students' online collaboration. These factors revolve around the mistrust between the students, their lack of comprehensive literacy of the computer as a medium for

online collaboration, and its associated benefits, and the concern about the absence of the teacher in the online collaborative task.

Importantly, the study has extended the understanding of the nature of students' interaction and reaction to peers' feedback, by considering the views of students during the online collaborative task. Students in this research were strongly aware of the way in which online peer feedback facilitates mutual scaffolding. The study has also clarified aspects of online collaboration that influence the students' revision behaviours, as well as revealing the nature of the collaboration between students in their groups, which may act as constraints if the collaboration does not occur effectively. It is evident that the use of technology has increased options in education, as it allows students to determine the time and place of their study. Although it is not easy to move instruction beyond the classroom where it has been formally taking place for thousands of years, the results reveal the tremendous affordances of online collaboration in enhancing the students' learning experience and skills development, particularly in CALL.

Thus, the incorporation of online collaboration is seen to have clear communicative potential to enhance students' writing performance in their L2 writing courses. However, the results indicated that the majority of the students perceived that the teachers' role was crucial to motivate them to engage in the online collaborative writing task. Furthermore, the study has identified the shifting nature of the teachers' role as some changes have impacted this role in the technological era. In light of these findings, there is a need for a changing role of the teacher in the online environment particularly in assisting students' collaboration in a collaborative writing environment. A word of caution, however, is that the teachers' interventions in online collaborative writing activities should be towards facilitating and guiding this process rather than focusing only on the

written product. Importantly, the teaching of writing in light of the rapid changes in the educational systems has been addressed. It leads to new theoretical insights about how to teach writing, which definitely contribute to an understanding of students' writing process in several ways. As Graham and Rijlaarsdam (2016) rightly noted, the teaching of writing is socially constructed and constrained by the needs, demands, and expectations of any social context. There is no doubt that the teaching of EFL writing does not come as naturally as writing in a first language. It is institutionalised within a larger language learning culture and agenda that does much more than simply addressing the specific skill of being able to write. It takes the shape of what others want the writer to achieve, resulting in limited attempts to write in accordance with perceptions of the teachers' preferences. The sample of the present study indeed indicated that students rarely felt engaged in writing when writing for teachers in comparison with writing for their peers as an external audience. Therefore, teachers need to re-evaluate their values regarding encouraging the students' experience of writing and authoring by engaging in meaning making and conscious knowledge transformation, which nowadays is accessible through technology.

7.3 Contribution to Knowledge

In a quest to move the debate about the impact of online collaboration on EFL writing forward and contribute something worthwhile, this mixed method research was conducted to find out the impact of online collaboration on EFL learners' writing performance and revision behaviour, as well as the extent to which online peer feedback could support mutual scaffolding among learners who engaged in online collaborative writing tasks. In accordance with the established objectives and the subsequent research outcomes and analytical critique, it can

be concluded that this study has successfully fulfilled the specified aim: it has provided relevant contributions to the knowledge and theory and has practical applications. With a view to developing EFL students' writing skills and English teaching overall, the findings can be used to guide the implementation of online collaboration in the EFL writing classroom by educators. Comprehensive experience and perceptions of the affordances and limitations of online collaboration were established in line with the expansion of pedagogical knowledge and the establishment of new beliefs. The study extends the incorporation of online collaboration in L2 writing development. The in-depth analysis of students' perspectives and perceptions of online collaboration provided a more detailed picture of how differently it was perceived and also made some practical implementation options available to teachers and policymakers in a clearer way. These contributions are discussed in more detail in the following sub-sections.

7.3.1 Theoretical Contribution

This study, based on its theoretical framework and findings, makes theoretical contributions to the EFL writing, and CALL, specifically. The study provided a new perspective and comprehensive description of the impact of online collaboration on the students' writing performance and revision behaviours on educational practices in the EFL context, where to date, limited research has been conducted. The study further touched on a range of sociocultural factors that may shape the way students interact and react to their peers' writing and online feedback. It also identified the nature of students' scaffolding behaviours in light of the observed engagement and interaction through the online collaborative writing tasks.

The findings contribute to developing an understanding of the value of online collaboration to allow students to learn through social interaction as well as peer feedback. Although the students pointed to some sociocultural factors that might have hindered their online collaboration and involvement, they believed that online collaboration is still a great opportunity for daily practice of writing to help them improve their writing ability. The study suggests various dimensions of online collaboration which encourage the students to improve their writing. It also suggests that the online collaborative activities are related to enhanced motivation, enhancement of the learning process, improvement of critical thinking abilities, and the support of interaction and communication beyond the classroom.

This study has emphasised the crucial role that teachers play in shaping students' collaboration during the online collaborative activity. Indeed, teachers should aim at encouraging the level of students' collaboration in order to trigger their engagement in the online collaborative tasks. Facilitating the students' interaction, supporting students' mutual engagement, following up the students' progress, solving problems related to the online collaborative task, providing training for the students, and modelling editing behaviours have been viewed to be teachers' roles that promoted students' online collaboration effectively. Other steps such as forming appropriate groups and instructing students to participate should be taken to further encourage students' collaboration. The findings identify that implementation of the online activity is insufficient to ensure a successful online collaboration throughout the writing task. Equally, the assumption that online collaboration enhances the students' writing performance in line with cognitive and linguistic growth relies on the effective implementation of the online collaborative task. The evidence from this study suggests that the online

collaborative tasks may not in themselves be enough to prompt the students' writing performance or revision behaviours.

Students' explanations highlight the significant role that teachers play in determining the effectiveness of the online collaborative task. This role takes more importance in collectivist societies like the Omani society where the students view their teachers as a main source of knowledge. The findings here suggest that beliefs about the nature of students' interaction itself also exert a powerful influence on revising behaviours. In particular, the false assumptions students made about the value of feedback from low proficiency students caused them to set unnecessary parameters on their revision. Of interest is the fact that such misconceptions were expressed by students who were both motivated and high achievers, raising questions about the kind of understandings that are promoted by or best serve course purposes, irrespective of their wider utility. What these findings demonstrate is the complex interaction of subjective and sociocultural factors which governs the students' interaction in the online collaborative task.

All of the aforementioned issues call for a need to ensure an effective approach to the teaching of writing in EFL contexts. The findings here pointed to a process genre writing approach which aims to meet the students' needs for skills of writing in different genres and give equally high attention to the process of writing. An effective implementation of the process genre approach allows EFL students to acquire necessary skills for academic purposes, such as writing various essays for various courses. Importantly, the process genre approach puts forward the crucial role of online collaboration as a mediating tool to provide the context for writing experiences and to extend opportunities for students' collaboration and peer feedback. Hence, the role of online collaboration for

writing extends the roles of students as writers, students as readers of other writers, and the teacher as the director of the writing process. Nevertheless, the findings suggest that attempts to apply online collaborative writing tasks should focus on pedagogical affordances rather than the use of technology itself. The teachers' role is then to take their students to their ZPD and gradually begin to address more academic topics which move away from students' ZPD and are progressively more complex linguistically.

The study supports the theory of the relationship between affordances of technology and writing development from the perspective that the traditional teaching of writing has limited beneficial effects on students' writing development. This has become apparent from the qualitative data that suggested that online collaboration has offered an alternative audience to the traditional classroom audience, which all too often comprises only the attending teacher. This shows the importance of placing a text within the social context of the intended readers. Thus, drawing on the sociocultural perspectives of writing can shed light on the affordances of the online collaborative activity. In this way, the study holds the view that there are some essential components of students' online collaborative tasks, which include the need for the audience to be absolutely clear about what is required and the fact that texts may need to be adapted to suit a given audience.

Taking into account of the constraints faced by teachers in similar circumstances, such as large class sizes and time limits, the study proposes the use of online collaboration as a way to address the limitations of traditional methods, as it allows the students to learn through social interaction, individual practice and feedback. It is recognised that online collaboration requires internet access and devices such as computers, iPads and smartphones, which may not

always be available. Nevertheless, the pedagogical affordances of the online platforms, such as the opportunities for social interaction which allow students to have freedom from boundaries of the classroom and share knowledge, alongside the opportunities for the daily practice of writing, help students improve their writing ability much more readily than traditional approaches. Furthermore, the evidence from this study suggests that online collaboration promotes mutual scaffolding between students through providing and receiving feedback, irrespective of their level of writing proficiency. Scaffolding behaviours include pointing, advising, and instructing when providing peer feedback on their classmates' writings. After receiving feedback, the students applied some responding behaviours such as 'admit feedback', 'reject feedback', 'clarification request', 'express concern', and 'inability to collect feedback' strategies to indicate their response to their peers' feedback. All these responding behaviours indicate the importance of feedback behaviours to better understand the nature of the students' response to online peer feedback.

7.3.2 Pedagogical and Practical Contributions

Despite its small sample size, this study makes practical contributions alongside the theoretical ones. The results provide valuable information about some of the aspects of online peer feedback and revision behaviours that are most relevant for EFL writing pedagogy. The practical contributions lie in the suggestions for how online collaboration might be effectively implemented in the writing classroom in order to improve the students' writing performance and revision behaviours. Giving an opportunity to engage in online collaboration highlights its importance in promoting the students' writing performance. In fact, the findings of this study can confirm that online collaborative writing tasks can

be advantageous for the students when they are integrated into the writing courses. Online collaborative writing tasks help L2 learners improve their writing skills by sharing their knowledge and strengths. They also provide the students the opportunity to promote their critical thinking, interact, and collaborate beyond the classroom. Furthermore, they give the student reviewers the chance to judge, interpret and evaluate their peers' work and feedback as well. Online collaborative activities are potentially motivation-creating tasks where students need to explain, discuss, and clarify their points of view for more than one reader as they used to do. The results of the study suggest that writing in a social environment could help students be more aware of their audience and they could benefit from drafting, revising, and editing their writing content before sharing it in the online platform.

Another useful pedagogical approach involves presenting a range of audiences as a central stratagem to practising online collaborative writing tasks. They allow students to write for a range of readers, other than the teacher of the course, who could be equally reachable online as well as students in other places. Furthermore, this approach is suggested to encourage reading texts written by their peers as shown when reading others' writings to provide peer feedback. This allows the students to develop a sense of critical awareness and editing potential of their own and others' texts. The results of this study illustrate that students can benefit from comparing what they have written with others' texts. Through exposure and the noticing of other texts, the students can develop their writings and expand their knowledge and skills. Critical to this, students should be warned against using the intellectual property of others. Clear discrimination should be made between benefiting from peers' texts and copying their writings, as plagiarism is a serious offence, especially in academic writing. Students need

to take advantage of reading their peers' writings and feedback to develop their writings. This seems to provide the students with a sense of belonging to a broader community where they could share ideas and information with their classmates. The learning log was perceived as an effective introspective tool and a supportive scaffolding tool to nurture the students' revision behaviours.

On the other hand, even though most EFL students agree with the crucial impact of online collaboration, many of them still have reservations about its practicality in their writing classes. In fact, their major concerns revolve around sociocultural issues and the misunderstanding of the value of collaboration. These concerns can be resolved by a well-planned implementation process which includes proper training and adequate preparation of the students. The results of this study clearly indicate the need for an effective implementation of online collaborative tasks. The success of any collaborative writing task depends not only on the writing ability of the learners, but also on developing positive attitudes and motivation for active collaboration and group success. Hence, it is critical that teachers prepare their students by establishing an atmosphere of mutual trust and respect and even modelling the collaboration process. This allows the learners to construct knowledge and benefit from the peers' feedback by becoming less dependent on their teachers.

In this sense, students need to build positive attitudes towards online collaboration in order to make it a more productive and enjoyable experience. Therefore, it is crucial to allow students in online collaborative tasks to interact in a variety of instructional strategies such as pointing, advising, and instructing to assist each other and provide the best possible learning environment. Related to training, the fact that peers' feedback mainly concentrated on surface-level issues like grammar and vocabulary, reveals that L2 students need more training on

other aspects of essay writing such as content and organisation for more effective writing. Therefore, teachers should consider establishing training procedures that can orient students most effectively to textual features in writing and explicitly encourage the negotiations which move beyond discussions of surface-level issues. More precisely, students need to be taught that revision should cover various areas of writing not only grammar and vocabulary. To do so, teachers can establish peer feedback training sessions for the students to encourage them to actively engage in discussions and provide comments on macro structure problems of sample texts.

The fact that online peer feedback did result in better essays in an EFL writing context should encourage students to engage in online collaborative tasks within the writing classroom. However, they should not assume that online collaborative tasks are automatically better and inevitably yield satisfactory results without well-designed instructions. Indeed, incorporation of online collaborative tasks into writing courses is an ongoing process. It takes time and effort to establish an environment that encourages productive collaboration. From the outset of the course, the instructors should carefully explain the objectives of collaborative tasks and make L2 students aware of their own role during the whole process as clearly as possible. They are advised to pay attention to preparing appropriate group formation, extensive training and guidance on how to engage in an online setting to ensure an effective collaboration and create a motivating learning environment. As the results of this study stressed, online peer feedback works better with small groups of learners in order to allow interaction and probing student understanding and development. If students are expected to construct knowledge mutually and scaffold each other skilfully, they need to be given the opportunity to learn how to engage in online collaborative tasks.

Another pedagogical implication emerging from this study is the importance of considering the teaching of writing skills with a focus on issues such as online peer feedback, mutual scaffolding, process genre approach, criteria of grades, and allowing time for online interaction and discussion. In terms of grades, in the current situation, grades are allocated only on the final draft which shifted the attention on how the final draft is presented rather than on how the final draft is made. There is no doubt that the final product is a key performance indicator of the level of success in learning. However, sight must not be lost of the needs to look beyond the final product to assess the process in an adequate manner. It may be of value to consider introducing different kinds of evaluations at various points in the process of writing rather than evaluating only the final version. Teachers are advised to evaluate students at each stage of writing (i.e. planning, first drafting, final draft) to ensure completion with certain outcomes. This allows teachers to evaluate to what extent the students engaged in collaborative behaviours; did they provide peer feedback to their classmates, the response to their peers' feedback, and did they develop their essays after reading their peers' comments? By doing this, teachers can help students in engaging in productive interaction that not only develops the final text, but also fosters instances of language learning between students in the online collaborative writing activities.

In terms of the writing approaches, the results demonstrated some concerns about the process approach as it failed to provide students with enough input that enabled them to write successfully, and it ignored the context in which writing occurs. This leads to a need to reform the teaching method of writing within the unique dimensions of the EFL context. The teaching method needs to tailor students' abilities and needs in order to be able to respond effectively to the

rhetorical demands of the proffered writing task. Therefore, the results of the study revealed that the process approach needs to be reviewed with the ideas and practises that are closely associated with the sociocultural teaching theory as in genre-based approaches specifically in consideration. To do so, a comprehensive understanding of and guidelines for the teaching of writing for an L2 novice writer is needed, in line with a process genre approach to the teaching of writing. This approach allows the student to write in distinctive contexts by using different linguistic and rhetorical options (Hyland, 2003). It, therefore, broadens the concepts of process writing as contextually implemented. Moreover, it lies beyond thinking simply about linguistic accuracy and fluency that might be included in professional practice for teaching authentic writing.

To conclude, the present study makes an important contribution in providing empirical data on the importance of the incorporation of online collaborative tasks particularly peer feedback into L2 composition classes. It puts forward some supportive evidence about the unique opportunity these tasks provide for L2 students to scaffold each other in terms of developing both their writing performance and revision behaviours.

7.4 Caveats and Limitations of the Study

As with any other study, a number of limitations must be acknowledged during the process of implementation of this study. These limitations are basically associated with the study sample, timeframe, and the obstacles of the employment of technology. In the following passages, the limitations and dilemmas of conducting the current study are outlined. First of all, the small sample size was apparently one of the limitations of the study. It was exclusively limited to investigating the use of online collaboration, in particular, the writing

classroom in Oman. Although the study took place in a college of technology which consists of about 4,250 students, only 23 students from one classroom were involved in this study. It would be reasonable to predict that a larger sample would increase the potential to generate a wider range of opinions and perspectives about the topic of research and a broader range of outcomes. However, due to access circumstances and time constraints, implementing a larger sample was not possible. It should be restated that, due to the small sample size, these results may only be used as the starting point for further research. Consequently, there was no attempt to generalise beyond the study's participants in this classroom. It is hoped that making available situationally detailed description might enhance the transferability of the findings to other contexts with similar characteristics.

Moreover, the analysis was limited to eight cases from the writing classroom; this limited the opportunities to explore variations amongst other students in the classroom. However, the decision to include a representative group of students who showed an interest to take part in the study allowed for an in-depth exploration of variations and similarities between the students over their different drafts. This not only broadened the understanding of the way the different students engaged in the task but assisted in the identification of the various types of students' behaviours that promote/hinder online collaboration. This required an in-depth qualitative analysis that could depict how interaction occurred between the students themselves on the one hand, and between teachers and students on the other hand.

In addition, as it was the first experience of this cohort of L2 students being exposed to using technology in their writing classrooms, as well as being introduced to online peer feedback, and revision techniques, they needed more

time internalising all these novel issues. Therefore, allocating two 60-minute sessions training the students and two sessions a week, introducing and practising two different genres as well as incorporating novel approaches and tasks was definitely inadequate. In fact, some of the students felt overwhelmed and exhausted towards the end of the course even though they called the course very interesting and productive. More precisely, they stressed that they needed more time and practice to internalise the abstract notions they were introduced to during the course. They particularly maintained that they need further preparation, training, and practice. Besides this, a number of students stated that the indirect correction codes that were used during the two writing cycles to address particular types of errors needed additional examples and more extended practice.

Another limitation of the study concerns the data collection itself. In the observation stage, it would have been better to videotape the lectures observed. That choice would have allowed for the opportunity to revisit the actual classrooms observed and determine whether anything was overlooked. Having the luxury of returning visually to the observed site would have allowed for observation and re-observation of the data and cross-checking and cross-referencing of what had previously been collected and recorded. However, due to the participants' refusing any videotaping of their classrooms, that option was not made available.

A final limitation of the study is that the students in the English Language Centre constituted the research focus; this was a limitation in its own right. The study did not involve students from levels of more formalised education, such as undergraduate students, as that would have put a wider scope on the phenomenon and offered a broader analytical range. The findings would have

been more enhanced, including additional sociocultural factors, such as the students' age, gender and curriculum content. Including other levels was not possible due to the time constraint and the different learning nature of these levels. The importance of teaching EFL writing and how it was taught differed from one level to another, hence, it would be challenging to accurately compare the findings and cater to these differences. In addition, other parties could have been involved, such as EFL teachers, administrators, and policymakers in order to add new dimensions to the study. It is heartily acknowledged that the involvement of the aforementioned parties would have strengthened the study.

7.5 Implications

The key findings of this research provide many implications for policymakers and teachers. More consideration is needed because of the various issues with the current implementation of technology in EFL writing. The recommendations made by the study stem from the participants of this study, the interpretations of the findings, and from the literature. These implications are reported in the following sub-sections.

7.5.1 Implications for Policymakers

This thesis showed that implementing online collaboration in Omani higher education and more specifically in EFL writing classrooms is feasible and beneficial to promote learners' writing performance and revision behaviours. The thesis also suggested that teachers played an indispensable role in promoting or hindering the learners' online collaboration. Therefore, policymakers are advised to reconsider the type of training provided for EFL teachers in the online environment. That is, policymakers need to focus on both pedagogical and

technical teacher training sessions to ensure an effective incorporation of online collaboration. Teachers should understand the theoretical assumptions behind implementing online collaboration in their writing courses. In addition, they should be prepared to solve the issues that the students might encounter while using the online platform. There is a considered need to raise teachers' awareness of the theoretical underpinning of online collaboration and to explicitly advise them to adopt the writing approaches that seem to promote learners' collaboration. Technically, they should be trained to know how to design the online collaborative tasks effectively, how to teach writing, and how to encourage students to engage in the online collaborative task with the ultimate aim of developing their writing performance. Such an investment in appropriate training gives teachers the needed confidence in using technology in their classrooms.

As this research has developed, it was noticed that students appeared to pay progressively less attention to ungraded tasks because they regarded such tasks as insignificant and accordingly perceived that their time was better spent on completing mandatory assignments for other courses because of their heavy workloads. Although teachers aimed at encouraging a student-centred approach in which students interacted and collaborated to promote mutual scaffolding, they emphasised on writing for achieving high scores, not on the learning process. Therefore, particular consideration and instruction are needed to shift their focus from form to content and from providing feedback for the grades to providing feedback to learn. Consequently, policymakers need to develop more flexible assessment models that assess students during the different stages of writing. From the perspective of learners, current arrangements serve as a barrier to effective revision by focusing on the final product of the students irrespective of the improvement they have achieved over their different drafts. There is a clear

need to refocus on different language skills, rather than just focusing on the lexical items and grammatical errors. It seems that an assessment model which gives the students the floor to critique their own texts would allow them to explain their thinking and some evidence against which to judge their success. Critical to this, tracking the students' development of text over their different drafts would allow examination of revising expertise more specifically. It would allow students to think about the content of their writings rather than writing for the purpose of completing the required task.

7.5.2 Implications for Teachers

The study findings show that many EFL students perceived the teachers' presence in the online collaborative writing tasks as a motivating factor to take part in the task. This might have led them to adopt more traditional strategies of writing, ignoring the important role of the peer feedback in their writing. Therefore, teachers should play an active role in facilitating and supporting the students' online collaboration. Not only facilitating the collaboration, but also teachers should guide students to govern their own learning throughout the online task. They should also pay attention to other factors that lead to the effective implementation such as group formation, students' training, and modelling how to engage in an online setting.

The study findings demonstrate that the absence of the teachers may hinder the students' engagement in the online task. Students need to understand that the peer feedback is not a substitute for teacher feedback. It offers a different resource to teacher feedback, not a replacement for it. The advent of digital technologies gives rise to new learning opportunities and have led CALL researchers to see the role of teachers through a new lens that enables learners

to learn the target language in an interactive way. It changes the individualised learning atmosphere where the teacher plays a dominant role as the only source of knowledge and supports online collaboration in which knowledge is constructed by interactions between the students. Indeed, the results of this study viewed the role of the teacher in the online collaborative tasks as being that of a supporter, a provider of knowledge, and as able to offer a critical eye on their writing.

Another important issue reported in the study findings is that online collaboration can provide opportunities for additional teacher feedback. However, this requires more work for teachers to ensure a successful implementation of the online task. Teachers are advised to trust students' knowledge and to give them opportunities to learn from each other. They, also, need to closely monitor the process of how students collaborate and learn from each other. They should give the students the floor to take an active role in the learning process, and students have to value other peers' contributions and knowledge. This suggests that much work at the teachers' level needs to be done to help students understand the wider value of engaging in this process rather than the content of the feedback itself. To make online collaboration practice sustainable, teachers are advised to consider introducing online collaborative tasks to students earlier in their schools as well as for higher educational institutions. It is hoped to develop a curriculum for the foundation programme at English-medium universities that would integrate technology into their writing curriculum.

7.6 Recommendations for Future Research

This study makes a contribution to existing knowledge about the impact of online collaboration on students' writing performance and revision behaviour by

examining the connection between the students' written texts over their different drafts after acting upon their peers' feedback. It identifies the highly contextualised nature of students' interaction and raises questions about some sociocultural issues regarding students' engagement in the online collaborative tasks. Although the current study bridged some gaps in the CALL literature, the findings have suggested that more research is needed in a number of areas. Below are some suggested directions for further researchers who wish to extend an understanding of the use of technology in EFL writing.

This study has discussed several issues in broader terms, such as mutual scaffolding, revision behaviours, writing performance, and online peer feedback issues. It is suggested that further research comprehensively investigates every aspect separately. This would give a deeper insight and provide thorough descriptions of the issues, which would consequently provide a sound basis to derive better conclusions.

Another suggested study is exploring a larger number of sociocultural factors. The issues of gender, age, and educational level of the students are other areas of exploration to offer another layer of depth to the discussion. As the sample only used students from the foundation programme, inclusion of the students from other levels would give this research another level of complexity. Whilst this study focused on the students from the foundation programme, expanding the range of educational levels could extend the study further. Thus, broadening the scope of the study to include other higher levels of education into the study could provide a wider view and increase the depth of findings. Another area of potential study expansion is to investigate the impact of online collaboration on the other English language skills, such as reading, listening, and

speaking. Moreover, a further study could investigate the teaching of contextual grammar through using online collaboration.

Future research might also consider conducting a quantitative experimental study with a matched control group, receiving traditional written peer feedback, to see whether and how much progress students who receive peer feedback would make in order to provide evidence of students' L2 writing improvement. These would serve to extend the impact of technology per se on the process of peer feedback. Furthermore, tracking the development of an L2 student through a longitudinal study would shed additional light on the impact of technological interventions. Therefore, future researchers may wish to examine in-depth how the incorporation of technology affects the students' interaction and involvement in the online collaborative task.

Students are the only participants of this study. Scant attention has been paid to writing teachers' perceptions of online collaboration which also matters to a great extent. Findings suggest, however, that their interaction and support are crucial to ensure the effective implementation of the online collaborative task. Thus, further research is needed to identify the challenges and inconsistencies that may exist and to seek the teachers' opinions and perceptions regarding the effectiveness of online collaboration in the writing courses. It is also suggested that further research may wish to investigate this issue with more depth and with a wider pool of participants.

Another potentially useful research direction in which to move could be the students' prior experience with online collaboration. The points of view explored in this research belonged to EFL student writers who prior to their participation in this study had never experienced peer collaboration activities in their L2 writing

history. It is worth conducting a similar research with students who bring some prior knowledge and experience of engaging in such types of tasks into the class.

Finally, the feedback strategy used during this study was indirect coded feedback. Hence, it might have contributed to the writing performance of the participants. More precisely, as this strategy assumes a relatively advanced level of formal knowledge and/or acquired competence in the L2 student writer, further research could provide even further insights on how L2 learners process direct feedback and how different it can affect their writing performance as well as revision behaviours.

7.7 Reflection on my own Learning

Before I started my PhD journey, I used to teach English as a Foreign Language to EFL students for almost nine years at different educational levels in Oman. During this period, I had observed that a majority of EFL students from all levels demonstrated low performance in writing skills even though most of them had been able to perform well in other language skills (reading, speaking, and listening). I should acknowledge even though I spent plenty of time in training my students, I noticed that the instructions were most of the time useless and my attempts failed to achieve satisfactory results. Therefore, improving writing proficiency in EFL learners has become my major concern when teaching the English language. Such a concern was always with me and I kept on thinking about alternative methods and strategies to overcome this situation and improve the quality of my instruction which in turn could improve the quality of students' written texts. Although, as an EFL teacher, I was familiar with the concept of student-centred pedagogy, I failed to incorporate this view into my classes because the context, the policy, and educational system automatically pushed

me towards employing more traditional, teacher-centred oriented approaches. Hence, as I was always keen on improving my professional qualifications, I enthusiastically welcomed the opportunity provided for me to continue my education at a higher level and through a complicated procedure was admitted as a doctorate candidate.

After earning my MA in Education Curriculum and Instruction: English language teaching, I was encouraged to pursue my PhD at a prestigious university. I came with the belief that I would investigate topics of interest that are to be explored further and build on the knowledge and experience that I had acquired to that point in time. During my first year as a PhD student at the University of Exeter, I had to enrol in an MSc in Educational Research programme. Attending MSc modules at the outset of my PhD journey provided me a great opportunity to acquire a set of research skills and knowledge and get a better understanding of the nature of research itself. At first glance, it was a challenging experience since it was the first time that I experienced new concepts such as philosophical and theoretical assumptions of research, qualitative and quantitative methodologies, and paradigms in education. However, the four modules I took at the MSc programme allowed me to evaluate and critique the literature in a more critical way, taking into consideration the strengths, limitations, and ethics of the academic works. Moreover, the knowledge I gained from it made me realise the relationship of such concepts to my PhD research. They also opened new horizons and ample opportunities to discuss the issue of teaching writing in an EFL context. These different and positive experiences allowed me to practically, not only theoretically, experience these research perspectives.

More importantly, I learned to include my own voice and arguments and justify what I am doing in my research appropriately. Furthermore, being a student at the University of Exeter gave me access to a wide range of research journals and books which have significantly stretched my capability to read and widen my linguistics and academic knowledge as a researcher in general and as an EFL researcher in particular. At a different level, I was experiencing something similar to my own participants in appreciating the benefits of collaborative learning and the need to develop collaborative skills.

My extraordinary PhD journey has allowed me inevitably to enrich my knowledge and understanding on a wide range of important educational issues. It is evident that going through peer-reviewed journal articles, books, and conference proceedings contributed to my learning. I practically experienced Vygotsky's (1978) notion that learning first happens socially and then individually. This unique experience has allowed me to gain different perspectives on my research, as the audience raised questions that sometimes proved to be informative. In addition, I engaged in several conferences, in and outside the UK, throughout the years, which allowed me to present and discuss my research with experienced audiences. I also published two articles, namely, one on the teachers' knowledge of and attitudes towards incorporating Computer Assisted Language Learning (CALL) in the EFL classroom, and the other on understanding teachers' integration of Moodle in an EFL classroom: a case study. Publishing in a high ranked peer-reviewed journals taught me how to search and find a suitable journal for each topic and how to identify the most important knowledge and information the article should contain in order to meet the criteria for acceptance.

As a research student, completing a piece of original research has influenced the way I now think about research, and has shown me that I should aim to grow as an independent researcher. Yet, being independent does not necessarily mean working away from one's supervisors. Indeed, researchers should not simply sit and wait to be told what to do. Rather, they should take the initiative, engage in the tasks themselves, and when faced with challenges, ask for their supervisors' help, since they are always there to offer support and solutions.

Moreover, a popular expression amongst those involved in pursuing a PhD is that it is, typically, a lonely process. However, networking can bridge this concern. My personal experience, for instance, was very positive in this regard. Indeed, I was lucky to get to know a number of inspiring PhD colleagues from within my own office and elsewhere in the school. Alongside this, I worked under the supervision of outstanding, world-leading experts from the field of education. I strongly believe that my PhD experience would not have been so positive without them. My experience was a great opportunity to share my thoughts, concerns, and feelings with my colleagues about all aspects of the PhD process. Furthermore, I joined the Language and Education Network as well as the Centre for Research in Writing in the School of Education. As I come to the end of my PhD journey, I believe that conducting this piece of research has not just provided me with the opportunity to discover key issues related to teaching, language learning and achievement in a particular learning environment but has also helped me to develop my own research skills.

In light of what I have reflected on above, I realise that conducting this study has significantly broadened my knowledge of the impact of online collaborative writing tasks and taken my attention from a narrow focus on

technological and personal aspects to more important contextual factors that significantly influence students' perceptions and practices and their implementation of online collaboration in their writing classes. I have also widened my research skills through my engagement with the long-term processes, starting from reviewing the literature in the early stages to developing the theoretical ideas that underpinned the study and ending with interpreting its findings according to its complex theoretical framework. I feel more informed about issues such as online collaboration, L2 writing, mutual scaffolding, revision behaviours, and online peer feedback than I was at the beginning of my study. I am blessed that my thesis has succeeded in throwing up a new way of thinking about online collaboration and revision techniques, which can serve as a basis for a range of future research projects, not only within L2 writing, but also across the broader EFL context. I am also more than pleased to be in a position to fulfil one of my major goals in life: attaining a PhD. I believe that it is my responsibility to take the experiences and methods I have learned back to Oman. I have the enthusiasm and the intention to continue my academic work and publish in the field of EFL to improve the current knowledge base and to benefit various different stakeholders. In that sense, this study is merely the beginning of a broader academic quest. As humans, we become who we are as a result of what we experience in life, and I am sure that the different experiences I endured will positively shape me, both personally and academically.

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Appendix 3: Ethical Research Approval From the University of Exeter



GRADUATE SCHOOL OF EDUCATION

St Luke's Campus
Heavitree Road
Exeter UK EX1 2LU

<http://socialsciences.exeter.ac.uk/education/>

CERTIFICATE OF ETHICAL APPROVAL

Title of Project: Investigating the impact of online collaboration on EFL students writing performance and revision behaviours

Researcher(s) name: Yasir Mohammed Alyafaei

Supervisor(s): Dr Susan Jones, Dr Li Li

This project has been approved for the period

From: 19/11/2019

To: 30/06/2020

Ethics Committee approval reference: D1819-009

A handwritten signature in black ink, appearing to read 'Dongbo Zhang', written over a faint circular stamp.

Signature:

Date: 19/11/2018

(Professor Dongbo Zhang, Graduate School of Education Ethics Officer)

Appendix 4: Ethical Approval Form



Ref (for office use only)

D1819-009

COLLEGE OF SOCIAL SCIENCES AND INTERNATIONAL STUDIES

All staff and students within SSIS should use this form; those in Egenis, the Institute for Arab and Islamic Studies, Law, Politics, the Strategy & Security Institute, and Sociology, Philosophy, Anthropology should return it to ssis-ethics@exeter.ac.uk. Staff and students in the **Graduate School of Education** should use ssis-gseethics@exeter.ac.uk.

Before completing this form please read the Guidance document which can be found at <http://intranet.exeter.ac.uk/socialsciences/ethics/>

Applicant details		
Name	Yasir Mohammed Alyafaei	
Department	Graduate School of Education	
UoE email address	ya259@exeter.ac.uk	
Duration for which permission is required		
Please check the meeting dates and decision information online before completing this form; your start date should be at least one month after the Committee meeting date at which your application will be considered. You should request approval for the entire period of your research activity. Students should use the anticipated date of completion of their course as the end date of their work. Please note that retrospective ethical approval will never be given.		
Start date:06/01/2019	End date: 30/06/2020	Date submitted:10/11/2018
Students only		
All students must discuss (face to face or via email) their research intentions with their supervisor/tutor prior to submitting an application for ethical approval. Your application <u>must</u> be approved by your first or second supervisor (or dissertation supervisor/tutor) prior to submission and you <u>MUST</u> submit evidence of their approval with your application, e.g. a copy of an email stating their approval.		
Student number	650060285	
Programme of study	Doctor of Philosophy (PhD) If you selected 'other' from the list above please name your programme here	
Name of Supervisor(s) or Dissertation Tutor	Dr Susan Jones Dr Li Li	
Have you attended any ethics training that is available to students?	Yes, I have taken part in ethics training at the University of Exeter EG the Research Integrity Ethics and Governance: http://as.exeter.ac.uk/rdp/postgraduateresearchers OR Ethics training received on Masters courses.	

	If yes, please specify and give the date of the training:
--	---

Certification for all submissions

I hereby certify that I will abide by the details given in this application and that I undertake in my research to respect the dignity and privacy of those participating in this research. I confirm that if my research should change significantly I will seek advice, request approval of an amendment or complete a new ethics proposal. Any document translations used have been provided by a competent person with no significant changes to the original meaning.

Yasir Mohammed Alyafaei

Double click this box to confirm certification

Submission of this ethics proposal form confirms your acceptance of the above.

TITLE OF YOUR PROJECT

Investigating the impact of online collaboration on EFL students writing performance and revision behaviours

ETHICAL REVIEW BY AN EXTERNAL COMMITTEE

No, my research is not funded by, or doesn't use data from, either the NHS or Ministry of Defence.

My research is self-funded.

If you selected yes from the list above, you should apply for ethics approval from the appropriate organisation (the NHS Health Research Authority or the Ministry of Defence Research Ethics Committee). You do not need to complete this form, but you must inform the Ethics Secretary of your project and your submission to an external committee.

MENTAL CAPACITY ACT 2005

No, my project does not involve participants aged 16 or over who are unable to give informed consent (e.g. people with learning disabilities)

If you selected yes from the list above, you should apply for ethics approval from the NHS Health Research Authority. You do not need to complete this form, but you must inform the [Ethics Secretary](#) of your project and your submission to an external committee.

SYNOPSIS OF THE RESEARCH PROJECT

Maximum of 750 words.

Despite writing being the principal medium through which academic performance is assessed, many students look at the writing class as a dull period although teachers are attempting to motivate them in their classes. The current generation of students is surrounded by several technological devices such as desktop computers, laptops, iPads, smartphones, and wireless networks. Accordingly, the use of new technologies has been supported by teachers and policymakers to enhance the learning process (Li, 2017). To do so, Salalah College of Technology encourages its EFL teachers to make effective use of the facilities provided in the language laboratories to teach the

different language skills. However, the use of these facilities in writing classes is still questionable in terms of its effectiveness and impact. In this context, most of the studies performed in the field of educational technology in Oman are still scarce in clearly identifying the perceptions and attitudes of teachers towards the use of technology in learning. However, no research has been conducted to provide an in-depth analysis of the way in which students integrate technology into their writing, especially when it comes to the use of online collaboration in the writing classes. Also, students' voices seem absent from the previously conducted research. This research therefore attempts to fill this gap by answering the research questions of the study. This study seeks to employ a case study approach to introduce one of the online collaboration tools, namely Moodle to explore how it is utilized by EFL Omani college learners into their writing and how this use changes or develops over time, in order to understand to what extent, it will have an impact on students' writing performance and revision behaviours.

Aim and objectives:

The broad aim of the current study is to explore the way in which online collaboration among EFL students might enhance their peer feedback and revision behaviours with the ultimate aim to improve their writing. This research contributes to the ongoing 'debate' about the impact of new technologies on students' writing practices. This will be done by examining the topic from the students' own perspective, which is often neglected in many EFL settings. A case study in the Omani context will be used to answer the research questions in the light of the most recent trends in the educational system in Oman towards the integration of new technologies to provide collaborative learning environment among students. Indeed, students are the main participants in this study, since they are the core recipients of the changes provided by their institutions. To determine the extent to which the most recent changes have met the needs of students, the research focuses on students' understanding of the impact of these changes (online collaboration) in improving their writing practices. Hence, it will investigate the extent to which they see the reforms as having contributed to improving their practice in terms of how they use peer feedback and the sophistication of their revision practices. The study also attempts to explore the Omani students' understanding of the affordances and challenges of online collaboration in the tertiary level classrooms and identifies their impact on their writing practices in terms of their peer feedback and revision practices. Although this is not an intervention study, participation in the study will offer opportunities for students to explore their own writing choices and revision practices and this might be of educative value to the students. The extent to which it is will be an aspect of the study both in terms of changes in their writing but also in changes in how they talk about revision and how they talk about on-line collaboration.

INTERNATIONAL RESEARCH

This study will take place in an ordinary classroom at the tertiary level at Salalah College of Technology in the Sultanate of Oman. This study will not interfere with the normal classroom teaching and learning atmosphere as all the sessions will take place as normal, but the parts related to the Lab class will be conducted in a computer lab where computers are available. The classroom is expected to include approximately 30 Omani students of level 4 aged 18 -20 from the English Language Centre at Salalah College of Technology. This research will involve methods of data collection such as online and in-class observations, texts analysis, face to face interviews and focus groups discussions.

The following sections require an assessment of possible ethical consideration in your research project. If particular sections do not seem relevant to your project please indicate this and clarify why.

RESEARCH METHODS

This research will employ the following research methods:

1. Cohort focus groups:

Initially, data will be collected from focus groups which will allow the participants to express opinion freely about their understanding of the affordances and challenges of the use of online collaboration in their writing classes. Using this method will allow the students to reflect on their experiences to date of on-line collaborative learning. It will also allow me as a researcher to understand the existing meanings of the experience through the perspectives of those engaged in it and therefore make interpretations that are aligned with this experience. The data collected from the focus groups will inform the development of the subsequent data collection. There will be 4 focus groups. Each group will approximately range between 4-5 students although group numbers and size will depend both on class size and those who consent to participate. Each group will be engaged in dynamic discussions of up to one hour where they will be asked questions about their past experience, and future expectations of the online task. Participants will be given the freedom to speak in either L1 (Arabic) or English as they wish. The focus groups will be used to recruit a smaller group of students for subsequent data collection. 2 students from each focus group will be selected for the case study. For this, I will recruit students who could potentially provide the richest information that could best provide insight to the research questions. Purposive sampling will be used to select the available students from those who had posted their writings and provided peer feedback on the discussion forum and show a willingness to take part in the study. Along with these criteria, samples that differ on some characteristics will be used to ensure diversity among the participants to enable comparisons. Students' gender, educational backgrounds, experience with computers will contribute to the heterogeneity of the sample. The second aim of the focus group is to obtain students' views on, and expectations of the collaboration process and its impact on their writing. They also allow students to raise issues and questions that may not have been foreseen in the research design. These issues and questions will be used later in the individual interviews.

2. Online and in-class observations:

Data will be collected from observations where the researcher can gain an insider look at students' interaction in the on-line environment. Students will be observed writing on two occasions: firstly during the initial drafting of text and secondly during the redrafting. These observations will take place in-class and online. The students will be aware that they are being observed and the consent of those in the smaller group will have been sought. My intention is to observe writing behaviours and any associated activities – collaboration and interaction with peers, pause-write patterns, use of a dictionary/thesaurus, reference to written plans, and so on. These observations will be recorded with line references to prompt the following discussion and to help students' recall of their thinking.

3. Students text analysis:

The purpose of this is to measure the impact of online collaboration on students' writing performance after receiving peer feedback. These texts will be analysed after the first draft and then after students receive peer feedback and redraft their texts. Students' written texts will be analysed for two main reasons. First, I will examine the quality of the students' writings over many drafts. It will facilitate tracking students' writing performance after participating in online peer feedback and revision activities. My second purpose is supporting the data collected from observations and focus groups.

4. Semi-structured interviews.

The interviews will focus on how online collaboration supports students in drawing on peer feedback to inform their revisions from the participants' perspectives; then, understanding the effect of online peer feedback on students' writing. Interviews involve a deeper discussion of the issues raised from the observations, focus groups and the analysis of the students' writings. The interview questions will be designed to lead the participants through the order in which they write their piece of writing, from the first processes, such as planning, to the final processes, such as rewriting. Also, they will allow the interviewee to describe their writing processes in their own words.

All these methods will be used for gathering in depth rich data about the students' online collaboration and its impact on their writing performance and revision behaviours. Data analysis will be conducted iteratively and simultaneously with data-collection, in keeping with suggested case study method: 'analysis begins with the first focus groups interviews. Emerging insights, ideas, and themes will direct the next stage of data collection. That is, emerging issues will be gradually clarified and refined as the sequence of research activities proceed. Then, a thorough description of each case and themes within the case will be followed by thematic analysis across the cases.

PARTICIPANTS

As this study is an exploratory case study, the research will be conducted in a bounded context. The participants of this study will be chosen from students of level 3 who are aged between 18-20 years old. The reasons for choosing Level 3 students are as follows:

- Level 3 students have already had two semesters of English language instruction at the tertiary level. That is, they have a sufficient mastery of English as they have gone through experiences concerning different writing approaches and what they are expected to do.
- Level 3 is the last stage of the Foundation Program; the students are likely to have adequate knowledge of using technology in their learning.

I will visit the selected class twice a week for 12 weeks over the spring semester in 2019. Altogether 30 students will be involved in the class. The online platform will be used for posting, revising and editing their written work. It will offer them peer feedback to which they will refer before they apply the changes to their drafts.

THE VOLUNTARY NATURE OF PARTICIPATION

Based on my previous experience at Salalah College of Technology, I have a quite good relationship with the English Language Centre (ELC) staff at the college where I had been working as a lecturer and a level coordinator. So, I will contact the ELC management via email to explain the aim and the data collection procedures. Then, an

official visit and a meeting will be held with the head of the ELC to explain my research project in detail, its aims, and the nature of participation expected from them. After gaining permission from the head of the ELC, I will contact some of the teachers in the ELC to check if they are interested in taking part in my research. As soon as I receive a response or a confirmation from any of these teachers, I will pay them a visit to explain the aim and the procedures. An appointment to have another detailed meeting with the participant class will be decided to explain the nature of participation and the role of the teacher and the students.

In fact, all the classroom tasks will be carried out the normal way. However, when it comes to writing lessons, the students will be asked to submit their first draft to their teacher as normal, but they will also have to type it into a computer or submit it online via Moodle to receive peer feedback. This process of peer feedback which they will be involved in will allow them to edit their work several times online based on their peer feedback before they hand in the final draft to their teacher. As a researcher, I will be following up the whole process by observing and providing support to the learners during this stage. All participants will be asked to give their written consents. Participation is voluntary, so participants have the right to withdraw their consent any time during research process without any consequences.

SPECIAL ARRANGEMENTS

As for the IT infrastructure needed for this study, I will ensure the arrangement and preparation for all the required PCs with the ELC administration.

As for preparations and training before the study, two training sessions will be conducted after gaining consent form the participants. In the first session, students will be trained step by step how to register in the discussion forums. In the second session, the students will be shown how to post their writings and feedback online. A Microsoft word document with all these instructions will also be provided to all participants.

THE INFORMED NATURE OF PARTICIPATION

This study will take place in a normal classroom environment. There will be no interference in the way the curriculum is taught or the way the students are assessed, as all the procedures of evaluating students written work will be aligned with the regulations of formative assessment rating. The discussion forum in this study will be used as an additional experience to normal classroom practice to evaluate students' online collaboration in their writing classes. The nature of the participation will be voluntary. Although all of the students in the selected class have to participate in the online collaboration tasks as a course requirement, the study will involve only those who show willingness to be involved as explained in the section of (The voluntary nature of participation).

ASSESSMENT OF POSSIBLE HARM

At this stage of the research, the researcher is not aware of any other exceptional factors that might raise ethical issues or harm. Nonetheless, if any potential issues are likely to raise at any of the research stages, will be dealt accordingly with the advice of the supervisor. Furthermore, if there is any form of distress towards the participants, they have the right to comfortably withdraw from the study at any time. It will be clear that there will be no negative consequences of this withdrawal.

In this study, the participants will be working on computers in the computer lab where they will be under the supervision of the teacher in addition to my own observation and supervision. It is expected that there will be no potential harm to the participants

because the students will have already been used to the location in their normal daily activities.

The ELC administration and the class teacher will be provided with all contacts of the researcher including e-mail and phone number for any further enquiry.

All information is confidential, and all instruments are anonymous with only a unique ID number for data analysis purposes.

DATA PROTECTION AND STORAGE

The participants will be informed about the process that will be followed to maintain confidentiality of their data and will be ensured that this data will only be used for research purposes. All data will be held anonymously with no reference to any particular participant, and each participant will have a unique ID number which will be for data analysis purposes only. The original list of the participants' names will be only known by the researcher.

The data will be processed according to the data protection legislations of the University of Exeter. So, all hard data including copy documents, field notes, and samples of students' texts will be securely stored in a locked cabinet at researcher's home or college. Digital data will be stored on the researcher's personal laptop under the researcher's own account with a username and password only known by the researcher. Another backup copy of the materials will be stored in an external hard drive only specified for the purpose of the research locked by a username and a password known by the researcher only. The recordings, which will initially be stored in the college's PCs, will not be accessible to people other than the students and the researcher himself.

DECLARATION OF INTERESTS

This study is self-funded, and the research is driven by my own interest of becoming a researcher in the field educational technology in EFL teaching, learning and assessment. This study is thought to be an academic start for a series of further studies that aim to broaden my own knowledge and understanding of using technology in education. There is no intention to generalise its results, yet, I think it might be useful to help many interested EFL teachers and curriculum designers to consider alternatives of assessing writing. Results from this research study may be published within a journal or other publication for the interest of research in this area.

USER ENGAGEMENT AND FEEDBACK

As the participants of this study are students at the tertiary level, I think the different methods of data collection will allow me to explore in-depth the way in which online collaboration affect the students' writing performance and revision behaviours. I do not think that I might need to go back for any further feedback from the participants. However, if the study requires doing so, this will be discussed with my supervisors, the ELC administration and the participants. Moreover, with regard to the results of the study, if the ELC wishes to get a copy of the results of the research, they are welcome to get it as an appreciation from me for their participation and interest.

INFORMATION SHEET

I intend to provide my participants with the following information and consent forms. These forms will be translated into Arabic by the researcher himself as he is a native speaker of Arabic and has 9 years of experience in teaching English.

However, the Arabic versions of the information sheet and the consent were revised by an experienced specialized Arabic language teacher who is working for the Ministry of Education. Both English and Arabic versions of the information sheet and the consent forms were also revised by an English language teacher who is working for Salalah College of Technology to ensure accuracy of the translation and that both copies are identical. Comments have been received from both revisers and amendments have been made. The final copies are attached to this application form in addition to three signed statements from the translator (researcher himself), Arabic versions reviser (Arabic language teacher) and checker of both Arabic and English versions (English language teacher).

SUBMISSION PROCEDURE

Staff and students should follow the procedure below.

Post Graduate Taught Students (Graduate School of Education): Please submit your completed application to your first supervisor.

All other students should discuss their application with their supervisor(s) / dissertation tutor / tutor and gain their approval prior to submission. Students should submit evidence of approval with their application, e.g. a copy of the supervisors' email approval.

All staff should submit their application to the appropriate email address below.

This application form and examples of your consent form, information sheet and translations of any documents which are not written in English should be submitted by email to the SSIS Ethics Secretary via one of the following email addresses:

ssis-ethics@exeter.ac.uk This email should be used by staff and students in Egenis, the Institute for Arab and Islamic Studies, Law, Politics, the Strategy & Security Institute, and Sociology, Philosophy, Anthropology.

ssis-gseethics@exeter.ac.uk This email should be used by staff and students in the Graduate School of Education.

Please note that applicants will be required to submit a new application if ethics approval has not been granted within 1 year of first submission.

Appendix 5: Consent Form

CONSENT FORM FOR RESEARCH: (FOR THE PARTICIPANT STUDENTS)

Title of Research Project

Investigating the impact of online collaboration on EFL students writing performance and revision behaviours

(Case study)

Details of Project:

The main purpose of the study is to (1) explore the nature of the students' online collaboration and their understanding of its affordances in the light of the practice in a particular sociocultural context; (2) understand the extent to which online collaboration supports students to draw on peer feedback to inform their revisions and the extent to which this results in supporting their writing. This study will also (3) explore how online collaboration impacts the students writing performance and revision behaviours, as well as to understand if and how online peer feedback might facilitate mutual scaffolding between students.

Researcher details:

Yasir Mohammed Al Yafaei, working at Salalah College of Technology at the Ministry of Manpower. A candidate doing my PhD at the University of Exeter.

Contact Details:

For further information about the research /interview data (amend as appropriate), please contact:

Name: Yasir Mohammed Al Yafaei

Postal address: University of Exeter, School of Education, St Luke's Campus, EX1 2LU

Telephone: 00 44 (07398473552)

Email: ya259@exeter.ac.uk

If you have concerns/questions about the research you would like to discuss with someone else at the University, please contact:

First supervisor: Dr. Susan Jones Susan.M.Jones@exeter.ac.uk

Involvement:

If you do choose to participate, you will be involved in the following activities:

- Observations of you writing: you will be observed by me while you are writing online and in-class. This will happen twice – once when you are writing a first draft, and once when you are completing your writing.

My intention is to observe writing behaviours and any associated activities – collaboration and interaction with peers, how often you pause for thought or change your mind as you go along, reference to written plans, and so on.

- Text analysis: Copies of your scripts will be requested in order to examine the quality of your writing overdrafts and the way in which you use your peer's feedback. Text analysis will allow me to track your writing performance after participating in online peer feedback.

- Interviews: You will be interviewed by me after the first writing and then after redrafting, about your plans for writing and about the choices you made while you were writing. This will happen two times. You can choose the site for the interview whether in your classroom or in the library. With your permission, the interviews will be audio-recorded.

Before commencing the course, two training sessions will be provided to you to support you in participating in the online collaboration task.

Confidentiality:

Observations, recordings of focus group discussions and analysis of students’ texts will be held in confidence. The data will only be used for research purposes and will not be allowed for usage for any other than for the purposes described. This data will not be revealed to a third party in any circumstances and no one will be allowed access to them (except as may be required by the law). However, it is your right to request any part that only belongs to your participation.

Data Protection Notice:

Your data will be used and held in accordance with the Data Protection Act of the University of Exeter. Your personal email or username used to access the online platform (Moodle) which might be appear in the recordings. Discussion transcripts of the focus group will be held and used on an anonymous basis, with no mention of your name. Codes will be used to refer to the different participant groups and to members of which each participant belongs. The results of the research will also be published in anonymised form. The data gathered will be stored and may be retained for up to 5 years, then will be destroyed.

Anonymity:

Any personal data you provide will be held and used on an anonymous basis, with no mention of your name. Names and groups will also be coded.

Consent:

I have been fully informed about the aims and purposes of the project.
I understand that:

- There is no compulsion for me to participate in this research project and, if I do choose to participate, I may withdraw at any stage.
- I have the right to refuse permission for the publication of any information about me.
- Any information which I give will be used solely for the purposes of this research project, which may include publications or academic conference or seminar presentations.
- If applicable, the information, which I give, may be shared between any of the other researcher(s) participating in this project in an anonymised form.
- All information I give will be treated as confidential.
- The researcher(s) will make every effort to preserve my anonymity.

.....

.....

(Signature of participant)

(Date)

.....
(Printed name of participant)
participant)

.....
(Email address of

Yasir Al Yafaei.....
(Signature of researcher)

Yasir Mohammed Al Yafaei
(Printed name of researcher)

One copy of this form will be kept by the participant; a second copy will be kept by the researcher(s).
Your contact details are kept separately from your interview data.

Appendix 6: Arabic Versions of Consent Forms:

إقرار بالعلم والموافقة نموذج (للطلاب المشاركين)

تهدف هذه الدراسة لاستكشاف مدى فعالية التعاون عبر الإنترنت في تعلم مهارة الكتابة باللغة الإنجليزية، وكذلك استخدام الطلاب للتغذية الراجعة من زملائهم في تغيير كتاباتهم وامكانية مساهمة التعاون بين الطلاب عبر الإنترنت في تطوير كتاباتهم. هذه الدراسة سوف تسلط الضوء على تجربة عملية لمجموعة من الطلاب في مرحلة التعليم الجامعي بسلطنة عمان، وذلك للتعرف على تجربتهم، وجهات نظرهم، والتحديات التي تواجههم وتقديم المقترحات اللازمة للتغلب عليها.

بيانات الباحث:

ياسر الياضي، طالب دكتوراه بجامعة اكستر بالمملكة المتحدة، كما أعمل كمحاضر بالكلية التقنية بصلالة في سلطنة عمان.

آلية التواصل مع الباحث:

إذا كان لديكم أي أسئلة أو استفسارات حول أي جزء من أجزاء هذا المشروع البحثي، لا تترددوا في الاتصال بي على عنوان البريد الإلكتروني الخاص بي بجامعة اكستر ya259@exeter.ac.uk أو الاتصال على الرقم + 968 99634321، وفي حالة رغبتكم بالمزيد من الإيضاح يرجى التواصل مع المشرفة الأكاديمية: الدكتورة سوزان جونز على عنوان البريد الإلكتروني:

Dr. Susan Jones Susan.M.Jones@exeter.ac.uk

السرية:

نفيدكم علماً بأنه سيتم الاحتفاظ بمعلوماتكم الشخصية، وبياناتكم بسرية تامة، ولن يتم الاستفادة منها إلا لهذا الغرض البحثي، كما نفيدكم علماً بأنه سيتم التخلص من جميع الوثائق، والبيانات المستخدمة في هذه الدراسة خلال خمس سنوات من انتهائها. لذا نرجو منكم عزيزي المشارك الاطلاع على استمارة الموافقة المرفقة للحصول على معلومات أكثر بشأن الآلية المتبعة للتعامل مع بياناتك وفق قانون حماية البيانات بجامعة إكستر.

الخصوصية وإخطار بحماية البيانات:

سيتم التعامل مع البيانات الخاصة بك وفقاً لقانون حماية البيانات من جامعة إكستر. حيث سيتم إخفاء بيانات البريد الإلكتروني الشخصي أو اسم المستخدم وكلمة المرور للدخول إلى برنامج Moodle عبر الإنترنت أما تسجيلات وحوارات المجموعات المركزة فسوف يتم طمس أسماء المناقشين من جميع الوثائق المكتوبة حيث سيتم استبدال الأسماء بالرموز للدلالة على أسماء المجموعات والمشاركين بكل مجموعة دون الإشارة لهوية المشارك. علماً بأنه سيتم تخزين هذه البيانات التي تم جمعها بسرية تامة لحين التخلص منها بعد خمس سنوات من انتهاء هذا البحث.

إقرار بالعلم والموافقة:

لقد تم إخطاري بأهداف هذه الدراسة ومقاصدها. وهذا إقرار مني بالعلم والموافقة على ما يلي:
-لا يوجد ما يجبرني على المشاركة في هذا المشروع البحثي، أما وقد اخترت المشاركة برغبتي فإنه يمكنني الانسحاب في أي مرحلة.

-لدي الحق في رفض السماح بنشر أي معلومات عني.
-أي معلومات أدلي بها سوف تستخدم فقط لأغراض هذا المشروع البحثي، والتي قد تشمل المنشورات أو المؤتمرات الأكاديمية أو عروض الندوات.
-لدي علم بأن المعلومات التي سوف أدلي بها يمكن أن يتم مشاركتها مع باحثين آخرين قد يكونون مشاركين في هذا المشروع بشرط أن يتم الإشارة إلى هويتي بالترميز فقط دون ذكر الهوية الشخصية.
-سيتم التعامل مع جميع المعلومات التي سوف أدلي بها بسرية تامة.

التوقيع:

اسم المشارك:

إيميل المشارك (في حال رغبتك الحصول على نسخة من التسجيلات):

التوقيع:

اسم الباحث:

ملاحظة: يحتفظ المشارك بنسخة واحدة من هذا النموذج؛ كما سيتم الاحتفاظ بنسخة ثانية من قبل الباحث. أضف إلى ذلك سيتم الاحتفاظ بتفاصيل الاتصال الخاصة بك بشكل منفصل عن بيانات التسجيلات ومقابلات المجموعات المركزة.

Appendix 7: The Cohort Focus Groups Interview (English version)

Cohort Focus Groups Questions

RQ.1. What do students understand about the affordances and challenges of online collaboration in supporting EFL students' writing?

1. Could you please talk about the value of using online collaboration in the writing classroom? In other words, do you think it is useful for your writing? How?
2. What is your view about multiple draft writing? In other words, do you think it will improve your writing? How?
3. To what extent training prior to actual online collaboration activities is useful? How does that affect your use of the online platform?
4. Do you receive any technical support in the college? Who provides this support? How?
5. How do you describe the successful use of technology in the classroom?
6. Do you think online collaboration could save time and effort in learning? How and why?
7. Do you think using online collaboration in the classroom could draw your attention and make the lesson interesting? Elaborate more?
8. Don't you think learning with technology more appropriate in this digital age?
9. Do you think online peer feedback can facilitate mutual scaffolding between EFL students? How?
10. How does online peer feedback affect students' writing performance (quality)?
11. To what extent does online peer feedback affect students' revision behaviour?
12. Do you face any difficulties with the use online platform in your study? How? How you solve them?
13. What aspect of the online collaboration you think is most challenging? What is the main challenge?
14. Are the equipment and resources available in your college? To what extent? Are they suitable for your learning?
15. Are you assessed according to your ICT use? How?
16. Are there anything else you would like to add about the course in general, and online collaboration, peer feedback, and multiple drafting in particular?

Appendix 8: The Focus Groups Interview (Arabic version)

أسئلة المقابلة البؤرية (مجموعات التركيز)

1. تحدث عن إمكانيات وتحديات التعاون عبر الإنترنت لدعم كتابة طلاب اللغة الإنجليزية كلغة أجنبية؟

1. تحدث عن قيمة استخدام التعاون عبر الإنترنت في الفصل الدراسي للكتابة؟ بمعنى آخر، هل تعتقد أنه مفيد لكتابتك؟ كيف؟

2. ما هو رأيك حول كتابة المسودات المتعددة؟ بمعنى آخر، هل تعتقد أنه سيحسن كتابتك؟ كيف؟

3. إلى أي مدى يكون التدريب قبل أنشطة التعاون الفعلي عبر الإنترنت مفيداً؟ كيف يؤثر ذلك على استخدامك للمنصة عبر الإنترنت؟

4. هل تتلقى أي دعم فني في الكلية؟ من يقدم هذا الدعم؟ كيف؟

5. كيف تصف الاستخدام الناجح للتكنولوجيا في الفصل؟

6. هل تعتقد أن التعاون عبر الإنترنت يمكن أن يوفر الوقت والجهد في التعلم؟ كيف ولماذا؟

7. هل تعتقد أن استخدام التعاون عبر الإنترنت في الفصل الدراسي يمكن أن يلفت انتباهك ويجعل الدرس ممتعاً؟ تحدث أكثر؟

8. ألا تعتقد أن التعلم باستخدام التكنولوجيا أكثر ملاءمة في هذا العصر الرقمي؟

9. هل تعتقد أن التغذية الراجعة من الزملاء عبر الإنترنت يمكن أن تسهل التعليم المتبادل بين طلاب اللغة الإنجليزية كلغة أجنبية؟ كيف؟

10. كيف تؤثر التغذية الراجعة من الزملاء على أداء كتابة الطلاب (الجودة)؟

11. إلى أي مدى تؤثر التغذية الراجعة من الزملاء عبر الإنترنت على سلوك المراجعة لدى الطلاب؟

12. هل تواجه أي صعوبات مع استخدام منصة الإنترنت في دراستك؟ كيف؟ كيف تحلها؟

13. ما هو الجانب الأكثر تحدياً في التعاون عبر الإنترنت؟ ما هو التحدي الرئيسي؟

14. هل الأدوات والموارد متوفرة في كليتك؟ إلى أي مدى؟ هل هي مناسبة لتعلمك؟

15. هل يتم تقييمك وفقاً لاستخدامك لتكنولوجيا المعلومات والاتصالات؟ كيف؟

16. هل هناك أي شيء آخر ترغب في إضافته حول البرنامج بشكل عام، والتعاون عبر الإنترنت، وتعليقات الزملاء، والصياغة المتعددة على وجه الخصوص؟

Appendix 9: Semi- Structured Interview (English version)

Semi- Structured Interview Schedule

Project title

Investigating the impact of online collaboration on EFL students writing performance and revision behaviours

Background Information:

Interviewee's code	
Date	
Time	
Place	

Introduction:

Hello, I'm **Yasir AlYafaei**, a PhD student at Exeter University, UK. This semi-structured interview is being conducted to explore the impact of online collaboration on your writing performance and revision. Your help in this regard will definitely be appreciated.

Notice:

- This interview will take at least 30 minutes.
- This interview will be recorded if you don't mind.
- You can quit any time during the interview.
- If you have any questions, please don't hesitate to ask and if you don't want to answer any question, just let me know.
- I assure you that all the data will be kept confidential and will be used in the research work only.

Do you have any question before we start?

Semi-structured interview Questions

RQ.1. What do students understand about the affordances and challenges of online collaboration in supporting EFL students' writing

1. How do you feel about the value of online collaboration and its effect on your writing?
2. What aspects of the online peer feedback do you think were the specific challenges you encountered in participating online?
3. How have you tried to develop strategies to develop your online writing activities?
4. Have online peer feedback helped you to make better decisions? In what ways?
5. Have you tried to seek anyone's advice to help you with your drafts? What other sources of support do you use?
6. What was the focus of your peer's feedback?
7. What was your feedback focus when you were in the role of reviewer?
8. Has this online course been different from any of your face-to-face English writing classes before? If yes, how?
9. Are there any other comments you would like to share?

RQ.2. To what extent does online peer feedback as a collaborative learning technique into EFL writing classes impact students' writing performance?

1. Are second drafts always better than first drafts? How? Are there circumstances where this is not the case?
2. Do you act on a peer's feedback? When? How do you make a judgment on your peer's feedback?
3. From your own experience, did you get benefits from the online peer feedback in your writing? How?
4. Did you have any repeated mistakes in your essays? In what ways? If this is the case, why did you think you keep making the same mistakes?
5. Did online peer feedback and learning logs help you to check your progress towards your learning goals?
6. Is your ability in developing your ideas in your essay improving? In what ways? How have you understood this?
7. After all online peer feedback work, how do you feel about your writing ability in comparison to when you began working on this programme?

RQ.3. To what extent does online peer feedback as a collaborative technique impact on students' writing behaviour and revision practices?

1. While writing your first draft, you knew your peer would be your audience. Did that have any effect on your writing or not? How?
2. Did you use your peers' feedback in your revisions? How do you respond? When?
 - (i) Does it take time? Do you usually leave it and come back to it later?
3. How do you manage your emotional response to online peer feedback? What sorts of feelings do you go through when trying to deal with online peer feedback and further drafting of work?
4. How many revisions did you make during the composition process? What kinds of revisions did students make?
5. Do you go back to review your learning log? How frequently? In what ways has this been useful to you?

RQ.4. How does online peer feedback facilitate mutual scaffolding between EFL students (contrasting the two roles of reviewer and receiver)?

1. What use did you make of your peer's comments? Did you use them in your revision? If so, what uses were they? If not, why not?
2. Did you benefit from reading a peer's work?
3. Did you benefit from giving comments on a peer's work?
4. How easy/difficult was it to offer feedback?
5. Did you find it useful to see your other classmates' feedback on your drafts? What problems, if any, did you see in understanding/applying them? Elaborate on your answer.
6. What type of peer feedback do you prefer? Use specific examples (content, organisation, grammar, vocabulary, etc.).
7. Did you yourself initiate any revision without your peer's comments?

Probing questions will also be asked in response to the answers provided by students.

Appendix 10: Semi- Structured Interview (Arabic version)

المقابلة

معلومات عامة

	رمز الطالب
	التاريخ
	الوقت
	المكان

المقدمة:

تنبيه:

- ستستغرق هذه المقابلة 30 دقيقة على الأقل.
- سيتم تسجيل هذه المقابلة إذا ليس لديك مانع.
- يمكنك الانسحاب في أي وقت أثناء المقابلة.
- إذا كان لديك أي أسئلة، لا تتردد في طرحها بكل أريحية. وإذا كنت لا تريد الاجابة على أي سؤال، يمكنك عدم الاجابة.
- أؤكد لك أن جميع البيانات ستبقى سرية وسيتم استخدامها لأغراض العمل البحثي فقط.

هل لديك أي سؤال أو استفسار قبل أن نبدأ المقابلة؟

1. تحدث عن فوائد وتحديات التعاون عبر الإنترنت على مهارة الكتابة وكذلك أساليب المراجعة؟

1. ما هو شعورك حيال قيمة التعاون عبر الإنترنت وتأثيره على كتاباتك؟
2. ما هي جوانب ملاحظات الزملاء عبر الإنترنت التي تعتقد أنها التحديات المحددة التي واجهتها في المشاركة عبر الإنترنت؟
3. كيف حاولت تطوير استراتيجيات لتطوير أنشطة الكتابة على الإنترنت؟ هل ساعدك رد فعل الزملاء عبر الإنترنت في اتخاذ قرارات أفضل؟ بأي طريقة؟
4. هل حاولت التماس مشورة أي شخص لمساعدتك في مسوداتك؟ ما مصادر الدعم الأخرى التي تستخدمها؟
5. ما هو محور ملاحظات الزملاء الخاصة بك؟
6. ما هو التركيز على ملاحظاتك عندما كنت في دور المراجع؟
7. هل كانت هذه الدورة على الإنترنت مختلفة عن أي من دروس الكتابة الإنجليزية وجهًا لوجه؟ إذا كان الجواب نعم، كيف؟
8. هل هناك أي تعليقات أخرى ترغب في مشاركتها؟

2. إلى أي مدى تؤثر آراء الزملاء عبر الإنترنت كأسلوب تعلم تعاوني في فصول كتابة اللغة الإنجليزية كلفة أجنبية على أداء كتابة الطلاب (الجودة)؟

1. من تجربتك الخاصة، هل حصلت على فوائد من ملاحظات الزملاء في كتاباتك؟ ما هي؟
2. هل لديك أي أخطاء متكررة في كتاباتك؟ بأي طريقة؟ إذا كان الأمر كذلك، فلماذا تعتقد أنك تستمر في ارتكاب نفس الأخطاء؟
3. هل ساعدت ملاحظات الزملاء على الإنترنت وسجلات التعلم على التحقق من التقدم المحرز نحو تحقيق أهدافك التعليمية؟
4. هل قدرتك في تطوير أفكارك في تحسين مقالاتك؟ بأي طريقة؟ كيف فهمت هذا؟
5. بعد كل ما يتعلق بتعليقات الزملاء عبر الإنترنت، ما هو شعورك حيال قدراتك في الكتابة مقارنةً بالوقت الذي بدأت فيه العمل على هذا البرنامج؟

3. إلى أي مدى تؤثر آراء الزملاء عبر الإنترنت كأسلوب تعاوني على سلوك المراجعة لدى الطلاب؟

1. أثناء كتابة المسودة الأولى، كنت تعرف أن نظيرك سيكون جمهورك. هل كان لذلك أي تأثير على كتاباتك أم لا؟ ماذا؟
2. هل استخدمت ملاحظات الزملاء في مراجعاتك؟ كيف ترد؟ متى؟
- * هل يستغرق الأمر بعض الوقت؟ هل عادة ما تتركها وتعود إليها لاحقاً؟

- * بشكل عام، هل ردود أفعالك الأولى وردود الفعل اللاحقة على آراء الزملاء عبر الإنترنت هي نفسها أو مختلفة؟
3. كيف تدير استجابتك العاطفية لملاحظات الزملاء عبر الإنترنت؟ ما أنواع المشاعر التي تمر بها عند محاولة التعامل مع تعليقات الزملاء عبر الإنترنت والمزيد من صياغة العمل؟
4. كم عدد المراجعات التي قمت بها أثناء عملية الكتابة؟ ما أنواع المراجعات التي أجراها الطلاب؟
5. هل تعود لمراجعة سجل السجل الخاص بك؟ عدد المرات؟ بأي طرق كان هذا مفيداً لك؟ ما مدى أهمية إعادة النظر في عملك؟ (قيمة المراجعة)
- ما هو نوع المراجعات التي تقوم بها؟
- ما نوع المراجعات التي يمكنك إجراؤها؟
- ما الذي قد يعنيه أن تصبح مراجعاً أفضل لعملك الخاص؟

4. كيف تساهم التغذية الراجعة من الزملاء عبر الإنترنت في تسهيل التعلم المتبادل بين طلاب اللغة الإنجليزية كلغة أجنبية (المقارنة بين دورَي المراجعين والمتلقين)؟

1. ما استخدامك لتعليقات الزملاء؟ هل استخدمتها في المراجعة الخاصة بك؟ إذا كان الأمر كذلك، فما هي الاستخدامات؟ إذا لم يكن كذلك، فلماذا لا؟
2. هل استفدت من قراءة عمل أحد الزملاء؟
3. هل استفدت من إعطاء التعليقات على عمل أحد الزملاء؟
4. ما مدى سهولة / صعوبة تقديم الملاحظات؟
5. هل وجدت أنه من المفيد رؤية تعليقات زملائك الآخرين في مسوداتك؟ ما هي المشاكل، إن وجدت، التي تراها في فهمها / تطبيقها؟ تفصيل على إجابتك
6. ما نوع تعليقات الزملاء التي تفضلها؟ استخدم أمثلة محددة (المحتوى، والتنظيم، والقواعد، والمفردات، وما إلى ذلك).
7. هل بدأت بنفسك أي مراجعة بدون تعليقات الزملاء الخاصة بك؟

Appendix 11

Semi-structured Interview Transcript

First of all, let's talk about how online peer feedback can facilitate mutual scaffolding between EFL students and create a greater sense of community and acceptance.

R: How do you feel about the positive dimensions of receiving observations and criticisms from others in your field?

Muna: Well, objectively, I think it was a positive experience. Some individual pieces of feedback were extremely constructive in allowing me to grow and develop in my position, while others were less revealing or insightful. It was an opportunity for me to know more about myself, and about others with whom I spend a great deal of time with, and I think I can make a difference based upon the process of going through it.

R: Were you able to apply what you learned from this process in a meaningful way?

Muna: Yes, that was most definitely the case with me.

R: Were you able to transfer your newly discovered insights to the material you revised (shortly afterward)?

Muna: Indeed, I was. Most of the comments that were offered to me involved spelling and grammar, specifically.

R: Was it also constructive for you to read what one of your classmates had written?

Muna: Without a doubt, it was also invaluable.

R: Tell me about one of these occasions in more detail.

Muna: Well, for example, the person with whom I was paired have had recurring issues with using words such as "a" and "an" in a correct manner. The process of discovering that we both had these shortcomings brought us closer together and helped to establish a degree of comfort that had not previously existed. Whereupon we consulted with our teacher about this grammar point, and his strategically timed explanation helped to increase the chance that we wouldn't make the same types of mistakes going forward.

R: What are some other potential areas of personal enlightenment that this can foster?

Muna: It's possible for me to develop and consider other previously unimaginable concepts or other facets of a basic topic or subject matter which I originally introduced. The sum total of what I had in my mind was expanded after my classmates shared their ideas with me. Therefore, it was possible for me to expand and broaden my own field of inquiry, and ultimately, to record that on paper.

R: Were the occasions when you offered feedback also meaningful for you?

Muna: It's a very normal thing for anyone's mind to wander, because there are so many potential distractions coming from all directions. So, when I offered my feedback, that helped me to focus on the topic, and task, at hand. Being able to recount what I have learned and acquired helps to strengthen and reinforce my

own internal memory. It also gives me a personal sense of empowerment to know that I am assisting another person in getting better. Finally, the sense of camaraderie that was established was useful in discounting what I later realized were mistakes in my classmates' writing to me?

R: How would you characterize the level of difficulty in offering feedback?

Muna: Providing feedback is easy enough; but finding and identifying mistakes takes a higher level of concentration and being able to mentally set your mind to do that for a continuous period of time can be challenging.

R: Is it time-consuming? Do you find that it requires being done in stages, where you mentally disengage and walk away, then come back at a time when you may be more refreshed?

Muna: It can be rather tedious.

R: Tell me some more about this process.

Muna: In the beginning, I concentrate on spelling mistakes. Later on, I shift towards punctuation. To maximize the potential of receiving benefits from it, it's something you have to resolve doing on multiple occasions. One of the discoveries I have made is that the constraints of time, and meeting deadlines, can create the circumstances where it's much more common to make mistakes.

R: Would you be able to develop this piece further if you had more time?

Muna: Yes, given the proper amount of time, I think I could unquestionably improve on my end result.

R: What type of peer feedback do you prefer? Use specific examples (content, organisation, grammar, vocabulary, etc.).

Muna: Spelling and grammar are the two most universal areas of concern that I have. My self-perception of my organizational and content ability is quite high.

R: Did you yourself initiate any revision without your peer's comments?

Muna: I gave it a cursory glance, then posted it online.

R. Great. Let us turn to the impact of online peer feedback as a collaborative learning technique upon your writing performance and revision behaviour.

R: From your own experience, were you able to reap benefits from the online peer feedback in your writing? In what way did this come about?

Muna: Yes, as mentioned earlier, my colleagues might offer feedback on things which I hadn't been aware of. I have realized that I have to revise my work before posting it, as most of my mistakes could be corrected if I made the effort to revise my writing at that specific juncture.

R: Did online peer feedback and learning logs help you to monitor and adjust your progress towards your learning goals?

Muna: Absolutely

R: While writing your first draft, you knew the peer in these circumstances would be your audience. Did that have any effect on your writing or not? How?

Muna: Not in my personal case. I had been able to undergo these same techniques and approaches in my primary and secondary education, so they are familiar to me, as well as the potential benefits that can emerge from making use of them.

R: Were you able to incorporate the use of your peers' feedback in your formal writing? How do you respond? When?

Muna: Without question, I used my peers' feedback in my final drafts. Unfortunately, I wasn't able to get an overwhelming amount of advice about grammar. One of the discoveries I made was that my absolute level of grammar is higher than theirs, and this informed me that not all feedback is constructive, or well-advised. Most of the feedback I received dealt with spelling and grammar'. I made use of their feedback only after checking if their feedback were correct.

R: Ok, let's have a look at some of the things that you did change then. I'm interested in why you made these changes. For example, you added a word at line 12 or 14.

Muna: well, I altered the structure of the sentence because it wasn't clear to the readers. As you noticed in the feedback, the meaning of what I was trying to communicate was lost on the peers who reviewed my writing. It went over their heads.

R: So, was the purpose of your revisions limited to clarifying the structure of the sentences?

Muna: Yeah, but I also think it's important to consider the readers of my essays at a deeper level to in order to write an essay that can attract their specific levels of attention.

R: Right, can you be more specific about that point?

Muna: Yeah, I think that writing an attractive essay is important so students would be curious enough to glance over it initially, then be possibly inspired enough to offer their feedback or commentary later.

R: Fair enough, is it more important for you to get good grades or writing for your own satisfaction? Or are they one and the same thing?

Muna: Well, to be brutally honest with you, I focus on writing a work with a style and content that merits consistently high grades, so I want to be adaptable enough that I may recognize, and adjust, my writing style to ensure I'll have the best chance to get good grades, no matter when or where I may be writing.

R: So, you try to tailor your style of writing with what's required?

Muna: Precisely, I usually try to adapt my writing to fit what's required from the writing task that is presented. In this task, I also tried to write a piece of writing that dovetails with the interests of my colleagues

R: OK. So, what about the changes down here, line 15

Muna: well, I acted upon my classmates' specific piece of feedback that there is no need to repeat the word school in every paragraph Subsequently, I changed it to the pronoun 'it' so that I could avoid repetition.

R: OK. And then line 23, why did you ignore the comment on the word choice?

Muna: In this particular case, I think that my choice was right. However, in the interests of comity and clarification, I also made my case to the reviewer who provided the advice, and they were persuaded that my original word choice was preferable.

R: What about your emotional response to online peer feedback/ How do you manage it? What sorts of feelings do you go through when trying to deal with online peer feedback and further drafting of work?

Muna: For me, I think it is fine to receive negative feedback, but I have noticed that it may not be equally desirable or advisable for other writers to submit to that process.

R: Explain more in detail about how you process negative feedback.

Muna: For me, I think it is fine to receive negative feedback, but some students feel intimidated about the prospect of pointing out lots of mistakes on their peers' writings. I try not to allow myself to be affectively influenced by negative feedback. I believe it's being offered with my best interests at heart, and that it can help me to learn and expand my abilities in future writings.

Finally, let us talk about the affordances and challenges of online collaboration in supporting your writing.

R: How do you feel about the value of online collaboration and its effect on your writing?

Muna: It encourages collaboration among students which helped them know each other, especially at the beginning of the semester. Also, it can reduce the potentially high levels of embarrassment between students. In addition, online learning, in particular, has underscored the desirability of developing the habit of revising my writing before I take the ultimate step of posting it online. I have also improved my computer skills especially my ability to type on an English keyboard and develop a rhythm and pace for my work. Changing the atmosphere from something as formal as a classroom to something as informal as my own bedroom or sitting room can potentially motivate students to write in a more inspired way.

R: What aspects of the online peer feedback do you think were the specific challenges you encountered in participating online?

Muna: The biggest challenge for me is that some students don't detect the mistakes, although they know that mistakes exist, right under their eyes. They don't want to embarrass their colleagues, so they don't actively engage in the process of learning or engage to the extent that it can make a positive difference in their writing capability.

R: Have you tried to seek anyone's advice to help you with your drafts? What other sources of support do you use?

Muna: I used to ask one of my colleagues for assistance in providing feedback at the beginning of the course, but later I came to do more of it by myself. Most assuredly, we sometimes ask the teacher for advice. For example, two weeks ago, we committed a common mistake about the use of the articles "the" and "a". Then, we asked the teacher to explain the use of both articles. His explanation helped us avoid making the same mistake in our next writings.

R: What specific writing concerns did you concentrate on reviewing, when you had to assume that role?

Muna: I tried to focus on all elements which you asked us to do (grammar, vocabulary and the content in general).

R: Has this online course been different from any of your face-to-face English writing classes before?

Muna: It was different to a large extent.

R: How? In what way?

Muna: This online feedback allows us to provide and receive the feedback immediately after the introduction of the task. Also, it gives us enough time to think about other's mistakes as we can provide feedback at universally available times and locations.

R: Are there any other comments you would like to share?

Muna: Just I want to express my appreciation to you for presenting this task to us. It was very interesting, and I wish that this opportunity would be available to us at the next level of instruction as well.

R: OK. That's great. Thank you.

END

Appendix 12 Interview Transcript (Arabic version)

نص أسئلة المقابلة

- الباحث: في البداية، أود أن أسألك عن كيفية مساهمة التغذية الراجعة عبر الإنترنت من زملائك في الصف في تسهيل تعلم اللغة الإنجليزية وخلق شعور أكبر بتقبل المجتمع المحيط بك.
- الباحث: ما هو انطباعك بالنسبة للأبعاد الإيجابية لتلقي الملاحظات والانتقادات من الآخرين في كتاباتك؟
- منى: حسناً، من الناحية الموضوعية، أعتقد أنها كانت تجربة إيجابية. كانت بعض التعليقات الفردية مفيدة جداً بالنسبة لي لنمو وتطور كتاباتي، بينما كان البعض الآخر أقل دقة. كانت فرصة بالنسبة لي لمعرفة المزيد عن نفسي وعن الآخرين من زملائي الذين أقضي معهم وقتاً طويلاً، وأعتقد أنه يمكنني إحداث نقلة إيجابية ونوعية من خلال المرور بهذه العملية.
- الباحث: هل تمكنت من تطبيق ما تعلمته طوال هذه العملية بطريقة مفيدة؟
- منى: نعم، هذا ما حدث معي بالضبط.
- الباحث: هل تمكنت من نقل ما تعلمته حديثاً إلى الكتابة التي راجعتها (بعد فترة وجيزة)؟
- منى: في الواقع نعم. ركزت معظم التعليقات التي قدمت لي على جوانب الإملاء والنحو على وجه التحديد.
- الباحث: هل كان من المفيد لك أيضاً قراءة ما كتبه احدى زميلاتك في الصف؟
- منى: بلا شك كان أيضاً ذا قيمة وفائدة جيدة.
- الباحث: اعطيني مثالاً بمزيد من التفاصيل؟
- منى: طيب، على سبيل المثال، كان لدى زميلتي مشكلات متكررة في استخدام أدوات التعريف مثل "a" و "an" بطريقة صحيحة. لذلك كانت عملية اكتشاف أن كلانا لدينا أوجه قصور قريبتنا من بعضنا البعض أكثر في تدارك هذه الأخطاء، وساعدت على ترسيخ شعور بالارتياح بينما لم يكن موجوداً من قبل، بعد ذلك طلبنا من معلمنا توضيح نقطة القواعد هذه، وساعد شرحه على زيادة فرصة ألا نرتكب نفس أنواع الأخطاء في المستقبل.
- الباحث: ما هي بعض المجالات المحتملة الأخرى للتطوير التي يمكن تعزيزها؟
- منى: من الممكن أن أطور مفاهيم أخرى لم يكن من الممكن تصورها أو جوانب أخرى لموضوع أو موضوع أساسي قدمته في الأصل وأخذ ذلك في الاعتبار. تم توسيع المجموع الكلي لما كان يدور في ذهني بعد أن شارك زملائي في أفكارهم معي، لذلك كان من الممكن بالنسبة لي تعزيز فهمي للموضوع، وفي نهاية المطاف، تسجيل ذلك على الورق.
- الباحث: هل كانت المناسبات التي قدمت فيها التعليقات مفيدة لك أيضاً؟
- منى: من الطبيعي جداً أن يكون هناك شروء ذهني لأي شخص، لأن هناك الكثير من عوامل التشبث المحتملة القادمة من جميع الاتجاهات حولنا. لذلك عندما قدمت ملاحظاتي في وقتها ساعدتني في التركيز على الموضوع والمهمة المطروحة بشكل أدق. تساعد القدرة على إعادة سرد ما تعلمته واكتسبته على تقوية وتطوير ذاكرتي الداخلية. كما أن ذلك يعطيني إحساساً شخصياً بالتمكين لأعرف أنني أساعد شخصاً آخر في تحسين مستواه أو مستواها. أخيراً، كان الشعور بالصدقة الحميمة الذي تم الشعور بها خلال هذه العملية مفيداً في استبعاد ما أدركت لاحقاً أنه أخطاء في كتابات زملائي في الفصل.
- الباحث: كيف يمكنك وصف مستوى الصعوبة في تقديم الملاحظات؟
- منى: إبداء الرأي سهل بما فيه الكفاية. لكن العثور على الأخطاء وتحديد ما يتطلب مستوى أعلى من التركيز، وقد تكون القدرة على ضبط عقلك على التركيز للقيام بذلك لفترة متواصلة من الوقت أمراً صعباً للغاية.
- الباحث: هل تستغرق وقتاً طويلاً؟ هل تجدي أن الأمر يتطلب القيام به على مراحل، حيث تنفصلي عقلياً وتبتعد عن من حولك، ثم تعود في وقت قد تكون فيه أكثر انتعاشاً؟
- منى: يمكن أن تكون مملة بدلاً من ذلك.
- الباحث: أخبريني أكثر عن هذه العملية؟
- منى: في البداية أركز على الأخطاء الإملائية. لاحقاً، أحول تركيزي نحو علامات الترقيم، ولتعظيم إمكانية تلقي الفوائد منها، يجب عليك حلها في مناسبات متعددة. أحد الاكتشافات التي توصلت إليها هو أن قيود الوقت، والالتزام بالمواعيد النهائية، يمكن أن يخلق الظروف التي يكون فيها ارتكاب الأخطاء أكثر شيوعاً.
- الباحث: هل ستمكين من تطوير هذه القطعة أكثر إذا كان لديك المزيد من الوقت؟
- منى: نعم بالتأكيد، بالنظر إلى الوقت المناسب، أعتقد أنه يمكنني بلا شك تحسين نتيجتي النهائية.
- الباحث: ما نوع ملاحظات زملاء الذي تفضلينها؟ استخدم أمثلة محددة (المحتوى، التنظيم، القواعد، ...)
- منى: التدقيق الإملائي والنحوي هما المجالان الأكثر تفضيلاً لدي. إن تصوري الذاتي لقدراتي المفردات، إلخ) التنظيمية والمحتوى مرتفع للغاية.
- الباحث: هل بدأت بنفسك أي مراجعة بدون تعليقات زملائك؟
- منى: دائماً ما أعطي نظرة خاطفة، ولقد تمكنت في مرات عديدة من نشر أعمالتي على الإنترنت.

الباحث. ممتاز. ننتقل إلى تأثير تعليقات الزملاء عبر الإنترنت كأسلوب تعلم تعاوني على أداك الكتابي وسلوك المراجعة.

الباحث: من خلال تجربتك الخاصة، هل تمكنت من جني فوائد من تعليقات الزملاء عبر الإنترنت في كتاباتك؟ بأي طريقة حدث هذا؟

منى: نعم، كما ذكرت سابقاً، قد يقدم زملائي ملاحظات حول أشياء لم أكن على علم بها. لقد أدركت أنه يجب علي مراجعة عملي قبل نشره، حيث يمكن تصحيح معظم أخطائي إذا بذلت الجهد اللازم لمراجعة كتاباتي في هذا المنعطف المحدد.

الباحث: هل ساعدتك ملاحظات الزملاء عبر الإنترنت وسجلات التعلم على مراقبة وتعديل تقدمك نحو أهدافك التعليمية؟

منى: بالتأكيد

الباحث: أثناء كتابة المسودة الأولى، عرفت أن زميلتك في هذه الظروف ستكون جمهورك. هل كان لذلك أي تأثير على كتاباتك أم لا؟ كيف؟

منى: ليس في حالتي الشخصية. لقد تمكنت من التعود على هذه الطريقة في تعليمي الابتدائي والثانوي، لذا فهي مألوفة بالنسبة لي، فضلاً عن الفوائد المحتملة التي يمكن أن تجني عن طريق الاستفادة منها.

الباحث: هل تمكنت من دمج استخدام ملاحظات زملائك في كتابتك الرسمية؟ كيف تردى؟ متى؟

منى: بدون أدنى شك، استخدمت ملاحظات زملائي في المسودات النهائية. لسوء الحظ، لم أتمكن من الحصول على قدر كافٍ من النصائح حول القواعد. كان أحد الاكتشافات التي توصلت إليها هو أن مستواي العام في القواعد النحوية أعلى من مستواهم، وهذا جعلني أجزم بأن كل التعليقات ليست بناءة أو حكيمة. تناولت معظم التعليقات التي تلقيتها في التهجنة والقواعد النحوية. لقد استفدت من تعليقاتهم فقط بعد التحقق مما إذا كانت ملاحظاتهم صحيحة أو لا.

الباحث: ممتاز، لنلقي نظرة على بعض الأشياء التي قمت بتغييرها. أنا مهتم بمعرفة سبب إجراء هذه التغييرات. على سبيل المثال، أضفت كلمة في السطر 12 أو 14

منى: صحيح، لقد غيرت بنية الجملة لأنها لم تكن واضحة للقراء. كما لاحظت في التعليقات، فقد معنى ما كنت أحاول إيصاله إلى الزملاء الذين راجعوا كتاباتي بأنهم لم يفهموا ما أقصده.

الباحث: إذن، هل كان الغرض من مراجعاتك مقصوراً على توضيح بنية الجمل؟

منى: نعم، ولكني أعتقد أيضاً أنه من المهم النظر إلى قراء مقالاتي على مستوى أعمق من أجل كتابة مقال يمكن أن يجذب ويشد مستويات معينة من انتباههم.

الباحث: صحيح، هل يمكنك أن تكوني أكثر تحديداً في هذه النقطة؟

منى: نعم، أعتقد أن كتابة مقال جذاب أمر مهم حتى يشعر الطلاب بالفضول الكافي لإلقاء نظرة عليه في البداية، ثم ربما يكونون مصدر إلهام كافٍ لتقديم ملاحظاتهم أو التعليق عليه لاحقاً.

الباحث: واضح جداً، هل الأهم بالنسبة لك أن تحسلي على درجات جيدة أو أن تكتبي ما يرضيك؟ أم أنهما نفس الشيء بالنسبة لك؟

منى: طيب، لأكون صادقة معك، أركز على كتابة إي عمل بأسلوب ومحتوى يستحقان درجات عالية باستمرار، لذلك أريد أن أكون قابلة للتكيف بما يكفي لأتمكن من التعرف على أسلوب كتابتي وتعديله لأضمن تحقيق ذلك. سيكون لدي أفضل فرصة للحصول على درجات جيدة، بغض النظر عن الزمان والمكان الذي قد أكتب فيه.

الباحث: إذن أنت تحاولين تكييف أسلوبك في الكتابة بما هو مطلوب؟

منى: على وجه التحديد، عادةً ما أحاول تكييف كتاباتي لتناسب ما هو مطلوب من مهمة الكتابة المعروضة. في هذه المهمة، حاولت أيضاً كتابة قطعة من الكتابة تتوافق مع اهتمامات زملائي.

الباحث: جميل. إذن، ماذا عن التغييرات بالأسفل هنا، السطر 15.

منى: حسناً، لقد تصرفت بناءً على تعليق محدد لزميلاتي في الفصل بأنه لا داعي لتكرار كلمة مدرسة في كل فقرة. وبعد ذلك، قمت بتغييرها إلى الضمير "هي" حتى أتمكن من تجنب هذا التكرار.

الباحث: حسناً. ثم السطر 23، لماذا تجاهلت التعليق على "اختيار الكلمة"؟

منى: في هذه الحالة بالذات، أعتقد أن خياره كان صائباً. ومع ذلك، من أجل المجاملة والتوضيح، قمت أيضاً بتقديم وجهة نظري للمراجعة، وتم إقناعها بأن اختيار الكلمة الأول كان أفضل.

الباحث: ماذا عن استجابتك العاطفية لملاحظات الزملاء عبر الإنترنت / كيف تديرها؟ ما أنواع المشاعر التي تمرى بها عند محاولتك التعامل مع تعليقات الأقران عبر الإنترنت والمزيد من إعادة صياغة العمل؟

منى: بالنسبة لي، أعتقد أنه من الجيد تلقي ردود فعل سلبية، لكنني لاحظت أنه قد لا يكون من المرغوب فيه أو من المستحسن أن يخضع الكتاب الآخرون لهذه العملية.

الباحث: اشرحي بالتفصيل كيفية معالجة الملاحظات السلبية؟

منى: بالنسبة لي، أعتقد أنه من الجيد تلقي ردود فعل سلبية، لكن بعض الطلاب يشعرون بالخوف من احتمال الإشارة إلى الكثير من الأخطاء في كتابات أقرانهم. أحاول ألا أسمح لنفسني بالتأثر بشكل كبير بردود الفعل

السلبية. أعتقد أنه يتم تقديمه مع اهتماماتي الفضلى في صميم العمل، ويمكن أن يساعدني في التعلم وتوسيع قدراتي في الكتابات المستقبلية

أخيراً، لنتحدث عن فوائد وتحديات التعاون عبر الإنترنت في دعم كتاباتك الباحث: ما هو شعورك بالنسبة لقيمة التعاون عبر الإنترنت وتأثيره على كتاباتك؟ منى: يشجع التعاون بين الطلاب على التعرف على بعضهم البعض خاصة في بداية الفصل الدراسي. أيضاً، يمكن أن يقلل من مستويات الحرج بين الطلاب. بالإضافة إلى ذلك فإن التعلم عبر الإنترنت على وجه الخصوص، يعزز الرغبة في تطوير عادة مراجعة كتاباتي قبل أن أتخذ الخطوة النهائية لنشرها على الإنترنت. لقد قمت أيضاً بتحسين مهاراتي في استخدام الكمبيوتر وخاصة قدرتي على الكتابة على لوحة المفاتيح باللغة الإنجليزية، وتطوير إيقاع وسرعة عملي. من المحتمل أن يؤدي تغيير الجو من شيء رسمي مثل الفصل الدراسي إلى شيء آخر غير رسمي مثل غرفة النوم أو غرفة الجلوس إلى تحفيز الطلاب على الكتابة بطريقة أكثر إلهاماً. الباحث: ما هي جوانب تعليقات زملاء عبر الإنترنت التي تعتقد أنها مثلت التحديات المحددة التي واجهتها في المشاركة عبر الإنترنت؟

منى: التحدي الأكبر بالنسبة لي هو أن بعض الطلاب لا يكتشفون الأخطاء، على الرغم من أنهم يعرفون أن الأخطاء موجودة أمام أعينهم. إنهم لا يريدون إحراج زملائهم، لذلك لا يشاركون بفعالية في عملية التعلم، أو يشاركون إلى الحد الذي يمكن أن يحدث فرقا إيجابياً في قدرتهم على الكتابة. الباحث: هل حاولت طلب نصيحة أي شخص لمساعدتك في تطوير مسوداتك؟ ما هي مصادر الدعم الأخرى التي تستخدمها؟

منى: اعتدت أن أطلب من أحد زميلاتي المساعدة في تقديم التعليقات في بداية الفصل الدراسي، لكنني حذت لاحقاً القيام بالمزيد من ذلك بنفسي. بكل تأكيد، نطلب أحياناً النصيحة من المعلم. على سبيل المثال، قبل أسبوعين، "a" و "the" ارتكبنا خطأ شائعاً بشأن استخدام الأدوات ثم طلبنا من المعلم شرح استخدام كلتا الأدوات. ساعدنا تفسيره في تجنب ارتكاب نفس الخطأ في كتاباتنا التالية الباحث: ما هي مخاوف الكتابة المحددة التي ركزت عليها في المراجعة، عندما كان عليك تولي هذا الدور؟ منى: حاولت التركيز على كل العناصر التي طلبت منا القيام بها (القواعد والمفردات والمحتوى بشكل عام) الباحث: هل كانت هذا البرامج الدراسية عبر الإنترنت مختلفة عن أي من دروس الكتابة الإنجليزية وجهاً لوجه؟ منى: كانت مختلفة إلى حد كبير.

الباحث: كيف ذلك؟ في أي اتجاه؟ منى: تتيح لنا هذه التعليقات عبر الإنترنت تقديم الملاحظات وتلقيها فوراً بعد تسليم الواجب المطلوب. كما أنه يمنحنا وقتاً كافياً للتفكير في أخطاء الآخرين حيث يمكننا تقديم التعليقات في الأوقات والمواقع المتاحة عالمياً. الباحث: هل هناك أي تعليقات أخرى تودين مشاركتها؟ منى: فقط أود أن أعبر عن تقديري لكم لتقديم هذا البرنامج إلينا. كان الأمر ممتعاً للغاية، وأتمنى أن تكون هذه الفرصة متاحة لنا في المستويات التعليمية القادمة أيضاً. الباحث: حسناً. هذا جيد. شكراً لك.

النهاية .

Appendix 13 Observation Schedule

<p>Observation Context and task: (Online collaboration/ online peer feedback)</p> <p>Date and Time:</p>
<p>Students' response to questions:</p>
<p>Students' participation and collaboration as a whole:</p>
<p>Student revision behaviour (for example: using ICT, asking others for clarifications)</p>
<p>Points to discuss in the follow up interviews:</p>
<p>General Comments:</p>

Appendix 14: Correction Codes

Grammar, Vocabulary, and Mechanics:

Use the following correction codes to point out the errors. Mark the codes in your peer's draft and discuss them later.

V *Error in verb tense/verb form (active/passive voice, present/past participle)*

Example: David got a cold. He couldn't went to Madrid last week. (V) (go)

Art *Article/other determiner missing or unnecessary or incorrectly used*

Example: I read book about London. The author, however, was from Manchester. (Art) (a book)

PP *Preposition missing or incorrectly used*

Example: Please come to my office at Wednesday. (PP) (on Wednesday)

PR *Pronoun*

Example: John was so excited last night. She visited Eiffel Tower in Paris. (PR) (He)

NE *Noun ending (plural or possessive) missing or unnecessary*

Example: Two piece of chalk (NE) (pieces)

WW *Wrong word/ wrong word form*

Example: He is a linguistics. (WW) (linguist)

Example: The show is alive. (WW) (live)

SV *Subject and verb do not agree*

Example: I took three tests yesterday. The tests was so difficult. (SV) (were)

SS *Sentence structure: incorrect structures, wrong word order, sentence fragments, run-ons*

Example: Because I could not sleep. I turned on my light and read. (SS) (sentence fragment)

Example: It is nearly half past five we cannot reach town before dark. (SS) (run-on)

IT *unnecessary, incorrect, or missing transition*

Example: I wanted to cook a pizza; therefore, I had forgotten to by the ingredients. (IT) (However)

PU *Punctuation, capitalization, or spelling errors*

Example: noor and suad are from saudi arabia (PU) (Noor, Suad, Saudi Arabia)

Example: These questions are challenging. (PU) (These)

^ *Missing word*

Example: Students ^ to schools to learn under the supervision of their teachers.

(^) (go)

! Unnecessary word

Example: Oman is has many tourism attractions, particularly within the field of cultural tourism.

. (!) (is)

Appendix 15: Example of Students' First Draft of Compare and Contrast Essay



Re: High school and college .

by [redacted] - Tuesday, 30 April 2019, 6:28 PM

High school and college are educational institution. These are similar in some ways, and are different in other points. For example, both are a place of education. However, the school is smaller than college. There are many similarities and differences between these two institution.

High school and college are alike on many ways. For example, both have some similar subjects , such as English language , basic math , IT skills and science . Another similarity, there are have some similarity in the buildings. both have a libraries, labs , cafeterias and class rooms . In addition, the teachers in both are caring and have interesting ways to teach . There are some of the thing high school and the college have in common.

High school and college are different in many ways. For example, the college is bigger than school . However, In college girls and boys study together , while in school they study in different schools , On other hand , the teachers in college are from different countries and have high degree , while the teachers in school are mostly Omani and have basic degree . These are a few differences between the college and high school.

In summary, education is very important in our life. The school and college are two places of study. there are have some differences and similarities. In my opinion , there are a great places for education.

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Appendix 16: Example of Peer Feedback



Re: High school and college .

by [redacted] April 2019, [redacted]

High school and college are educational **institution (NE)**. **These (WW)** are similar in some ways, and are different in other points. For example, both are **a place (WW)** of education. However, the school is smaller than college. There are many similarities and differences between these two **institution(NE)**.

High school and college are alike **on (PP)** many ways. For example, both have some similar subjects, such as English language, basic math, IT skills and science. *Another similarity (^)there (WW)are have (V)some similarity (NE)in the buildings.Both (PU)have a libraries (Art), labs , cafeterias and class rooms.* In addition, the teachers in both are caring and have interesting ways to teach. There are some of the **thing (NE)** high school and the college have in common.

High school and college are different in many ways. For example, the college is bigger than school. However, **In (PU)** college girls and boys study together, while in school they study in different schools , **(PU)** On other hand , the teachers in college are from different countries and have high degree , while the teachers in school are mostly Omani and have basic degree . These are a few differences between the college and high school.

In summary, education is very important in our life. The school and college are two places of study. there are have some differences and similarities. In my opinion, **there (WW)are a great (Art)** places for education.

Well-done

TASK ACHIEVEMENT (CONTENT): Most parts of the text are clearly communicated as directed, or most of the questions are clearly answered.

ORGANIZATION: Information and ideas are logically organized.

Appendix 17: Example of Students' Second Draft



Re: High school and college .

by [redacted] April 2019, [redacted]

High school and college are educational **institutions**. **They** are similar in some ways, and are different in other points. For example, both are **places** of education. However, the school is smaller than college. There are many similarities and differences between these two **institutions**.

High school and college are alike **in** many ways. For example, both have some similar subjects, such as English language, basic math, IT skills and science. *Another similarity is that they have some similarities in the buildings. Both have libraries, labs, cafeterias and class rooms.* In addition, the teachers in both are caring and have interesting ways to teach. There are some of the **things** high school and the college have in common.

High school and college are different in many ways. For example, the college is bigger than the school. However, **in** college girls and boys study together, while in school they study in different schools. On the other hand, the teachers in college are from different countries and have a high degree, while the teachers in the school are mostly Omani and have a basic degree. These are a few differences between college and high school.

In summary, education is very important in our life. The school and college are two places of study. there are have some differences and similarities. In my opinion, **they** are **great** places for education.

Appendix 18: Initial Codes

- 1- Affordances of using online collaboration on EFL students writing
- 2- Enhancing the learning process
- 3- Improving computer literacy
- 4- Online collaboration motivates students
- 5- think about others' mistakes
- 6- Recall memory
- 7- Improving reading
- 8- Learning new words (vocabulary)
- 9- learning from peers' writings
- 10- Avoiding commit peers' mistakes
- 11- Boosting critical thinking
- 12- Improving speaking
- 13- Enhancing interaction and communication beyond the classroom
- 14- Relationship between Affordances of blogging and writing improvement
- 15- Social Interaction
- 16- Combination of solitary and interaction
- 17- Communication outside the classroom
- 18- Writing in social space
- 19- Avoiding committing mistakes
- 20- Minimising mistakes
- 21- Collaborative writing
- 22- Computer literacy
- 23- Improved grammatical range and accuracy
- 24- Used a different type of tenses
- 25- Paragraph cohesion and coherence
- 26- Practice the stages of process writing
- 27- Encourages a sense of audience
- 28- Opportunity to know each other
- 29- The importance of using educational blogs as a tool of teaching EFL writing
- 30- Educational blog improves English skills
- 31- Educational blog improves EFL writing
- 32- Practice inside the classroom and out classroom
- 33- Challenges of using online collaboration on EFL students writing
- 34- Traditional teaching methods
- 35- Lack of use of the platform in classes
- 36- Lack of time
- 37- Negative responses to peer feedback
- 38- Absence of the teacher's involvement
- 39- Classroom is not prepared to use technology in school
- 40- Network is not available in the college
- 41- Computers are off work in the lab
- 42- Lack of practice
- 43- Technical issues
- 44- Lack of privacy
- 45- Lack of handwriting
- 46- Health problems
- 47- Mistrust between students
- 48- Trust teachers' feedback
- 49- Traditional methods in teaching writing

- 50- ICT equipment is not always enough in classroom
- 51- Not good for teaching writing
- 52- Online collaboration in teaching EFL writing
- 53- Students don't use educational technology.
- 54- Students experience of using the types of online platforms
- 55- In what ways students improved in their writing
- 56- Paragraph organization
- 57- Mutual Scaffolding
- 58- Providing peer feedback
- 59- Improving peer's writing
- 60- Detecting mistakes
- 61- Receiving peer feedback
- 62- Metacognitive awareness
- 63- Reading peers' work
- 64- Learning new vocabulary and phrases
- 65- Expose to different writing styles
- 66- Awareness of macro level mistakes
- 67- Scaffolding behaviours
- 68- Pointing
- 69- Using correction codes
- 70- Decide of the correct alternative
- 71- Draw peers' attention to their mistakes
- 72- Advising
- 73- Offer choices
- 74- Enhancing cooperative spirit
- 75- Linking
- 76- Instructing
- 78- Providing a short lesson for peers
- 79- Questioning
- 80- Asking for more clarifications
- 81- Listening
- 82- Responding behaviours
- 83- The nature of students' practical response (action) to their peers' feedback
- 84- Receiving and applying the feedback
- 85- Receiving and engaging in discussion
- 86- Receiving but do not make use of feedback
- 87- Failing to collect feedback
- 88- Students concerns about the nature of the online task
- 89- Rejecting peers' feedback
- 90- Concerns about plagiarism
- 91- Students' writing performance
- 92- Compare-Contrast Essay
- 93- Focusing grammar and vocabulary
- 94- Cause-effect Essay
- 95- Improving their writing performance
- 96- Compare-contrast Essay vs. cause-effect Essay
- 97- Self- confident
- 98- Student's attitudes towards using online collaboration in teaching EFL writing
- 99- Students' lack of training in technology
- 100- Negative attitude towards using educational blogs
- 101- Poor time management
- 102- Needs more practice

- 103- Difficulty of use
- 104- Students views of using online platforms
- 105- Students' revision behaviour
- 106- Students as the audience
- 107- Express willingness to write for the peers
- 108- Trying to impress the peers
- 109- Students' emotional response to peers' feedback
- 110- Positive emotional response
- 111- Satisfactory
- 112- Pleasure to receive peer feedback
- 113- Reluctant to receive peer feedback
- 114- The use of the learning log
- 115- Checking the learning log at home
- 116- Referring to the learning log only before submission or exams
- 117- Students' use of smart phones to log in their online platform
- 118- Online peer feedback is important particularly in fostering collaboration
- 119- Making lesson interesting
- 120- Technology use needs to be interesting to be successful
- 121- Successful presentation is necessary
- 122- Video and pictures facilitate mutual scaffolding
- 123- Online collaboration used when equipment is available
- 124- Teacher guides students to appropriate use
- 125- Practical training for students in using computers
- 126- Lack of practical training for ICT use at university
- 127- Assessment does not include ICT use
- 128- Teacher demands students to use ICT
- 129- Lack of support by tutor when using ICT
- 130- Students expect help and support from teacher
- 131- Lack of ICT labs hindered practical training

Appendix 19 Final Thematic Map

	Themes	Codes	Sub-codes
1	EFL students' understanding of the implementation of online collaboration in their writing class	Affordances of online collaboration	Enhancing the learning process
			Improving computer literacy
			Online collaboration motivates students
			Boosting critical thinking
			Enhancing interaction and communication beyond the classroom
2		Challenges of the online collaboration	Difficulties with the use of the platform
			Lack of time
			Negative responses to peer feedback
			Absence of the teacher's involvement
3	Mutual Scaffolding	Peer feedback as mutual scaffolding	Reading peers' work
			Providing peer feedback
			Receiving peer feedback
		Scaffolding behaviours	Pointing
			Advising
		Responding behaviours	Instructing
			The nature of students' practical response (action) to their peers' feedback
			Students concerns about the nature of the online task
4	Students' writing performance	Compare-Contrast Essay	
		Cause-effect Essay	
5	Students' revision behaviour	Students as the audience	
		Students' Emotional Response to Peers' Feedback	
		The use of the learning log	