

**An Investigation into the Impact of the Flipped Classroom on Intrinsic Motivation  
(IM) and Learning Outcomes on an EFL Writing Course at a University in Saudi  
Arabia Based on Self-determination Theory (SDT)**

**Thesis submitted for the degree of**

**Doctor of Philosophy**

**at**

**The University of Leicester**

**by**

**Iman MohammedKhidr Oraif**

**School of Education**

**University of Leicester**

**2018**

## Abstract

Previous studies have demonstrated the positive impact of blended learning (BL) on English as a foreign language (EFL) writing courses. However, enhanced BL using a flipped classroom still needs to be explored. This study develops a flipped approach through the use of videos on an EFL writing course and explores its impact on EFL learners' intrinsic motivation (IM) and learning outcomes.

The research questions identified for the present study are:

1. What is the impact in terms of learning outcomes and intrinsic motivation (IM) of implementing the flipped classroom approach, in comparison with the non-flipped approach, on the English writing skills of EFL learners?
2. In both approaches, what is the relationship between on the one hand, the supporting environment offered and on the other, the satisfaction of basic psychological needs, IM and learning outcomes?
3. What is the relationship in the two approaches between IM and learning outcomes?
4. How do the learners perceive the supporting environment provided by the flipped classroom, in comparison with the non-flipped approach?

The present research was conducted with 55 female undergraduate EFL learners in the Kingdom of Saudi Arabia (KSA). Two writing classes were selected: one to receive flipped classroom teaching through the use of videos (n=24) and the other, non-flipped teaching (n=31). An experimental design was implemented using a mixed-method approach. Meanwhile, the design of the flipped classroom was underpinned by Sociocultural Theory (SCT). Six participants per group were subsequently interviewed, with diaries being collected weekly from four participants per group. One week of online interaction (via wikis) was extracted for the flipped classroom group (FCG), while both groups undertook pre- and post-writing tests and completed pre- and post-questionnaires.

This study used Deci and Ryan's (1985) self-determination theory (SDT) to construct the conceptual framework. The analysis revealed that the FCG developed their writing outcomes and IM. They also satisfied their psychological need for a sense of competence, relatedness and autonomy to a higher degree than the non-flipped group (NFG). A positive correlation was found between IM and learning outcomes, and between learning outcomes and the supporting environment for the satisfaction of the above-mentioned psychological needs. In addition, from the qualitative data gathered, different types of support were found to be helpful for satisfying these psychological needs using the flipped approach.

Several methodological and pedagogical contributions have been made by the design of the study and the flipped approach adopted. A theoretical contribution has also been made through self-determination theory (SDT). Finally, this study provides empirical evidence for policy-makers in higher education in KSA, of the need to implement the flipped classroom in EFL practice.

## **Dedication**

I dedicate this thesis to my beloved husband, parents and children. Without their support, the work would never have been accomplished. I am so thankful to them for being there for me when I needed them.

## **Acknowledgments**

I am so thankful to everyone who supported me at the University of Leicester, especially from the School of Education. I am also eternally grateful to my two supervisors: Dr. Palitha Edirisingha and Dr. Agneta Svalberg for their continuous advice and support. Dr. Palitha Edirisingha has always been generous with his time, whenever I needed it. His insights have indeed helped me throughout all the different stages of building up this study. I would like to express my sincere gratitude to Dr. Agneta Svalberg for being there for me whenever I asked her for help. She has been consistently supportive and her guidance helped me shape my ideas. I would especially like to express my appreciation to Dr. Maria Viskaduraki for providing me with advice whenever I needed it.

Aside from this, I must not forget my precious family, who have helped me pursue my dream of finishing this doctorate. Special thanks go to my lovely husband, Dr. Mohammed Fatani, who has made this journey so much easier for me through his encouragement and patience. Moreover, his support has kept me motivated to complete this work. Heartfelt gratitude also goes out to my parents, namely my father, Prof. Mohammed Khidr Oraif and mother, Khadeejah Yaseen, for their unfailing belief in me and continuous prayers.

A very special mention should also be dedicated to my children, Lein, Lujain, Elaf and Abdulrazzaq especially my youngest son, Ahmed who was born during the period of my research. I will never forget the sacrifices they made to allow me the time for this study.

Additionally, I am indebted to my sisters, for their endless encouragement, and friends for their constant support and help.

Finally, I wish to acknowledge the English language institute in King Abdul-Aziz University, Saudi Arabia, which has provided me with the opportunity to progress in my career, and my country for awarding me the scholarship and funding my study.

## Table of Contents

<b>Abstract.....</b>	<b>1</b>
<b>Dedication .....</b>	<b>2</b>
<b>Acknowledgments .....</b>	<b>3</b>
<b>Table of Contents .....</b>	<b>4</b>
<b>List of Tables.....</b>	<b>9</b>
<b>List of Figures.....</b>	<b>11</b>
<b>Glossary of Abbreviations.....</b>	<b>13</b>
<b>Definitions of Terms .....</b>	<b>14</b>
<b>Chapter One: Introduction .....</b>	<b>15</b>
1.1 Background Information .....	15
1.2 Significance of the Study .....	20
1.3 Context of the Study.....	22
1.4 Research Questions .....	23
1.5 Main Research Objectives.....	23
1.6 Organisation of the Thesis .....	25
1.7 Summary .....	26
<b>Chapter Two: Self-determination Theory (SDT) for Language Learning</b>	
<b>Motivation.....</b>	<b>28</b>
2.1 Towards Defining the Motivation to Learn a Foreign Language (FL) .....	28
2.2 Psychological Theories of Language Learning Motivation .....	30
2.2.1 The Socio-educational Model.....	31
2.2.2 The Process-oriented Model.....	34
2.2.3 Self-determination Theory (SDT): The Conceptual Framework .....	37
2.2.4 Cognitive Evaluation Theory, the Satisfaction of Basic Psychological Needs and Intrinsic Motivation (IM).....	42
2.3 Conclusion.....	56
<b>Chapter Three: The Flipped Classroom Approach and EFL Practices.....</b>	<b>58</b>
3.1 Blended Learning (BL) .....	58
3.1.1 Blended Learning (BL) Strengths and Pitfalls .....	60
3.1.2 Blended Learning (BL) Designs.....	63
3.1.3 Blended Learning (BL) and EFL Teaching.....	65

3.2 The Flipped Classroom .....	69
3.2.1 The Potentials and Pitfalls of the Flipped Classroom .....	70
3.2.2 Flipped Classroom Construction Strategies .....	75
3.2.3 The Flipped Classroom and EFL Pedagogy .....	79
3.3 Conclusions .....	81
<b>Chapter Four: Designing the Flipped Classroom on an EFL Writing Course .....</b>	<b>82</b>
4.1 The Process Approach to Teaching Writing .....	82
4.2 Types of Feedback .....	86
4.3 The Flipped Classroom Design and Implementation.....	90
4.3.1 Course Description .....	90
4.3.2 Instructional Procedures .....	91
4.3.3 Online Environment in the Flipped Classroom .....	97
4.4 Theoretical Foundation for the Implementation of the Flipped Classroom.....	101
4.5 Conclusions .....	107
<b>Chapter Five: Research Methodology .....</b>	<b>108</b>
5.1 The Research Paradigm.....	109
5.2 The Mixed-method Approach .....	112
5.3 Research Design.....	113
5.3.1 Experimental Design .....	113
5.3.2 Sampling Procedure.....	115
5.4 The Research Instruments .....	118
5.4.1 Quantitative Instruments .....	119
5.4.2 The Validity of the Quantitative Research .....	128
5.4.3 Qualitative Instruments .....	129
5.4.4 Validity and Reliability in Qualitative Research.....	134
5.4.5 Research Tools and Piloting Procedures .....	135
5.5 Data Analysis .....	139
5.5.1 Quantitative Data Analysis .....	140
5.5.2 Qualitative Data Analysis.....	142
5.6 The Role of the Researcher .....	147
5.7 Ethical Considerations .....	147
5.8 Risk Plan .....	149

5.9 Summary .....	151
<b>Chapter Six: Findings Related to the Change in Intrinsic Motivation (IM) and Learning Outcomes amongst EFL Learners and Based on Self-determination Theory (SDT).....</b>	<b>152</b>
6.1 Characteristics of the Study Groups.....	152
6.1.1 Duration of Studying English .....	153
6.1.2 Age Distribution across the Groups .....	154
6.1.3 University Level of the Participants .....	154
6.1.4 Previous Experience of Blended Learning (BL) .....	155
6.2 Analysis and Interpretation of Achievement in Writing .....	156
6.2.1 Normality Tests .....	157
6.2.2 Comparing the Students' Scores in the Baseline Writing Test .....	159
6.2.3 Changes Observed for the Flipped Classroom Group (FCG) and the Non-flipped Group (NFG), with Scores Compared to the Baseline Test.....	159
6.3 The Results and their Interpretation Regarding Intrinsic Motivation (IM) for the Non-flipped Group (NFG) and Flipped Classroom Group (FCG).....	161
6.3.1 Comparing the Responses from Both Groups at Baseline .....	162
6.3.2 Comparing Students' Responses at the End of the Study .....	163
6.4 Comparisons Involving the Satisfaction of Basic Psychological Needs and the Supporting Environment at the End of the Study .....	166
6.4.1 Comparison of the Groups' Responses Regarding the Satisfaction of Basic Psychological Needs.....	167
6.4.2 Comparison of Both Groups' Responses to the Supporting Environment for the Satisfaction of Basic Psychological Needs.....	169
6.5 The Correlation between the Supporting Environment, the Satisfaction of Psychological Needs, Intrinsic Motivation (IM), and Learning Outcomes .....	171
6.5.1 The Relationship between the Supporting Environment and the Satisfaction of Psychological Needs .....	171
6.5.2 The Satisfaction of basic Psychological Needs, Correlated with Intrinsic Motivation (IM) on an EFL Writing Course .....	175
6.5.3 Correlations with Learning Outcomes by the End of the Study.....	176
6.6 Conclusions .....	178
<b>Chapter Seven: Findings for Perceived Support in the Flipped Classroom, as Compared to the Non-Flipped Process Approach from the Learners' Perspective.....</b>	<b>179</b>

7.1 The Interviews and Diary Findings .....	179
7.1.1 The Learners' Attitudes to the Teaching Approach .....	181
7.1.2 The Learners' Attitudes to Teacher Support .....	190
7.1.3 The Learners' Attitudes to Peer-support .....	197
7.1.4 The Learners' Personal Feelings towards the Teaching Approaches.....	203
7.1.5 Summary of the Interview and Diary Findings .....	209
7.2 The Learner-Peer Online Interactive Tasks .....	210
7.3 Conclusions .....	216
<b>Chapter Eight: Discussion.....</b>	<b>217</b>
8.1 The Impact of the Teaching Approach on Intrinsic Motivation (IM) and Learning Outcomes.....	217
8.2 Learning Outcomes and their Relationship with Intrinsic Motivation (IM), the Supporting Environment, and the Satisfaction of Psychological Needs.....	219
8.2.1 The Relationship between the Learning Outcomes and the Supporting Environment .....	220
8.2.2 The Relationship between the Supporting Environment and the Satisfaction of Basic Psychological Needs .....	223
8.2.3 The Relationship between Basic Psychological Needs and Intrinsic Motivation (IM).....	223
8.3 The Relationship between Intrinsic Motivation (IM) and Learning Outcomes..	225
8.4 Learners' Perceptions of the Supporting Environment.....	226
8.4.1 Support for Autonomy.....	227
8.4.2 Support for Competence.....	232
8.4.3 Support for Relatedness.....	237
8.5 Conclusion.....	243
<b>Chapter Nine: Conclusions and Recommendations .....</b>	<b>245</b>
9.1 Introduction .....	245
9.2 Synthesis of the Main Findings.....	245
9.3 Contributions of the Research.....	248
9.3.1 Contributions to Theory .....	249
9.3.2 Methodological Contributions.....	249
9.3.3 Empirical and Pedagogical Contributions .....	251
9.4 Limitations of the Research .....	253



9.5 Implications for the Teacher in Practice .....	255
9.6 Recommendations for Future Research .....	256
9.6 Concluding Remarks .....	257
<b>Appendices</b> .....	259
Appendix A (Consent Form).....	259
Appendix B (Translated Consent Form) .....	263
Appendix C (Approval from the Institution) .....	267
Appendix D (Interview Protocol).....	268
Appendix E (Translated Interview Protocol) .....	269
Appendix F (Diary Form) .....	270
Appendix G (Pre-Post Questionnaires).....	271
Appendix H (Test Form).....	279
Appendix I (Writing Test Analytical Scale) .....	280
Appendix J (Sample of a Detailed Instructional Plan).....	282
<b>List of References</b> .....	286

## List of Tables

Table 3.1 Studies on BL in teaching EFL and ESL writing courses .....	67
Table 3.2 Strategies for ‘flipping’ instruction (summarised from Hughes, 2012) .....	76
Table 3.3 Types of tool for delivering online content (summarised from Hughes, 2012) .....	78
Table 4.1 Components of instruction for both the FCG and NFG .....	92
Table 5.1 The interviewees’ background.....	117
Table 5.2 The research instruments .....	118
Table 5.3 The grading grid .....	121
Table 5.4 Cronbach’s alpha of the writing assessment tool .....	137
Table 5.5 Summary of the reliability of the multi-item scales .....	138
Table 5.6 The participant category coding scheme, based on Zhu (1998) .....	145
Table 5.7 Coding scheme for different types of interaction (Zhu, 1998) .....	146
Table 6.1 Normality test for the pre- and post-test measurements .....	157
Table 6.2 Results of the baseline test.....	158
Table 6.3 Results of the final test .....	158
Table 6.4 The students’ scores in the baseline writing test (n=55).....	159
Table 6.5 Changes in the FCG’s achievement in the writing test, compared to the baseline and by the end of the study (n=24) .....	160
Table 6.6 Changes in the NFG’s achievement in the writing test, compared to the baseline and by the end of the study (n=31) .....	160
Table 6.7 Comparing changes in the FCG and NFG’s achievements in the writing test by the end of the study (n=55) .....	161
Table 6.8 Comparison of mean scores for responses to statements reflecting intrinsic motivation (IM) in the FCG and NFG at the start of the study (n=55).....	162
Table 6.9 Comparing the mean ranks for IM in the FCG and NFG at the start of the study (n=55) .....	163
Table 6.10 Comparison of mean scores for responses to statements reflecting IM in the FCG and NFG by the end of the study (n=55) .....	164
Table 6.11 Comparison of the mean rank for the FCG’s IM by the end of the study (n=24).....	165
Table 6.12 Comparison of the mean rank for the NFG’s IM by the end of the study (n=31).....	166
Table 6.13 Comparison between mean ranks for IM in the FCG and NFG by the end of the study (n=55) .....	166
Table 6.14 Students’ agreement with statements reflecting the satisfaction of their psychological needs by the end of the study (n=55).....	167
Table 6.15 Agreement of both groups with statements reflecting the support received on the writing course (n=55).....	170

Table 6.16 The relationship between each type of supporting environment and the satisfaction of the basic psychological need of relatedness, autonomy and competence .....	172
Table 6.17 The relationship between students' intrinsic motivation (IM) and the satisfaction of psychological needs.....	175
Table 6.18 The relationship between learning outcomes, intrinsic motivation (IM) and the supporting environment .....	176
Table 6.19 The relationship between the learning outcomes and the supporting environment for each psychological need .....	177
Table 7.1 The codes and sub-codes derived from the current study.....	180

## List of Figures

Figure 2.1 The process-oriented model (summarised from Dörnyei and Cumming, 2003) .....	34
Figure 2.2 Techniques to develop motivation in the L2 context (summarised from Dörnyei and Ushioda, 2010) .....	36
Figure 2.3 Extrinsic motivation in SDT (organised in descending order) .....	39
Figure 2.4 Conceptual framework implemented in the current study, based on SDT (adapted from Deci and Ryan, 1985) .....	44
Figure 2.5 Different strategies for fostering learners' autonomy (summarised from Stefanou et al., 2004) .....	50
Figure 3.1 The convergence of F2F teaching and distributed environments in relation to the emergence of BL (adapted from Graham, 2006, p.8) .....	59
Figure 3.2 The merits of BL implementation, as described in the literature .....	60
Figure 3.3 The potential of the flipped classroom, as described in the literature .....	73
Figure 4.1 The process approach adopted in the present study (adapted from Tribble, 1996; Mora-Flores, 2008) .....	84
Figure 4.2 Non-flipped classroom using the process approach .....	95
Figure 4.3 Flipped classroom instructional design .....	96
Figure 4.4 The construction of the groups on the VLE wiki page .....	98
Figure 4.5 The learners' work plan on the VLE welcome page .....	98
Figure 4.6 Example of the week's content on the VLE (Week 1) .....	99
Figure 4.7 The video production process .....	100
.....	101
Figure 4.8 Sample of the video lecture .....	101
Figure 4.9 RCOI framework used in the flipped classroom .....	102
Figure 4.10 The application of SCT to the flipped classroom in the present study .....	103
Figure 4.11 ZPD in SCT .....	105
Figure 5.1 The design used for the mixed-method approach in this study .....	113
Figure 5.2 The experimental study design .....	114
Figure 5.3 The process of developing the writing assessment tool .....	122
Sample of a discussion thread in the VLE wiki .....	132
Figure 5.4 Description of the fieldwork tasks for the pilot study .....	136
Figure 5.5 Codes emerging from the interviews and diaries .....	143
Figure 6.1 Numbers of years of English study .....	153
Figure 6.2 Age distribution across the groups .....	154
Figure 6.3 Participants' university levels in the Department of European Languages and Literature .....	155
Figure 6.4 The blended learning (BL) experience .....	156
Figure 6.5 Histogram of total pre-test writing results in both the FCG and NFG .....	157
Figure 6.6 Histogram of total post-test writing results in both the FCG and NFG .....	158

Figure 6.7 The relationship between support for competence and perceived competence .....	172
Figure 6.8 The relationship between support for autonomy and perceived autonomy.	173
Figure 6.9 The relationship between support for relatedness and perceived relatedness .....	173
Figure 6.10 The relationship between total environmental support and the overall score for satisfaction.....	174
Figure 7.1 Bloom’s Taxonomy (Anderson and Sosniak, 1994) .....	192
Figure 7.2 Comparison of NFG and FCG responses to the supporting environment, as presented in the interview-diary data set .....	210
Figure 7.3 Frequency of occurrence for different types of logs in online interactive tasks .....	213

## **Glossary of Abbreviations**

BL	Blended learning
CALL	Computer-assisted language learning
CMC	Computer-mediated communication
CMCL	Computer-mediated collaborative learning
EAP	English for academic purposes
EFL	English as a foreign language
ESL/ESOL	English as a second language
F2F	Face-to-Face
FCG	Flipped classroom group
FL	Foreign language
FLL	Foreign language learners
GPA	Grade point average
ICT	Information and communications technology
IELTS	International English Language Testing system
IM	Intrinsic Motivation
KSA	Kingdom of Saudi Arabia
L2	Second language
LMS	Learning management system
MoE	Ministry of Education
NFG	Non-flipped Group
RCOI	Revised Community of Inquiry
SCT	Sociocultural Theory
SDT	Self-determination Theory
SPSS	Statistical Package for the Social Sciences
TOEFL	Test of English as a Foreign Language
VLE	Virtual learning environment
ZPD	Zone of Proximal Development

## **Definitions of Terms**

Blended learning (BL): This is the integration of technology to include online components together with face-to-face (F2F) instruction, based on the course requirements.

Flipped classroom: This is a type of BL, with pre-exposure to new content online in a virtual learning environment (VLE), in order to save classroom time for practice and knowledge enrichment.

Process approach: This is a type of instruction used to teach writing. It involves a linear process, whereby the students write several drafts and the teacher provides feedback.

Intrinsic motivation (IM): This is the psychological need relating to learners' personal interest in conducting an activity and enhancing their learning. In terms of self-determination theory (SDT) (Deci and Ryan, 1985), it can be affected by the satisfaction of basic psychological needs.

Psychological needs: Basic psychological needs include the need for a sense of competence, autonomy and relatedness, which are mainly affected by the support provided in a specific environment and play a role in satisfying IM.

Sociocultural Theory (SCT): This theory states that learning is an interpersonal process, which can be hindered if it occurs in isolation. It is constructed on the basis of the Zone of Proximal Development (ZPD), mediation and scaffolding (Vygotsky and Cole, 1978).

## **Chapter One: Introduction**

### **1.1 Background Information**

This study relates to English as a foreign language (EFL) teaching and learning practices in the Kingdom of Saudi Arabia (KSA). More specifically, it relates to writing courses, whereby the integration of a flipped classroom is trialled to examine its efficacy in improving EFL learners' intrinsic motivation (IM) and learning outcomes, in comparison with a non-flipped approach. As previously described in the literature, low English language proficiency and limited attainment of language skills is a frequently encountered problem for EFL learners in the Saudi context, whereby their level of proficiency remains below expectations. In the light of this, numerous studies have been conducted to identify the reason for the problem (Abu-Ghararah, 1989; Al-Seghayer, 2005; Alshammari, 2011; Khan, 2011; Hamouda, 2012; Ur Rahman and Alhaisoni, 2013). In these studies, learners are reported as finding English courses unappealing and ineffective for motivating their learning. Accordingly, further recommendations have been made for improving EFL teaching practice all over the country.

Along with the above-mentioned issue, another primary reason for selecting the topic addressed in this study was based on my previous experience of EFL teaching at university level, where I taught a general English language course on a university preparatory year in KSA. Here, I found learners striving to produce grammatically correct paragraphs. In practice, I noticed that some students relied totally on their teacher and rarely spent any time independently looking for new information. Nor did they appear self-motivated to improve their skills. In their view, the main aim of an English course was merely to pass an exam. However, learning a language must exceed this goal, taking on a much more communicative purpose. Learning a global language, such as English, is in fact very important for equipping students to compete in the global market, especially in the fields of technology and science. In this regard, new approaches for improving current teaching practice are necessary.

According to Ur Rahman and Alhaisoni (2013), even though EFL instruction begins early in KSA – previously in Year Seven and, more recently, as early as Year Six – the level of student attainment and proficiency remains below Ministry of Education (MoE) expectations. These problems persist, even though the Saudi MoE has stipulated that the



principal goals of EFL teaching and learning are for students to acquire basic language skills in listening, reading, speaking and writing; to develop positive attitudes to learning English; to improve their general linguistic competence, and to equip themselves with the language skills required to access scientific and technological innovations from other countries, which could prove advantageous for their communities (Ur Rahman and Alhaisoni, 2013).

Javid et al. (2012) assert that most EFL learners in KSA have an extremely poor standard of English and as a result, cannot compete with learners from other Arab and Asian countries. In an earlier study on this topic in EFL teaching in general education, Ur Rahman and Alhaisoni (2013) attempted to synthesise the challenges encountered by learners in KSA, using Fareh's (2010) description. They included the following factors: inappropriate and inadequate teacher-training; a teacher-centred rather than learner-centred classroom; demotivated students, with low L2 aptitude; inadequate textbooks, teaching materials and assessment procedures, and insufficient exposure to English. However, the limited exposure of most of these Saudi EFL learners to the English language outside their classroom sessions may in fact be one of the main reasons for their low level of English proficiency. When Saudi students enter university, they then face another challenge of a placement test set by the universities concerned to ascertain their English level before starting their Preparatory Year. This is sometimes substituted by a standardised English language test, such as TOEFL. However, it is important to note that reports from TOEFL testing services between 2003 and 2009 indicate that overall, Saudi EFL students obtain lower TOEFL scores than other candidates from Asia and the Middle East (Javid et al., 2012).

Regarding their specific language skills, Saudi EFL learners have been found to have serious problems with writing, as evidenced by their low scores for the writing components of the International English Language Test System (IELTS), in comparison to their skills in listening, reading and speaking (Grami, 2010). This is supported by Al-Khairi (2013), who found Saudi learners to be extremely weak in extended writing – for example, in descriptive, argumentative, narrative and expository essays. In this regard, many EFL learners do not feel that they can go beyond paragraph level in their writing (ibid.). According to Brown (2006), writing in a foreign language (FL)/second

language (L2) is an arduous and complicated process, since the written product is the outcome of thinking, drafting and revision processes (Brown, 2006). These require specific skills that do not develop naturally, unlike speaking (*ibid.*). In fact, Raimes (1983) explains that learning to write is not an extension of learning to speak; the latter being a quite natural process taking place in childhood. In contrast, an individual needs to be expressly taught to write. For these reasons and the others mentioned above, it may be deduced that EFL learners in KSA tend to have limited EFL writing ability and this may relate to a range of different factors. Dörnyei (2014) described several L2 learner ID variables that can result in low L2 attainment, namely L2 aptitude (learning abilities); motivation (different motivational perspectives); anxiety (low self-confidence and fear); creativity (intelligence and openness to experience); willingness to communicate (the tendency to communicate using L2); self-esteem (a person's beliefs about his abilities), and learners' beliefs (for example, when a learner believes in a certain way of learning, but resists others). It is possible that these variables are responsible for low learning accomplishment among Saudi EFL learners. Thus, EFL learners in the Saudi context have mainly been described in previous literature as being negatively affected by low levels of motivation, more specifically IM. In this regard, several researchers have called for improvements to the instructional environment, in an attempt to reduce the influence of this psychological aspect on, for example, learning abilities (Alrabai, 2014).

From the above perspective, Al-Seghayer (2005) describes learners in the Saudi context as being driven by an external, rather than internal impetus. Moreover, he identifies IM as a component that is missing amongst Saudi EFL learners. He further elaborates that low levels of IM are related to English being disconnected from learners' needs. As a result, students do not consider it important to learn the language for its own sake, but rather devote their efforts to acquiring the minimum competency required to pass exams. Liton (2012) also confirms that IM is a significant element lacking amongst EFL learners in KSA. The above author conducted a study using questionnaires with a sample of 380 students and 94 teachers from different colleges across the country's various regions. The resulting study was carried out to investigate the primary strategies required to improve EFL learners' IM. Ultimately, both the teachers and students agreed that building up a good teacher-student relationship was an important

motivational approach and the teachers confirmed that motivation played a key role in EFL learning.

In a more recent study conducted by Alrabai (2014), the researcher used questionnaires to identify the type of motivation that was absent amongst EFL learners in KSA. The sample selected consisted of 826 students and 36 teachers, drawn from different universities across KSA. One group of participants came from the institution where the study was conducted. The students' responses revealed that their instrumental motivation was a highly-rated variable, while IM was a moderately-rated variable. Moreover, the students' responses indicated a low level of autonomy.

In fact, IM plays a critical role in learning and this has been proposed by Deci and Ryan (1985), who describe IM in their self-determination theory (SDT) as providing individuals with the drive to set goals and behave in ways that result in them moving towards their desired achievements. EFL learners in the Saudi educational system are mostly affected by an extrinsic influence that promotes and drives their learning. Therefore, the promotion of personal interest amongst the learners themselves may foster IM, in turn leading to higher achievement in EFL learning.

IM is mainly related to the enjoyment associated with conducting an activity (Deci and Ryan, 1985). Here, learners find their reward within the activity itself, whenever they perform it successfully. Noels et al. (2000) explain that this type of motivation is primarily linked with engagement in an activity, purely on the grounds of it being enjoyable and satisfying in itself. The classroom environment can facilitate IM, but it can also reduce it (Deci and Ryan, 1985; Noels et al., 2000). Such an environment must satisfy the basic need for perceived competence, autonomy and relatedness. Deci and Ryan (1985) propose that it is the satisfaction of these needs that predicts IM, according to their sub-theory, cognitive evaluation theory (for further details, see section 2.2.4).

Thus, keeping learners detached from the actual learning process and largely dependent on descriptions from their teacher will not allow them to develop a sense of self-determination. Learners need to be able to set their own goals and evolve their learning style to suit themselves as individuals. Therefore, providing learners with opportunities to explore their deficiencies and resolve them by themselves can help address this

situation. As a result, learners will build self-confidence and become much more engaged in the learning process.

In fact, EFL learners in KSA have tended not to have any interest in English courses, indicating a lack of IM, which in turn impacts their ability to learn (Al-Seghayer, 2005). To resolve this issue, Alrabai (2014) has identified the following strategies for developing learners' motivation in general: 1) Developing a positive relationship between teachers and learners; 2) Familiarising students with the values associated with language learning; 3) Promoting learners' self-confidence and integrating it into teaching practices; 4) Allowing group work, and 5) Developing strategies for lowering anxiety and increasing autonomy among learners. Alrabai adds that many aspects of autonomy are usually overlooked in KSA, because of the authoritative personality generally adopted by EFL teachers in that context. As a result, Saudi EFL learners are generally regarded as passive receivers and observers in the classroom.

Nevertheless, various attempts have been made to improve EFL teaching in Saudi Arabia, in a bid to enhance IM and develop EFL learning. In the wider context of the Middle East, Al-Khairy (2013), Ur Rahman and Alhaisoni (2013), and Dikli et al. (2015) have all made various recommendations for addressing the situation described above. These include encouraging learners to communicate in English while participating in various activities, thus offering them an opportunity to think critically and use the language in meaningful scenarios. Considering the Saudi context more specifically in terms of improving EFL writing skills, Adas and Bakir (2013) and Al-Khairy (2013) mention the need to consider the personal involvement of learners in their own education, which would include encouraging them to exercise and refine their writing skills in an appropriate and technology-supported, language-learning atmosphere. As a result, learners would be further encouraged to use the language, as they would not be obliged to face each other immediately – a situation that can be embarrassing and inhibiting for some students. Moreover, they would have additional time to think about what to write. At present, technology is inadequately utilised in EFL classrooms in KSA.

In fact, with the evolution of learning technologies and development of online instruction, the field of EFL teaching has changed worldwide, with correspondingly

more focus on these new approaches among EFL researchers. Nevertheless, there are different ways of including technology to teach online content in the language classroom. For instance, the use of online activities is possible both in isolation and in a teacher-fronted classroom. Moreover, these activities can be performed at different levels of emergence and in a variety of ways, rendering it difficult to identify a single instructional design in use among EFL instructors. Furthermore, many different factors can impact the choice of design and the way in which the instructional procedure is constructed. This is most likely associated with the fact that each teaching situation is unique, with its own aims and objectives. Moreover, the learners' ability to use the technology involved will inevitably have an effect.

The integration of online instruction with a face-to-face (F2F) approach is generally referred to as blended learning (BL) (Bonk and Graham, 2012). In most cases, online activities are used to provide extra opportunities for practice, with a view to supplementing the traditional teaching approach. Learners consequently participate to demonstrate their understanding of the content learned in class. BL can involve pre-exposure to content through online work, followed by F2F practice. This type of instruction is commonly referred to as the 'flipped' approach or 'flipped classroom'.

The flipped classroom is a teaching and learning approach involving activities that are traditionally performed in class, being performed outside the classroom; while activities that are usually undertaken by students at home, are carried out in class under the teacher's guidance (Uzunboylu and Karagozlu, 2015). There is a need for further investigation to define the design specifications of the flipped classroom, together with an examination of the effects of this approach on learning outcomes (*ibid.*). The current study attempts to fill this research gap and integrates a particular design of flipped classroom, followed by an examination of its impact on IM and learning outcomes on an EFL writing course in KSA.

## **1.2 Significance of the Study**

Since IM is considered to be an essential element of learning, the current study will closely examine this specific issue. Based on SDT, having a suitable environment to improve IM is important. In this regard, the EFL teaching environment may have an

impact on FL learners' IM and learning outcomes, especially when looking at the way in which the adaptation and inclusion of technology can make a positive contribution. As a result, a flipped classroom was developed for the current study based on socio-cultural theory (SCT), in order to ensure the adequacy and viability of each step of this instructional design for implementation in practice. With this theory, learning is considered as an interpersonal process, rather than an isolated one in which learners are neither assisted nor mediated (Turuk, 2008).

Thus far, I have not found a specific examination in the literature of the impact of implementing a flipped classroom through the use of videos on EFL learning in KSA. The most recent research on teaching and learning in the above context has only examined the impact of BL on courses in subjects other than EFL. Such studies have been conducted to examine the impact of an online discussion forum on existing BL courses, with a focus on students' attitudes and achievement - for example, on an Islamic Studies course (Al-Soraiey and Alqahtani, 2010). Meanwhile, one study conducted by Qenaey (2014) to examine the impact of BL on EFL reading comprehension skills at secondary school level revealed a positive impact on learners' achievement. In relation to the inclusion of BL for teaching writing to EFL learners, many studies in a wider context (other than KSA) have investigated the impact of the BL environment on learning development (Miyazoe and Anderson, 2010). However, they have failed to consider the effect of motivation, especially IM, on learning outcomes.

Chen and Jang (2010) argue that insufficient attention has been given to the significant effects of blended/hybrid courses in terms of motivation. For instance, few studies have considered BL and its influence on learners' IM (Hayes, 2009; Chen and Jang, 2010; Sucaromana, 2013; O'Reilly, 2014). Hayes (2009) used iPods and podcasting to teach foreign language learners (FLLs) Japanese, with a survey indicating that BL led to a change in their IM for learning the language. Meanwhile, in these above-mentioned studies, BL was the most strongly emphasised approach to teaching EFL, with little attention being awarded to the flipped approach. There is consequently still a need to consider the flipped classroom and examine its potential.

In fact, there is a dearth of research on the topic of the flipped classroom and its impact on EFL pedagogy, both in the current study context and further afield (Huang and Hong, 2016; Mehring, 2016). What is more, throughout the existing literature, little or no rigorous research is evident on whether the flipped classroom can develop EFL learners' IM to learn (Abeysekera and Dawson, 2015; Hung, 2015). Abeysekera and Dawson (2015) have therefore called for further work to investigate changes in students' IM, specifically in the flipped classroom. The present study adopts this approach by developing a flipped classroom design through the use of videos and examining changes to IM and learning outcomes amongst learners on an EFL writing course. Accordingly, it endeavours to fill the existing gap in the literature. It is especially hoped that the resulting findings will fill the knowledge gap relating to KSA and motivate educators to consider the use of the flipped approach on EFL courses in that context.

In summary, this is one of few studies that have examined the impact of the flipped classroom on IM and learning outcomes on an EFL writing course. The current study examines changes in IM and learning outcomes, before and after the use of the flipped classroom by using videos, as well as making comparisons with the non-flipped approach. Furthermore, the relationship between IM and learning outcomes is tested, along with other variables, such as the supporting environment for meeting basic psychological needs. These needs consist of the need for perceived competence, autonomy and relatedness. Also tested is the eventual satisfaction of these needs. The process described above is underpinned by SDT, which helped formulate the conceptual framework for this study. By reflecting on the results derived, it is hoped that policy-makers and the leadership at higher education institutions in KSA and in the Arab world in general will be informed of the potential offered by the flipped approach for EFL courses, thus promoting its adoption.

### **1.3 Context of the Study**

This study was conducted at one of the leading universities in the Middle East. The University is a state institution in Saudi Arabia, comprising 24 faculties and hosting a population of approximately 36,000 students. At the time of conducting this study, it

was offering around 80 Master's degree programmes and 41 doctoral programmes. These programmes were aimed at producing academic research and promoting effective interaction between intellectuals, as well as meeting the needs of the wider society.

In addition, the University has an e-learning and distance-learning centre, which runs many distance-learning programmes accredited as bachelor's degrees in different specialities. Further to the above, the University website describes how to use a virtual learning environment (VLE), providing a general overview of BL for university staff. According to the University's vision, BL is a method of delivering instruction, which combines an F2F with a computer-mediated approach, in order to increase student-teacher interaction (Deanship of E-learning and Distance Education, 2015). However, this is a broad definition of BL, which could be developed and more precisely defined by the University.

#### **1.4 Research Questions**

The research questions for this study were formulated as follows:

1. *What is the impact in terms of learning outcomes and intrinsic motivation (IM) of implementing the flipped classroom approach, in comparison with the non-flipped approach, on the English writing skills of EFL learners?*
2. *In both approaches, what is the relationship between on the one hand, the supporting environment offered and on the other, the satisfaction of basic psychological needs, IM and learning outcomes?*
3. *What is the relationship in the two approaches between IM and learning outcomes?*
4. *How do the learners perceive the supporting environment provided by the flipped classroom, in comparison with the non-flipped approach?*

#### **1.5 Main Research Objectives**

This study is based on an examination of the following objectives, which are mainly related to the research questions listed above:



1. To construct a flipped classroom design using videos and based on the previous literature, so that a supportive environment can be provided to promote the satisfaction of psychological needs, while also helping to develop IM and learning outcomes on an EFL writing course.
2. To examine the changes in both groups after the flipped classroom period, with regard to EFL writing achievement.
3. To examine the changes in both groups after the flipped classroom period, with regard to IM.
4. To compare the groups in terms of their response to the supporting environment and the satisfaction of their psychological need for perceived competence, autonomy and relatedness, in terms of SDT.
5. To examine the relationship between the environment's support for each of the psychological needs and the perceived satisfaction of the psychological need specified, in both the non-flipped and flipped classroom approaches.
6. To examine the relationship between perceived psychological needs and IM.
7. To examine the relationship between IM and the consequent learning outcomes.
8. To explore the perceptions of EFL learners regarding the supporting environment provided by the flipped classroom, compared to the non-flipped classroom.

In order to achieve these objectives and answer the research questions, this study employed an experimental design, wherein a mixed-method approach was adopted. Here, two groups were involved: the experimental or flipped classroom group (FCG) and the non-flipped group (NFG), this being the comparison group. Several tools were implemented to serve the various study aims proposed, namely a writing assessment, questionnaires, semi-structured interviews, diaries, and online interactive tasks. These were used to meet the stated research objectives. Meanwhile, the quantitative findings served to quantify the change in participants' IM and learning outcomes after the experiment, as well as examining any correlation between the two variables. Also examined was the correlation between other variables, such as the supporting

environment, the satisfaction of psychological needs, IM, and learning outcomes at the end of the study. These phenomena were tracked over a period of five weeks using two groups: the FCG and NFG.

Furthermore, qualitative data were used to meet the final objective of this study, thus providing a better understanding of EFL learners' perceptions of both types of teaching approach. This was achieved by comparing the participants' responses in diaries, interviews and online interactive tasks. Thematic analysis was also applied to the interviews, validated by the diary data. A coding system, proposed by Zhu (1998), was consequently used to analyse the online interactive data, in order to further validate the interview and diary findings. The coding scheme implemented follows content analysis, related to the categories of participant (Contributor, Mentor, Wanderer and Seeker) and the type of participation (information-seeking question, discussion question, answer, information sharing note, comment, reflective notes and scaffolding notes). For further clarification, see section 5.5.2. The learners' interactions with each other were analysed to examine the types of interaction taking place in the online mode, which could have assisted them in developing their IM and learning outcomes.

## **1.6 Organisation of the Thesis**

This thesis comprises nine chapters. The first chapter provides the background to the study, including the research purpose. The research objectives and questions are also set out, with a review of the related literature in Chapters Two, Three and Four – each chapter relating to a different construct under investigation in this study. For example, Chapter Two presents a comparison between different motivational theories in the EFL context, with further emphasis on IM. It is based on self-determination theory (SDT) and how it relates to FL learning ability. Chapter Two therefore discusses the relationship between the supporting environment and the satisfaction of the basic psychological need for competence, autonomy and relatedness. These are needs that all impact IM, according to SDT. The conceptual framework for this study is also outlined in Chapter Two. Chapter Three then compares BL and the flipped classroom; it describes the limitations and strengths of each approach and provides guidelines for developing the flipped classroom, with specific reference to its use in an FL classroom,

based on the existing literature. Chapter Four then outlines the flipped classroom design steps, developed on the basis of SCT. Each of these stages is described in detail.

Chapter Five presents the methodological approach and its application in the present study, with the underpinning theoretical framework on which the ontological and epistemological stances are based. A thorough explanation is given of each tool used in the current investigation, including the most appropriate methods for approaching reliability and validity. Chapters Six and Seven then present the study findings. Chapter Six covers the quantitative findings, which comprise the change in IM and learning outcomes on a writing course, where a flipped classroom by using videos is integrated, as well as the way in which the various theoretical constructs relate to each other in the learning environments. Chapter Seven covers the findings derived from investigating learners' attitudes to the respective teaching approaches; comparing the responses from the groups and using several qualitative tools as a source of triangulation.

Chapter Eight then discusses the main research findings and how they address the research questions. Finally, Chapter Nine outlines the limitations of the current study and makes recommendations for future research.

## **1.7 Summary**

This first chapter provides background information on the current study. A university in KSA was selected to serve as the research site. The EFL learners in this institution were subsequently found to have limited English writing abilities. Low IM was proposed as one of the reasons for this, resulting from current teaching practices. I therefore developed a flipped classroom design in an attempt to elevate F2F instruction. Its impact on IM and learning outcomes on an EFL writing course was subsequently examined. An experimental design was applied; comparing groups taught using a flipped classroom and the non-flipped approach. This was intended to help clarify the effect of integrating a flipped classroom into an EFL writing course, in the sense that it would help reveal the potentially positive effects of involving an online environment for teaching an EFL course. In this regard, the extent to which the flipped approach improved IM and learning outcomes was examined, with an exploration of the

participants' perceptions of the supporting environment by comparing both the non-flipped and flipped classroom approaches.

In the coming chapter, an explanation of various motivational theories is provided. More specifically, SDT will be examined, with a comprehensive description of IM, the satisfaction of basic psychological needs, and the supporting environment. SDT holds that an environment can have a crucial effect on the satisfaction of psychological needs and in turn, this can develop motivation and attainment. The literature on the flipped classroom will subsequently be reviewed, followed by a comprehensive description of the instructional design developed for the flipped classroom in the current study.

## **Chapter Two: Self-determination Theory (SDT) for Language Learning Motivation**

This chapter reviews the literature on motivation for language learning. It focuses on self-determination theory (SDT) and the distinction between intrinsic and extrinsic motivation (Deci and Ryan, 2004). Moreover, there is an emphasis on the stream of motivational psychology linking human behaviour to motives, based on human processes (Bi, 2015). Towards this end, the current chapter is organised into three sections outlining the use of SDT to describe motivation - more specifically, its relationship to learning. A comprehensive outline of these theoretical frameworks is included, highlighting the IM concept.

The first section of this chapter provides a general definition of learning motivation in a language classroom, with some general specifications for the characteristics of a motivated language learner. The second section then presents a critical review of SDT, the motivational theory. This theory is discussed in terms of its relationship to language learning, with an emphasis on the importance and impact of IM in language learning. Moreover, it describes the supporting environment as part of SDT, together with an outline of cognitive evaluation theory and its implications for satisfying the basic psychological need for *competence*, *relatedness* and *autonomy*. In turn, the satisfaction of these needs will have an effect on both intrinsic and extrinsic motivation, although the present study is mainly concerned with IM (intrinsic motivation). Additionally, this section discusses several strategies that can be used in support of the satisfaction of each of the aforementioned psychological needs; for example, the possible effect of teaching practices.

### **2.1 Towards Defining the Motivation to Learn a Foreign Language (FL)**

Motivation plays a significant role in learning and can have an impact on achievement and performance (Dörnyei, 1994; Brown, 2006; Wang, 2009; Gardner, 2010). In other words, motivation can help achieve various learning goals (Oxford and Shearin, 1994). With regard to FL teaching practices, meeting the above-mentioned psychological learning needs should increase learners' overall satisfaction with instructional processes

(Gilakjani et al., 2012). However, it is important to incorporate approaches that generate student motivation. Conversely, a 'motivated' learner is one who is willing to invest effort in learning, in an endeavour to make progress. Furthermore, motivated students do not need continuous encouragement and may even stimulate their peers in the classroom, thus promoting collaborative learning themselves (Oroujlou and Vahedi, 2011; Gilakjani et al., 2012).

Although motivation is considered to be a significant element in learning overall, the nature of its impact has not yet been fully acknowledged, specifically in the field of education. An example of this appears in work by Dörnyei and Ushioda (2010), who claim that it is difficult to identify motivation as either a cause or effect of learning. Nevertheless, it does tend to work in a cyclical relationship with knowledge; either as a positive cycle (high motivation - high achievement - high motivation), or as a negative cycle (low motivation - low achievement - low motivation). However, in previous research, it has been found that motivation directly impacts major factors of learning in the language classroom, such as learning strategies and the level of interaction with native speakers (Oxford and Shearin, 1994).

In fact, what emerges from the existing research is that motivation cannot be defined according to a single perspective. As a result, there is no consensus on the definition of language learning motivation and no theoretical description has been agreed on in the literature (Oxford and Shearin, 1994). What is apparent, however, is that it is a complex construct that can be discussed from different angles (O'Reilly, 2014). Even though Gardner and Lambert (1972) have provided a view of learning motivation as a construct with four elements, namely the desire to acquire a language, the learning goal, a positive attitude to language learning, and the effect of motivation, Oxford and Shearin (1994) find this approach to be limited, because learning goals cannot be identified from a single perspective; each language learner is likely to have a different goal, which might not correspond to the types of orientation indicated in Gardner and Lambert's definition of motivation. Oxford and Shearin (1994) further illustrate their point by citing the example of a learner studying German, purely to fulfil a language requirement. Such a goal cannot be classified under a motivation orientation. However, studying German for the purpose of communicating with a relative could be seen as an

acceptable goal and defined as a genuine motivation orientation. Therefore, it is clear that although there have been various theoretical attempts to provide a precise definition of motivation and to classify it into types, it is still negotiable.

Tracing the history of motivational theory in general, Keblawi (2006) describes movement from a behavioural framework to a cognitive revolution, culminating in an examination of the role of the individual through observation of his or her actions. Winer (1990, cited in Keblawi, 2006) explains that the concept of motivation was originally examined based on a behavioural framework, in an attempt to understand what can move a resting organism into a state of activity; mainly relying on concepts such as instinctual drives, needs, energisation and homeostasis. Theory of this nature considers reward systems to be essential for motivating individuals towards desired behaviour. On this basis, however, the motivation construct can be hard to apply in an educational context (Keblawi, 2006).

In the 1970s, cognitive development theory was expounded by Piaget, leading to the so-called ‘cognitive revolution’, whereby motivation was described as an in-built, unconscious striving towards the development of mental structures (Oxford and Shearin, 1994). This in turn led to a shift in focus on the role of the individual in terms of behaviour and changes in levels of motivation (Keblawi, 2006). In this regard, various theories of learning motivation were developed. Some of these are described in detail below.

## **2.2 Psychological Theories of Language Learning Motivation**

This section offers a detailed description of the most influential theories that could explain language learning motivation. Each of these theories sheds light on different types of motivation and its possible effects on attainment and persistence in learning. Here, the following theoretical models are described: the socio-educational model (section 2.2.1), the process-oriented model (section 2.2.2), and self-determination theory (SDT) (sections 2.2.3 and 2.2.4). To begin with, the process-oriented model and SDT define possible strategies for use in the classroom, as a means of enhancing learners’ motivation. More specifically, SDT and IM are considered here, as they represent the theoretical framework for the current study.

### 2.2.1 The Socio-educational Model

The application of social psychology caused a shift in early research into language learning motivation. This approach showed that variables, such as attitude and anxiety, combined with language aptitude, could predict language learning achievement (Gardner and Lambert, 1972). Following this, Gardner and Lambert (1972) presented their socio-educational model. Within this model, motivation was considered to be a fixed trait, based on the existing environment and impossible to enhance (Ehrman et al., 2003). It is also a model that makes a sharp distinction between motivation and orientation (Pae, 2008). These two terms were differentiated by Gardner (1985) as follows: *orientation* is identified in terms of *reasons*, while *motivation* relates to the extent to which an individual works towards learning a language and gains a sense of satisfaction as a result (Pae, 2008). Based on the socio-educational model, there are several characteristics that distinguish a motivated language learner, such as being self-driven to fulfil a particular goal, making an effort to attain this goal, and experiencing strong desire and enjoyment, accompanied by expectations of both failure and success (Gardner, 2010).

In addition, this theory of motivation examines both the individual learner's attitudes to foreign cultures and his or her reasons for learning an L2 (Jones et al., 2009). More explicitly, it distinguishes between *integrative* and *instrumental* orientations (Gardner and Lambert, 1972). Daskalovska et al. (2012) define integrative orientation as a learner's desire to integrate into the target language community and to merge with the culture of the target language speakers (Brown, 2006; Daskalovska et al., 2012). An example of this type of learner might be a student who enrolls on an FL course out of a desire to participate in the corresponding L2 community (Jones et al., 2009). On the other hand, instrumental orientation refers to the desire to learn a language for the purpose of achieving a personal goal, such as passing an exam or making other personal advancements (Brown, 2006; Daskalovska et al., 2012). An example of this might be a student who enrolls on an FL course, because he or she wants to live in the country where that language is spoken (Jones et al., 2009).

In terms of socio-educational constructs, the dichotomy between the two principal components - integrative and instrumental orientation - is still controversial. In other



words, a major problem in this theory arises, when attempting to make a distinction between the two types of motivation; considering that it is possible for both instrumental and integrative orientation to be linked with the social and psychological factors involved in a specific context (Ely, 1986). Moreover, the exact nature of the relationship between the two types of orientation, together with their impact on language achievement, is not very clear (Pae, 2008). Some studies even demonstrate the equal importance of both types of orientation. For instance, in one study by Gardner and MacIntyre (1991), both types of motivation were found to be equally important in developing the French/English vocabulary of Canadian university students. In another study by Carrió-Pastor and Mestre (2014), an EFL context in Spain was investigated, using a sample of 40 EFL learners divided into two groups. Each group consisted of 20 learners. The first group of participants were enrolled on an optional English class offered for the degree in Electrical Engineering, while the second group of participants were enrolled on an English course to improve general English language concepts. The first group were taught using the F2F approach and provided with activities by their teacher. They were also asked to perform tasks in the same way for every topic. Meanwhile, the second group were offered online materials and activities, whereby the teacher helped them plan their own learning. As a result, the learners in the second group considered what they wished to use in each lesson, with the teacher helping them to customise the learning materials to match their needs and abilities. It was consequently found through a qualitative analysis of the learners' motivation that the students in the second group had more integrative motivation, since they tended to complete the assigned activities and plan their own learning. As presented in earlier literature, an integrative orientation is consistently considered to be a better predictor of learning achievement (Pae, 2008).

In the same vein, however, it may be argued that the restriction of learning motivation to either an instrumental or integrative approach cannot be regarded as comprehensive (Oxford and Shearin, 1994) and this imposes a further limitation on this theory. It is suggested that the motivation for learning is not as simple as the integrative-instrumental dichotomy; other components of motivation may also play a significant role (Wu, 2003; Rifai, 2010). For example, the instrumental-integrative view of motivation is not so successful for predicting those learners who might not wish to

invest much effort in their language learning (Jones et al., 2009). In addition, within certain learning contexts, integrative orientation is hard or even impossible to achieve (Ehrman et al., 2003). This is clear from FL courses taught in an instructed rather than naturalistic setting, whereby the language spoken outside the classroom differs from the one being taught within it (ibid.).

Integrative motivation may also be impacted by the community and culture of the foreign language learners (FLLs) themselves, as is evident in the current context, namely KSA. Here, it is common for learners to have very limited exposure to the English language outside the classroom. The culture of the FLL can have an additional effect, where the use of the English language is associated with Westernisation by some communities. They will then refuse to accept its importance as a global language, despite recognising its importance. Such attitudes will indeed affect EFL teaching and usage in countries, where English is not the first language of communication.

A further important point with regard to integrative motivation - previously addressed by Oxford and Shearin (1994) - is the distinction between an L2 and FL environment. In the latter, learners tend to encounter the language in the classroom, but in the former, learners are far more likely to be involved with the language by practicing it in the language community. Oxford and Shearin (1994) add that an L2 is one that is learned in a place where the language is mainly used as the vehicle of everyday communication by the majority of the population; for example, French is likely to be learned by a non-native French speaker in France. The above authors expand on this point, stating that the environment will ensure that the L2 learner is stimulated on all sides by visual and auditory events in the target language. Moreover, Oxford and Shearin (1994) declare that the L2 environment creates circumstances that are in complete contrast to the FL environment, in that an FL is usually learned in a place where it is not the medium of communication; for example, French in the USA. In this regard, learners will be surrounded by speakers of their own native language, making it difficult for them to find adequate stimulation for learning the L2.

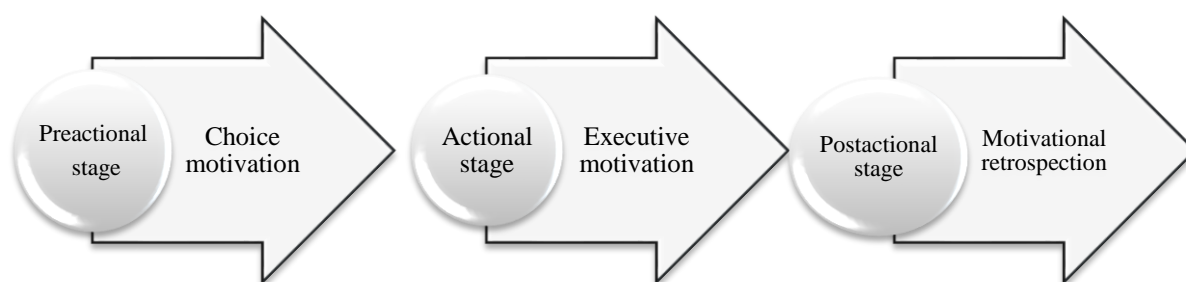
In light of the above, integrative motivation is better facilitated by an L2 environment than by an FL environment. In fact, this problem is typical of the situation facing learners in KSA, where they mostly practice English in class, because the common

language (mother tongue) in the community is Arabic. Moreover, it is likely that the learners will only be studying English as a course requirement, thus leading to diminished integrative motivation.

Further to the above, Gardner's motivational construct does not include the cognitive aspects of learning motivation (Dörnyei, 1994). In a study conducted by Oxford and Shearin (1994) on university students learning Japanese as an L2, Gardner's instrumental-integrative dichotomy was applied. In the qualitative results obtained through interviews, the students emphasised their reasons for learning Japanese, which went beyond merely instrumental or integrative orientation. These motives included receiving intellectual stimulation, seeking a challenge, showing off to friends, and enjoying the elitism of learning a language that is generally perceived to be difficult. Following this, alternative models of motivational theory were proposed. One example is Dörnyei and Cumming's (2003) description, which is based on a process-oriented approach and includes learners' desires, goals and intentions, as well as the impact of these on developing motivation. The Dörnyei (process-oriented) model will be further described in the following section.

### 2.2.2 The Process-oriented Model

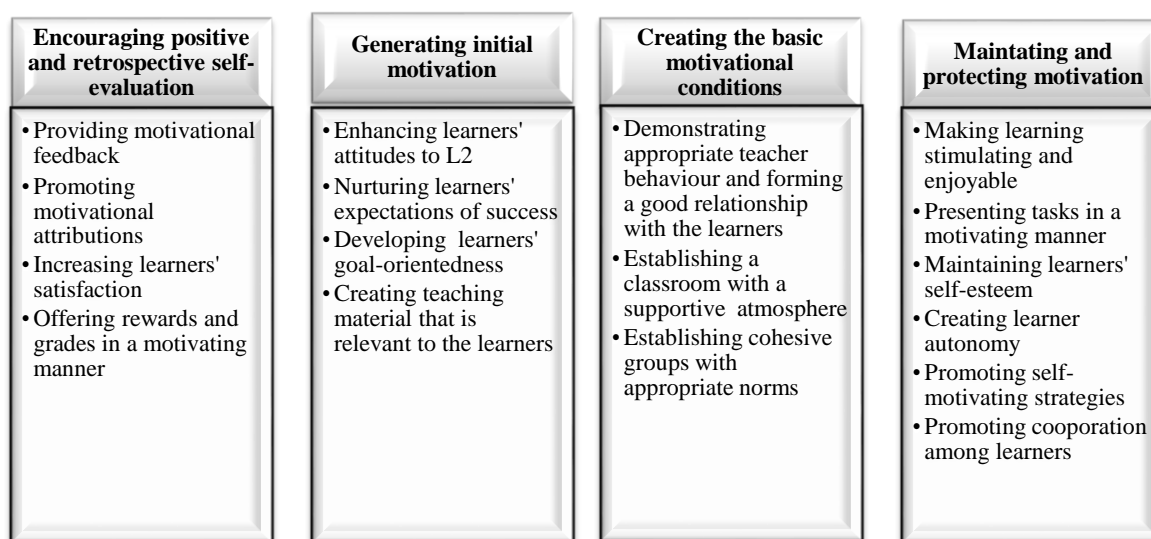
The essence of the process-oriented model is that it breaks down the overall motivational process into discrete segments, which describe how initial *desires* are transformed into *goals* and then into operationalised *intentions*, which in turn lead to *goal accomplishment* (Dörnyei and Cumming, 2003). This approach falls into three distinct phases, each of which must be completed before the final evaluation of the process (see Figure 2.1 below).



**Figure 2.1 The process-oriented model (summarised from Dörnyei and Cumming, 2003)**

According to this theory, all the phases are interlinked and are based on motivational processes as they occur in real life (Hiromori, 2009). Dörnyei and Cumming (2003) provide a full description of each of these phases. For example, in the ‘preactional’ stage, motivation is generated by individual goals. Hence, the motivational dimension of this phase is referred to as a ‘choice motivation’. In the ‘actional’ stage, after motivation has been generated, it needs to be maintained and protected while the action is being performed. This motivational dimension is known as ‘executive motivation’, because it appears during sustained activities. Here, language learners are exposed to many distracting influences, such as irrelevant comments from others and anxiety. The last stage in this process is the ‘post-actional’ stage, which follows completion of the action. It is known as ‘motivational retrospection’ and at this juncture, the students will process their experience of the activity, thus determining their future participation.

The above framework could assist with designing a classroom environment that will potentially contribute to language learning motivation. It emphasises the teacher’s positive relationship with the learners; a supportive atmosphere, and cohesive groups of learners, with shared norms being the most important elements. Dörnyei and Ushioda (2010) further describe several techniques in a framework based on the process-oriented model, which could be applied in a language classroom. These consist of encouraging positive and retrospective self-evaluation; generating initial motivation; creating the basic motivational conditions and maintaining and protecting motivation. These different techniques under each category are summarised in Figure 2.2 below.



**Figure 2.2 Techniques to develop motivation in the L2 context (summarised from Dörnyei and Ushioda, 2010)**

Following the process-oriented model, Dörnyei proposed a new *L2 Motivational Self System* made up of three major dimensions: *Ideal L2 Self*, *Ought-to L2 Self*, and *L2 Learning Experience* (Dörnyei, 2014). In consideration of this, the above author defined each of these constituents as follows:

1. *Ideal L2 Self*: An effective motivational L2 learning component to satisfy the desire to reduce the difference between the actual and ideal self.
2. *Ought-to L2 Self*: Relates to attributes that a person believes that he or she 'ought' to possess; for example, fulfilling different obligations so as to avoid negative outcomes.
3. *L2 Learning Experience*: The specific motives behind situations related to immediate learning experience.

However, unlike SDT, the potential impact of the environment on IM is not explicitly described in this motivational theory; especially not the way in which the sensation behind performing the activity can be enhanced. Moreover, previous motivational theories, namely the process-oriented model, socio-educational model, and L2 motivational self system, were mainly formulated to examine motivation for L2 learning. Meanwhile, SDT, formulated by Deci and Ryan (1985), relates to learning in

general. Hence, most of the classroom strategies presented in the process approach are considered in terms of SDT, albeit in the form of learners' autonomy and interest in an activity. SDT includes different constructs that can be useful for understanding language-learning motivation. In SDT, several psychological needs are important to consider, when endeavouring to enhance motivation. In this regard, SDT mainly considers the distinction between *IM*, *extrinsic motivation* and *amotivation*. Furthermore, SDT is constructed from different sub-theories, each describing different motivational constructs and possible strategies for enhancing motivation. SDT is further explained in the following section (2.2.3).

### **2.2.3 Self-determination Theory (SDT): The Conceptual Framework**

As mentioned briefly earlier, a theory of learning motivation was developed within educational psychology by Deci and Ryan (1985), referred to here as SDT. It focuses on an individual's ability to make choices and manage his or her interaction with the corresponding environment (Jones et al., 2009). SDT has been widely used in health research (Williams et al., 1996; Edmunds et al., 2006; Ryan and Deci, 2008; Ryan et al., 2008; Silva et al., 2010; Patrick and Williams, 2012) and in physical education research (Coleman et al., 1993; Standage et al., 2005; Chatzisarantis and Hagger, 2009; Ryan and Patrick, 2009).

In the main, the basic distinction in SDT is between *intrinsic motivation* (the pleasure gained from successfully conducting an activity) and *extrinsic motivation* (the successful completion of an activity for an expected external reward, such as a job promotion) (Deci and Ryan, 1985). In language learning, both types of motivation share similar definitions. Noels et al. (2000) define IM as motivation to engage in an activity, because it is satisfying to perform, while extrinsic motivation is an action performed to earn instrumental rewards, such as avoiding punishment or gaining a prize or payment of some kind. Although language-learning motivation is not specifically mentioned in SDT, there is some evidence to show its feasibility for predicting the occurrence and outcomes of such motivation (Noels et al., 2000; Dörnyei and Cumming, 2003). In addition to that several attempts have been made to incorporate the several elements of SDT in L2 Field (Dörnyei, 2014).

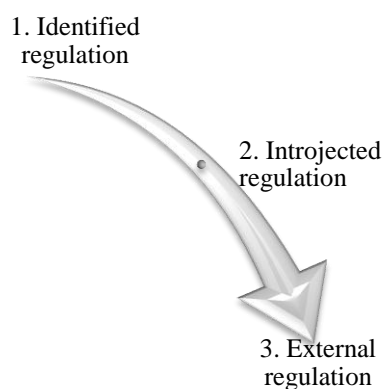
In SDT, IM has been described as the relationship between a person and a task, whereby the activity is perceived as interesting by the person engaging in it, or else the person concerned gains satisfaction from engaging in the task (Ryan and Deci, 2000). Meanwhile, extrinsic motivation relates to doing something, because it will lead to a particular outcome (ibid.). According to this theory, the two different types of motivation have an impact on each other. In fact, extrinsic motivation can have a negative impact on IM. Deci (1975) clarifies this hypothesis, illustrating how monetary rewards for performance can negatively impact IM - these rewards being contingent on performance. In contrast, extrinsic motivation is affected by external rewards and this is also known as *controlled motivation*, which could also have a negative influence on IM (Chen and Jang, 2010).

The IM concept was reflected in early research on language-learning motivation, as explained by Gardner (1985) and Ehrman et al. (2003). From Gardner's perspective, IM relates to the extent to which a person will work attentively to learn a language out of a desire to do so, as well as the satisfaction which follows the activity (ibid.). It therefore relates to doing something, purely because it is enjoyable and interesting in its own right (Noels et al., 2000). Thus, intrinsically motivated behaviour that is then sustained is the product of interest and enjoyment, developed by spontaneous feelings experienced during the activity (Black and Deci, 2000). Moreover, this motivational concept comes from within the individual and is driven by their identity and consideration for their own personal well-being (Ehrman et al., 2003). Learners may be intrinsically motivated when their learning becomes a goal. Moreover, they may find an intrinsically motivating task interesting and challenging and the reward will be their enjoyment of the activity, with accompanying feelings of competence (ibid.).

Following this, Noels et al. (2000) applied an IM taxonomy developed by Vallerand and colleagues (1992). This categorisation divides IM into three sub-types, based on the pleasurable feelings experienced during self-initiated and demanding activities: 1) *IM-knowledge* is the sense of performing an activity to satisfy a need to explore new ideas and develop knowledge; 2) *IM-accomplishment* is the sense of achieving a goal or mastering a task, and 3) *IM-stimulation* is related to the sensation stimulated by performing a task associated with fun and excitement. The present study examines

changes in IM for EFL learning, based on the above categories and including these sub-types for measuring IM.

Conversely, even though IM is considered essential, this does not imply that extrinsic motivation is of limited importance. In this regard, teachers still need to be informed of how to motivate students to perform activities that are not intrinsically motivating, but which rather require extrinsic motivation (Deci and Ryan, 2004). In other words, teachers need to seek a theory of extrinsic motivation. In these terms, it is believed that extrinsically motivated behaviour is sustained by contingencies, such as rewards (Black and Deci, 2000). However, although such behaviour would appear to be controlled by external contingencies, regulated from the outside, it can still be transformed into internal regulation through a process of internalisation (Deci and Ryan, 2004). Hence, organismic integration theory has evolved as a sub-theory in SDT to explain different forms of extrinsic motivation, the contextual factors influencing internalisation, and the integration of regulation into these behaviours (Ryan and Deci, 2000). As a result, three sub-types of extrinsic motivation have emerged (see Figure 2.3). Each type differs from the others, according to the extent to which it reflects controlled regulation (Black and Deci, 2000).



**Figure 2.3 Extrinsic motivation in SDT (organised in descending order)**

Each one of these extrinsic motivation regulations has its own definition and importance for language learning. Regarding *identified regulation*, which is highly internalised and self-determined, learners agree to commit to a specific behaviour, because they can see its importance; for example, they might read a book because it will



help them achieve a major goal (Deci and Ryan, 2004). Regarding the other two types of less self-regulated extrinsic motivation, such as *introjected regulation*, learners will seem to be less self-determining than in *identified regulation* (Dörnyei and Cumming, 2003; Pae, 2008). For instance, although learners may agree to enact certain behaviours in *introjected regulation*, they could still feel pressure as a result; for example, they might read a book to satisfy their desire to be a good student, without actually seeing the point of it for themselves. Meanwhile, in *external regulation*, motivation only arises as a result of an environmental event, such as a reward (Deci and Ryan, 2004).

In addition to the intrinsic and extrinsic motivation continuum, Deci and Ryan (1985) have also defined *amotivation*. This refers to a state of being where an individual fails to associate his or her actions with the consequences of these actions, due to reasons beyond their control (Dörnyei and Cumming, 2003). In this situation, the individual will have no reason to be either intrinsically or extrinsically motivated to perform an activity, which will soon lead to them abandoning it.

In earlier studies, it was found that the majority of EFL learners were extrinsically motivated. This mainly relates to an increase in social demands (Abeysekera and Dawson, 2015). Regarding the Middle Eastern context, such as in KSA, a study conducted by Moskovsky and Alrabai (2009), involved questionnaires being distributed to 55 university learners, revealing that IM was an important motivational orientation that was lacking in the above-mentioned study sample. The researchers concerned consequently made recommendations for improving teaching practice, such as providing an enjoyable environment to support independent learning. In the current study, IM was examined after providing the learners with a supportive environment. This is described using various sub-theories of SDT, associated with the satisfaction of psychological needs and linked to IM, namely cognitive evaluation theory, which is described in the next section (2.2.4).

In fact there are other sub-theories that include SDT. Each of these relates to a different type of motivation. Furthermore, they highlight the impact of the environment on development and support other components, such as the satisfaction of the need for motivation and for a sense of well-being. Ryan (2009) gives a comprehensive description of these, as outlined below.

Organismic integration theory involves the process of internalising different extrinsic motives. In this sub-theory, the focus is on the level of internalisation. Therefore, there is a movement from external regulation to introjection (for example, being involved in behaviours in order to gain approval), followed by identification and eventually, integration. Therefore, external regulation is the least autonomous form of extrinsic motivation, while integrated regulation is the most autonomous. In addition, organismic integration theory suggests that internalisation and integration are facilitated by contextual support for autonomy, competence and relatedness. Here, an individual is most likely to internalise and integrate a practice if he or she has choices over it, efficacy through engagement with it, and a relationship with those who convey it.

Meanwhile, causality orientation theory refers to individual differences in the way that people orient towards various elements in the environment by regulating their behaviour. If autonomy-oriented, an individual will orient towards what interests him or her and behave with congruence. If control-oriented, the individual will regulate his or her behaviour by orienting towards reward contingencies and social controls. Finally, if impersonally-oriented, the individual will focus on his or her lack of personal control. Causality orientation theory also looks at the effect of stimuli on certain orientations in individuals and how these affect their motivation.

Basic psychological needs theory, on the other hand, expands on the concept of basic needs satisfaction by connecting them with wellness. This means that each need will have an independent effect on wellness. Moreover, the impact of any behaviour on well-being is related to the satisfaction of needs.

Finally, goal content theory concludes that extrinsic goals, such as fame, do not promote the satisfaction of needs and neither do they develop well-being, even if they are attained. Conversely, goals like developing relationships or contributing to the community predict needs satisfaction and as a result, can enhance health and wellness.

However, none of the above-mentioned sub-theories are of concern in the present research. Instead, cognitive evaluation theory was considered, as it mainly relates to the IM construct, given that this sub-theory considers the role of needs satisfaction in increasing or undermining IM.

#### **2.2.4 Cognitive Evaluation Theory, the Satisfaction of Basic Psychological Needs and Intrinsic Motivation (IM)**

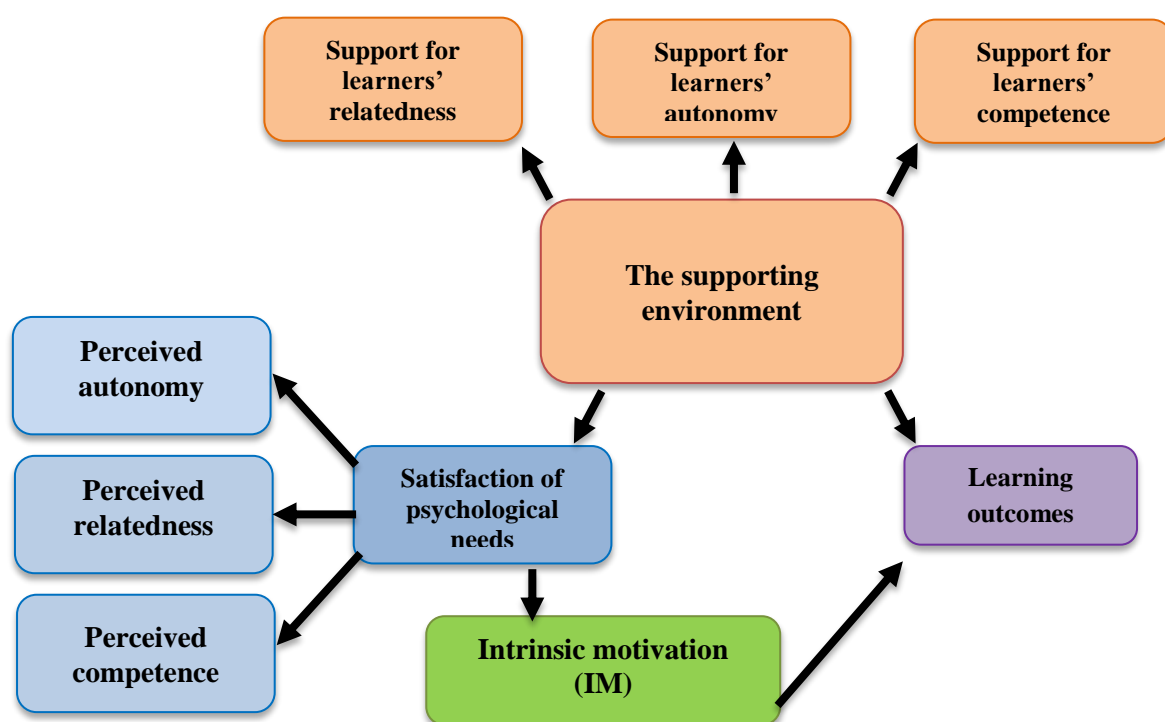
Cognitive evaluation theory has been proposed as part of SDT by Deci and Ryan (1985). In this micro-theory, the interpersonal context is a major feature (Black and Deci, 2000). It determines the extent to which individuals are autonomous and perceive a high level of needs satisfaction, thereby predicting IM (Black and Deci, 2000). In cognitive evaluation theory, specific factors are important for identifying why someone may or may not be intrinsically motivated (Jones et al., 2009). In this regard, the satisfaction of basic psychological needs (the need for *autonomy*, *competence* and *relatedness*) will help individuals become more assured and self-determining, with their psychological well-being subsequently being enhanced (Niemic and Ryan, 2009). Deci and Ryan (1985) define these needs as follows: *autonomy* refers to learners' self-determination of when and how to perform a certain task; *competence* develops where skills are acquired to manipulate and control the environment - in other words, a focus on the outcome of one's actions and a desire to be effective in the environment - and *relatedness* is the feeling of association and relationship with others. These definitions are used in the current study with reference to these psychological needs. SDT further asserts that providing learners with a learning experience to support the satisfaction of such psychological needs is important for academic engagement and for achieving more satisfactory learning outcomes (Niemic and Ryan, 2009). Conversely, if these psychological needs are not met, the result is likely to be lower engagement and a poorer learning outcome (ibid.).

Generally speaking, Dörnyei and Ushioda (2010) highlight how the learning environment ideally helps motivate L2 learners. Furthermore, the teacher's role is identified as important for improving or diminishing learners' IM through the adoption of appropriate teaching strategies (Jones et al., 2009). As a result, the contextual surroundings will have an impact on IM through the mediation of psychological needs satisfaction.

Chen and Jang (2010) identify contextual support as a key concept in SDT, with the SDT framework helping to identify the mechanisms of contextual factors, such as

instructors' behaviour or social interaction. Both of these factors can enhance IM and indicate more effective strategies for supporting learners' development. The above authors pinpoint two types of support: support for autonomy and support for competence. In this regard, learners are found to demonstrate higher engagement with their learning and greater learning achievement, the more autonomous and self-determined they are. The above study was conducted on two online courses, already in existence and taught via WebCT over a period of 10 days. The identified programmes were designed for individuals without a renewable teaching certificate, thus enabling them to qualify as Special Education General Curriculum Consultative P-12 teachers. The sample consisted of 267 participants and the study employed a correlational research design. In terms of the data collected, a survey was conducted, consisting of four categories: motivation, contextual support, needs satisfaction and learning outcomes, together with demographic information. The results revealed that learning outcomes were not directly predicted by the contextual support, but rather through the mediation of needs satisfaction. However, the above researchers referred to this as a deficiency in the grading. Meanwhile, they called for further experimental studies to explore the relationship between these variables.

Regarding the above, the current study examines the impact of the supporting environment on an EFL writing course, in terms of the satisfaction of psychological needs and IM. The learning outcomes are therefore to be taken into consideration and the current researcher has consequently drawn up a conceptual framework based on SDT (see Figure 2.4). A further description of IM and its impact on language learning is to be found in the coming section.



**Figure 2.4 Conceptual framework implemented in the current study, based on SDT (adapted from Deci and Ryan, 1985)**

#### ***2.2.4.1 Emergence of the Intrinsic Motivation (IM) Concept in Language Learning***

Intrinsic motivation (IM) has emerged as an important phenomenon, with effects on learning and achievement that can be catalysed by teaching practices (Van Lier, 1996; Ryan and Deci, 2000). Early definitions of IM relate to involvement in activities (Deci, 1975). Many activities are in fact intrinsically motivating and the rewards for these are mediated within the individual, who consequently engages in them; not merely because they will invoke an external reward (such as money, praise, food, etc.), but rather to produce an internal reward that is satisfying in itself. According to Koch (1956, cited in (Deci, 1975), if a person is intrinsically motivated, he or she will be committed to and engaged in the task, even when experiencing fatigue, due to being highly organised. All these identifications of IM demonstrate its importance for the successful performance of a specific task.

A study conducted by Pae (2008) examined the relationship between Gardner's orientations and motivational SDT constructs, together with a structural analysis to identify the best predictor of L2 learning outcomes. The sample consisted of 315

Korean EFL students, specialising in Humanities and Social Sciences at university. The results revealed that IM was the only directly related element in L2 acquisition. This may be due to the notion that an intrinsically motivated learner is perhaps someone who willingly devotes energy and time to their studies (Niemiec and Ryan, 2009). However, in order to approach a satisfactory level of IM, a careful consideration of the supporting environment is essential and this would relate to the satisfaction of psychological needs. A description of how to support the satisfaction of each psychological need in general and more specifically in the context of the current study is emphasised in the next section.

#### ***2.2.4.2 A Supporting Environment for the Satisfaction of Psychological Needs***

Learners are not necessarily born naturally liking or disliking specific activities, but the learning environment may be intentionally constructed to increase or decrease their enjoyment of an activity (Jones et al., 2009). The supporting environment can therefore play a critical role in meeting essential psychological needs (such as the need for *competence, autonomy or relatedness*). Hence, it can further enhance internalisation, attainment and motivation, based on SDT (Black and Deci, 2000). A sample of strategies relating to support for motivation itself has been provided by Dörnyei and Ushioda (2010, p.51), in their description of the three-level framework of L2 motivation presented by Dörnyei (1994). Dörnyei conceptualised motivation within a framework of three related but distinct levels: 1) the language level, which includes different components linked with the notion of L2, such as culture and community, together with intellectual and pragmatic values and the benefits associated with them, 2) the learner level, which involves the individual characteristics brought by the learners to the learning situation, and 3) the learning situation level, consisting of course-specific motivational components linked with the syllabus, teaching materials, teaching methods and learning tasks; teacher-specific motivational components, concerning the impact of the teacher's personality, behaviour and teaching style, and group-specific motivational components, relating to the group dynamic of the learners involved.

However, even when these strategies are implemented, there must still be the assurance that they will help achieve further engagement. This will in turn have a positive impact

on motivation and learning outcomes based on SDT (Black and Deci, 2000). Nevertheless, specific identification of the relevant type of engagement is not reflected in this theory, which applies to most theories in the field of language acquisition, wherever the term ‘engagement’ is not defined (Svalberg, 2009). Platt and Brooks (2002), however, have distinguished different types of engagement according to their occurrence at speech level: *language-based engagement* and *task-based engagement*.

In Platt and Brooks’ (2002) description, *language-based engagement* can be determined within individual students’ speech activity, insofar as they repeat themselves or respond to questions and statements from others. It relates to linguistic information, such as lexical items of concern to the learner. Thus, learners will be more or less committed, depending on how much discursive work they produce. Regarding *task-related engagement*, this is defined by Platt and Brooks (2002) as being found in discourse, whereby learners demonstrate their own way of structuring a task in private or social speech. It could involve learners establishing specific goals, whereby they find it important to move from merely performing a task, to actually engaging with it. Evidence of this would appear at a verbal level; for example, in order to increase fluency, there would be more use of the target language and less procedural talk.

However, in expanding the original definition to provide a clearer view of engagement, Svalberg (2009) relates it to language awareness. To ensure the applicability of this expanded definition, Svalberg undertook an analysis of qualitative data through observation of ESOL classes and interviews with the students involved, who then identified the nature of their language use. Here, the learner was the agent and the language was either an object or vehicle for communication. Considering language as an object involves undertaking language tasks through the medium of the target language, with a great deal of emphasis on the exercise itself. As a result, the language is considered as a vehicle for carrying out a communicative task, without taking into account any aspect other than communicative efficacy.

In addition to the above and in order to properly identify engagement, it must be defined according to the following three aspects:

- Cognitively, the engaged individual is alert, pays focused attention and constructs his or her own knowledge.
- Affectively, the engaged individual has a positive, purposeful, willing and autonomous disposition towards the object (the language or the language and/or what it represents)
- Socially, the engaged individual interacts and imitates (Svalberg, 2009, p.6).

These constructs help distinguish the notion of engagement from other similar concepts, such as motivation. Meanwhile, engagement, according to Svalberg's definition, shares the affective construct with motivation, mainly in relation to perceived autonomy. This is based on Van Lier's (1996) definition of autonomy as a personal sense of responsibility for one's own actions. Consequently, the way in which the environment is constructed will be crucial to its effect on an individual's attitudes.

Even though existing instructional procedures, such as those presented in Figure 2.4, can help build a supporting environment, it is essential to consider the extent to which individuals are autonomous and perceive their level of needs satisfaction (Deci and Ryan, 1985). Along these lines, Black and Deci (2000) applied SDT in their study to examine the effects of students' course-specific self-regulation and their perception of their instructor's support for autonomy in relation to academic performance and adjustment. The results revealed, through questionnaires completed by 298 participants on an Organic Chemistry course, that students' reports of joining the course for autonomous reasons predicted higher perceived competence and enjoyment, with lower anxiety. It was also related to whether or not students dropped their course. Here, the learners appeared to engage more if they found that the classroom context helped meet their psychological needs (Stefanou et al., 2004). Further discussion into ways of supporting a sense of autonomy, competence and relatedness is included in the coming sections.

#### a. Support for Autonomy

Regarding the first of the above-mentioned needs, autonomy mainly relates to the learner's need to be in control and to retain their independence to perform tasks that can foster learning (Chen and Jang, 2010). An earlier description of an environment that



supports autonomy was provided by Black and Deci (2000); it presented a highly authoritative individual (for example, a teacher) considering another party as having lower authority (for example, a student) and taking into account their knowledge, perspectives and feelings. The highly authoritative party then supplies the weaker party with various information and opportunities, along with decreasing demands and pressures. The authoritative figure can thus compel others to behave in specific ways through the use of seductive means, as well as implicit or explicit penalties and rewards. However, this may undermine the weaker party's self-determination (ibid.). Therefore, a consideration of the way in which interaction takes place between different parties in the instructional environment is important for fostering a sense of autonomy. Reflecting on the importance of supporting autonomy, O'Reilly (2014) conducted a study over an eight-week period on an intensive academic language programme, with a sample consisting of 77 adult learners. The subsequent correlation analysis revealed that support for autonomy is strongly correlated with higher levels of IM and more moderately, with grade point average (GPA), thereby accounting for 9% of the variance in learners' GPA. In O'Reilly's study, SDT was used as a theoretical framework, with the theory's definition of autonomy being adapted.

In relation to teaching practices, teachers can often develop students' persistence and sense of autonomy (Ehrman et al., 2003). For example, they can support more autonomous feelings by providing learners with the necessary information and then encouraging them to use it to solve problems their way (Black and Deci, 2000). In a previous study conducted by Deci et al. (1981), the researchers assessed state elementary teachers' reports of their orientation towards supporting learners' autonomy, as opposed to controlling their behaviour. The results revealed that children taught by teachers who support autonomy reported higher levels of IM and perceived more competence and self-esteem over time, than was evident in children assigned a controlling teacher. In the same vein, Noels (2001) conducted a study on 322 native English speakers learning Spanish at a university in California, examining the relationship between the students' perception of their teachers' *communicative style* (the teacher's involvement with the learners through, for example, feedback) and the learners' IM. The above authors found that controlling behaviour on the part of a teacher led to reduced learning outcomes, because the learners tended to lose their

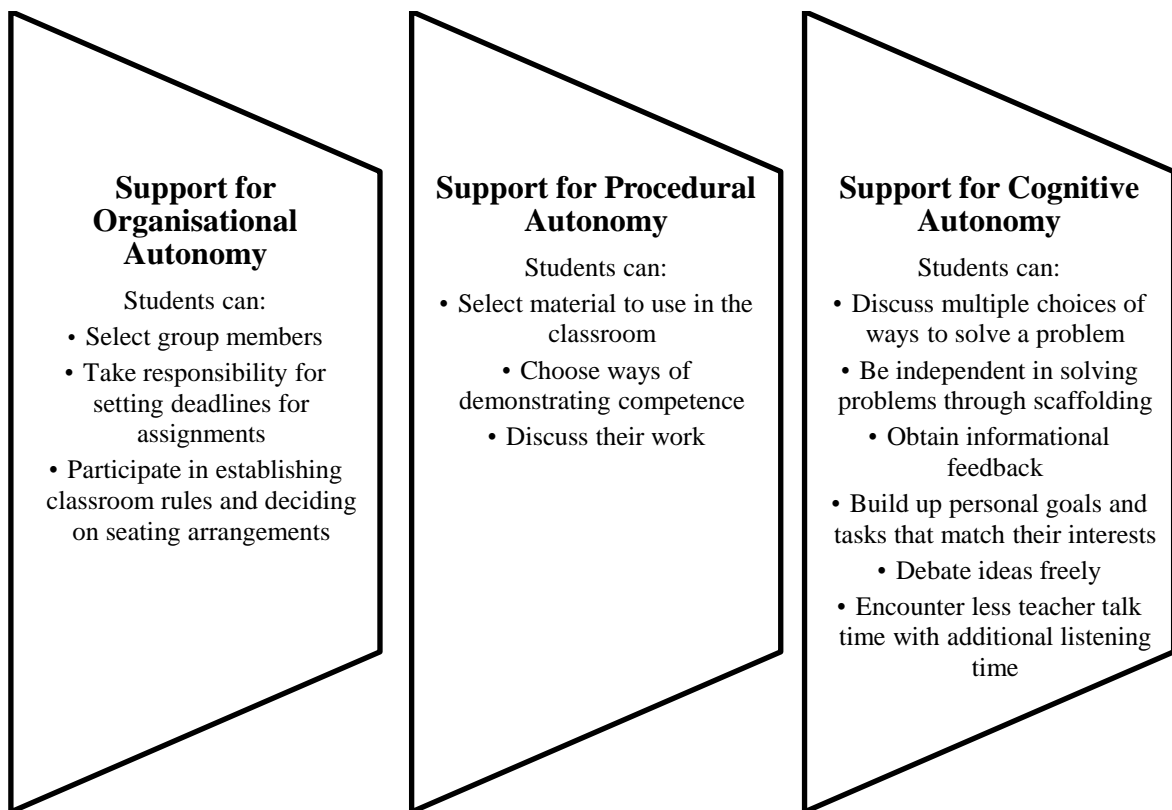
intrinsic desire to learn. Meanwhile, the more teachers were perceived to be integrated into the students' learning through praise and encouragement of their efforts, the more Spanish the students learned. Furthermore, IM was found to be correlated with integrative orientation, presented in Gardner and Lambert (1972).

In addition to the communicative style highlighted in the above study, various teaching strategies can be used to foster autonomy in the language classroom, such as those outlined by Dörnyei and Cumming (2003), who describe allowing learners to make choices over which activities to engage in and when to complete them (Dörnyei and Cumming, 2003). Other strategies involve providing a rationale for any activities assigned; presenting choices; giving learners the responsibility for organising their own learning processes; encouraging peer-teaching; allowing learners to contribute, and paying attention to learners' feelings about a topic (Niemic and Ryan, 2009). In a previous study conducted by Reeve et al. (2002), the researchers investigated the impact of a motivational strategy to help others value their efforts while performing an activity that they might not find interesting. The main outcome of the above-mentioned study was the finding that uninteresting activities were mostly extrinsically motivated. The strategy involved providing a rationale, communicated in a way that would support autonomy in the performance of the unappealing activity. In two studies and by using the motivation mediating model of SDT, it was suggested that extrinsic motivation can be more self-determined through a process of identification, promoted by a rationale delivered in a way that would support autonomy. Further to this, McLachlan and Hagger (2010) developed a list of behaviours to help teachers foster a learner's sense of autonomy. These included providing encouragement, giving learners time to work in their own way, and minimising the teacher's responsibility for the learning by avoiding commanding utterances.

More precisely, Benson (2010) presents specific categories of approach to fostering autonomy (Dörnyei and Ushioda, 2010). These consist of resource-based approaches (including independent interaction with learning materials); technology-based approaches (including independent interaction with available learning technologies); classroom-based approaches (considering learners' control over the evaluation and planning of their learning), and a curriculum-based approach (implementing the

learner's evaluation and planning of the curriculum as a whole). A detailed description of the operationalisation of each of these strategies in the classroom is to be found in a study conducted by Stefanou et al. (2004), who present three ways of fostering autonomy in learning and for task performance: organisational, procedural and cognitive support. An example of the actual application of each of these is consequently provided. Although these methods were originally suggested for use in the Mathematics classroom, they are still applicable to EFL teaching.

Organisational support encourages students to take ownership of the learning environment and this may also involve the teacher's behaviour. It provides students with opportunities for choice in environmental procedures. Procedural support relates to students' ownership of the procedure and may also include the teacher's behaviour. Finally, cognitive support relates to students' ownership of their own learning and may additionally include the teacher's behaviour. The above-mentioned ways of fostering autonomy are set out in Figure 2.5 below.



**Figure 2.5 Different strategies for fostering learners' autonomy (summarised from Stefanou et al., 2004)**

From the above Figure, it can be seen that these strategies may be used to produce an autonomous environment, where the learners retain control over the way in which problems are solved. However, Dörnyei and Ushioda (2010) suggest that even though learners' autonomy reflects personal control over their own learning, it does not mean that they should be allowed to become isolated from their social lives and learning communities. Therefore, a learner's autonomy should not reflect an individualistic approach. Rather, the learner ought to be productive within the respective social context; experiencing freedom of choice and setting personal goals, while still using socialising strategies to align these goals with the overall aims of the curriculum. In turn, learners will be able to regulate their motivation to support a social learning environment (ibid.).

The present study was initiated with the assumption that EFL learners can achieve autonomy by being involved in a social context that will help them become more productive in their environment, as they will have control over what they are doing. The use of online material is believed to help achieve this. In a previous study by Ilter (2009), conducted in a Turkish university with a sample of 350 learners from the Social and Natural Sciences, it was found that the use of online material on EFL courses was a dynamic motivating factor through the promotion of autonomous learning. However, specifications for the type of motivation examined were not provided, even though these are essential for constructing teaching objectives. In order to specify a way of supporting each psychological need, a precise definition is necessary.

The online mode freely provides self-accessed materials, without pressure. Learners have the choice of learning independently and discussing their work with others via an online asynchronous tool developed for this particular purpose. In a study conducted in Saudi Arabia by Al-Jarf (2004), the impact of using a discussion board as supporting material for F2F instruction was examined for a period of 12 weeks. The experimental group was assigned to posting threads made up of poetry and stories, based on themes from the course book. The results revealed that the development of writing ability was more evident in the experimental group than in the control group, as self-paced and autonomous learning was supported through the online instruction. However, in order to make the use of online material more systematic, the teacher can, for example, give

learners access to a learning management system (LMS), which will further contribute to their sense of autonomy.

The use of an LMS can enhance this sense of autonomy among learners by facilitating out-of-class learning in the respective online environment, through the inclusion of study materials and practice activities (Lai and Gu, 2011). The teacher's role will consequently change from that of knowledge provider to a more evaluative function, in consideration of Bloom's Taxonomy (Anderson and Sosniak, 1994). This was reflected in an experimental study by Sanprasert (2010), conducted in Taiwan on EFL learners during their foundation year. The survey results revealed a positive change in the experimental group's learning autonomy after using an LMS. The learners related this positive change to a shift in the role of their teacher from one of control to that of a facilitator and they were affected by her efforts to create LMS materials. The researcher did not precisely define 'autonomy', but related it to the learners' independence and confidence, and the experience of language learning itself. In another study conducted by Lai and Gu (2011), the researchers used interviews and questionnaires to investigate the implementation of different types of technology outside the classroom, as a means of fostering self-regulated learning among 279 EFL learners at the University of Hong Kong. Through the findings, it was demonstrated that the learners were actively engaged in technology use, but there were variations in their level and the aspects of language learning that they planned to support through the use of technology. However, the above study failed to examine how the sampled learners developed their learning as a consequence of technology use. Furthermore, in both studies, autonomy in when and how to perform the tasks was not included.

Therefore, setting instructions for learners to follow, together with considering their sense of autonomy, can help produce a better learning environment. In a study conducted by Sierens et al. (2009), the researchers investigated the relationship between perceived teacher support for autonomy and the provision of structure. The above authors described this structure as, for example, setting rules like deadlines using non-controlling language, which showed respect for learners' perspectives and provided a rationale for the limits introduced. The outcome of this was expected to be the students following instructions with a greater sense of psychological freedom. Through the

implementation of questionnaires amongst a sample of 526 learners in a Belgian secondary school, aged between 15 and 17, the above researchers found that support for autonomy and structure were positively correlated.

#### b. Support for Competence

In addition to providing a suitable environment for satisfying the need for autonomy, a sense of competence must also be engendered. According to Dörnyei (2003), a learning environment that supports competence can positively impact learners' IM and performance. In addition, the satisfaction of the need for autonomy and competence are in fact vital for maintaining IM (Niemic and Ryan, 2009). Although the terms, 'perceived competence' and 'self-efficacy' are used interchangeably in the literature, only the concept of perceived competence is applied in this study. This is supported by the results of a study conducted by Rodgers et al. (2014), in which perceived competence, according to SDT, was found to be distinct from the self-efficacy presented in social cognitive theory. In this respect, self-efficacy reflects individuals' beliefs and confidence in their ability to mobilise cognitive resources, motivation and the actions required to successfully execute an action in a particular context.

In order to support competence, there are several approaches which may be adopted. For example, informative feedback can be given and challenging tasks set to enhance self-determination and perceived competence (Dörnyei and Cumming, 2003; Niemic and Ryan, 2009; Akbari et al., 2015). With regard to the relationship between feedback and the satisfaction of the need for a sense of competence, Nicaise et al. (2006) found that feedback was highly correlated with perceived physical competence, especially for female learners. In the above study, the researcher investigated a sample of 450 French High School students (200 boys and 250 girls), using a questionnaire to discover whether their perception of their teachers' feedback was gender-differentiated in physical education, as well as examining whether the feedback was related to the students' perception of competence.

Feedback can play an equally a critical role in language learning development. For example, in a writing class, students who are given appropriate feedback by those reading their work, such as teachers and peers, are likely to discover new ideas when

revising their first draft to develop the second. However, as noted by Akbari et al. (2015), F2F feedback can hinder learners from participating, as they may not have the courage to express their thoughts in front of others. In this case, the online environment could be beneficial. Akbari et al. further explain that in cyberspace, learners do not face any time constraints on asking questions and/or discussing learning materials. This means that they have more of a chance to improve their communication skills and individualisation in learning. In addition, the online environment provides easy access to various scientific resources and this can help learners express their views with greater assurance (ibid.).

Further to the above, the use of video material to teach new content could have a positive impact on support for competence. In a recent experimental study by Chen (2012), it was found that learners who used interactive video-based instruction in an experimental group demonstrated more engagement and were able to acquire more knowledge and remember more ideas than their counterparts in a control group. This relates to a feature of video media, whereby learners can easily hyperlink the part they need to study from. Accordingly, learners become more effective in their learning environment, as they tend to see the outcomes of their actions after watching videos of the activities being performed.

### c. Support for Relatedness

The need for relatedness can be met by the sense of belonging to a social group in a given context (Chen and Jang, 2010). This psychological need relates to learners seeking to belong to a 'warm', 'caring and respectful' environment (Niemic and Ryan, 2009; Akbari et al., 2015). Niemic and Ryan (2009) further add that satisfying the need for relatedness will increase the tendency to internalise the practices and values of those to whom one feels connected, thereby accepting them as one's own. In terms of the classroom environment, learners need to establish a good relationship with their teacher and peers to further enhance this sense. Cox et al. (2009) conducted a study examining the social factors related to teachers' perceived emotional support, peer-acceptance and friendship quality, which can have an impact on students' sense of relatedness, motivation and affective response based on SDT. In their sample of 411

Junior High Physical Education pupils, they found that relationships with teachers and peers were important for the students' sense of relatedness.

Aside from the above, the teacher can enhance the classroom environment, so that it satisfies the need for relatedness, by providing opportunities for interaction and collaboration between students (Akbari et al., 2015). Numerous studies have concluded that collaborative environments have a positive impact on learners' attitudes to learning and on their self-esteem and confidence (Dörnyei and Ushioda, 2010). Throughout the literature, the online environment is suggested as a further means of satisfying the need for relatedness, through which learners can become active participants in their learning communities (Axelson and Flick, 2010). The merits of an online social network lie in the possibility of using several different formats for communication, which in turn facilitate relatedness, either through the use of audio-visual tools, or through short messages. These methods are defined as easy to use (Akbari et al., 2015) and so this ease of use may raise the expectation of increased relatedness amongst students (Akbari et al., 2015). In an early study by Warschauer (1997), it was concluded that features of computer-mediated communication (CMC) resemble what occurs in group oral conversations, except with two important differences. The above author elaborated on this as follows:

First, CMC creates the opportunity for a group of people to construct knowledge together, thus linking reflection and interaction. Second, the social dynamics of CMC have proven to be different from those of face-to-face discussion in regard to turn-taking, interruption, balance, equality, consensus, and decision making. (p.473)

In a study conducted by Bradley et al. (2010), the researchers examined the impact of using wikis to enhance group interaction among language learners by encouraging the participants to construct texts and exchange peer-responses. The qualitative findings focusing on patterns of interaction and the nature of the feedback showed that the learners were able to evaluate existing contributions efficiently and suggest constructive changes. Thus, the use of an online approach should be directed towards meeting the learning objectives and should take place on educational platforms. Careful consideration of its implementation is important, but the use of an LMS wiki



incorporated into instructions can reduce the risk of students spending time ‘chatting’ about every-day issues, rather than discussing the educational tasks assigned.

Considering the merits of using technology to introduce online instruction as a means of collaboration in EFL education, a study conducted by Wu et al. (2011) examined the impact of video-conferencing amongst native speakers on the motivation, confidence and ability of Taiwanese EFL learners. This was achieved through exploratory factor analysis and structural equation modelling, using surveys to identify which elements of learning through video-conferencing beneficially affected motivation, confidence and ability. The results revealed that a long-term change in ability was mainly predicted by enjoyment of the learning experience. In the above study, the researcher used Gardner’s orientations to measure the motivational construct, although enjoyment is primarily related to IM in SDT. This is considered in the current study, mainly in relation to FL writing courses, where the appropriate choice of teaching approach can help build better relationships between learners and satisfy their need for relatedness. In this way, learners can become involved in group work, teaching each other and reinforcing and refining a written text. As a result, they will be better prepared for undertaking academic tasks (Horowitz, 1986).

## **2.3 Conclusion**

This chapter has reviewed the concept of motivation in a language-learning context. In addition, a description of the supporting environment and its impact on the satisfaction of basic psychological needs and IM was provided, as outlined in SDT. This review of the literature therefore revealed an existing gap, although the possible positive impact of motivation has already been investigated on relation to listening and speaking (Liu and Chu, 2010) and reading (Wigfield and Guthrie, 2000), but the effect of IM on developing writing skills needs to be further explored, more specifically in EFL context.

In the current study, EFL learners were provided with a supportive environment in the form of an integrated online environment using flipped classroom, in a process approach to teaching writing. This process was initiated on an EFL writing course and it mainly concerned writing several drafts of text, followed by feedback provided by the

teacher or peers (see section 4.1 for further explanation). The impact of this intervention on IM and learning outcomes was subsequently examined.

In KSA, the present study context, Al-Seghayer (2014) explains how a considerable number of learners feel that it is beyond their reach to learn English and so it merely becomes a passive academic exercise concerned with assimilating the teacher's explanation of a textbook. As a result, they may lose motivation and enthusiasm (*ibid.*). Therefore, educators should afford learners every opportunity to learn as much as they can (Ehrman et al., 2003). Additionally, educators ought to consider establishing programmes that are comfortable and stress-free for the user, allowing learners to apply their preferred learning style (Akbari et al., 2015). In this regard, the study suggests the use of online learning alongside F2F instruction – otherwise known as the flipped classroom. This approach could have a positive impact on EFL learners' IM and consequently, their learning outcomes, as this study findings might show. Subsequently, further recommendations will be made based on the findings of the current study.

Further description of the flipped classroom approach adopted in the current study, as well as BL and its various designs, is presented in Chapter Three. This includes the essential elements for constructing an inverted approach, such as the materials that could possibly be used to present new content.

## **Chapter Three: The Flipped Classroom Approach and EFL Practices**

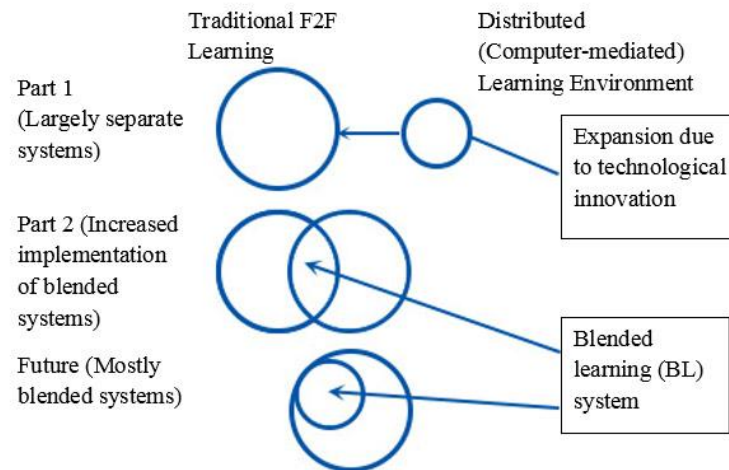
This chapter reviews different definitions of BL, before describing a more specific type of BL known as the flipped classroom. It is difficult to give a precise definition of the term ‘blended learning’ (BL), since this will depend on the specific context of its application. This is discussed in the current chapter, but since the present study deals with the flipped classroom approach to BL, more emphasis is placed on this type of BL when considering its merits and pitfalls. The chapter concludes with the major elements involved in constructing the flipped classroom design.

There are two main sections in this chapter. The first deals with the BL approach, drawing on several previous attempts to define it that appear in the literature. It presents an inclusive description of BL, along with its merits and drawbacks and a description of several ways in which it may be used to construct a course. The second section describes the design used in this study, namely the flipped classroom and its constructional elements. A description of the application of the flipped classroom in EFL pedagogy is also given towards the end of this chapter, providing evidence of its application to EFL courses and describing how this study can fill the gap in the existing literature.

### **3.1 Blended Learning (BL)**

Although various attempts have been made in the literature to define BL, previous definitions have tended to be quite broad. In fact, it is difficult to give a precise definition of the term (Klimova, 2011), which may be attributed to the fact that BL is a concept that is always open to new interpretations (Oliver and Trigwell, 2005). In a discussion of the different definitions applied to BL, Neumeier (2005) describes it as a combination of F2F and computer-assisted learning in a single teaching environment. Graham’s (2006) definition is similar to Neumeier’s, in that he describes BL as the product of an on-going convergence between two archetypal learning environments: the F2F environment, which has been around for a long time, and the computer-mediated learning (CML) environment, which has grown alongside the development of new

technologies. BL allows for more distribution of resources between the two environments and for their interaction, in order to construct a single instructional procedure (see Figure 3.1).



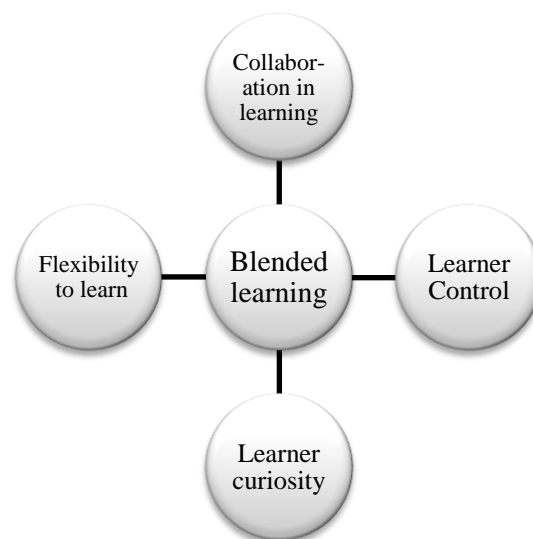
**Figure 3.1 The convergence of F2F teaching and distributed environments in relation to the emergence of BL (adapted from Graham, 2006, p.8)**

Further definitions have been proposed for BL, but from varying perspectives. The combination of technology and traditional teaching can be described as a set of methods, modes and multimedia technology, combined with F2F teaching. BL has also been described as a mixture of multimedia technology and classroom training, which can bring together the best of F2F and online teaching (Dodero et al., 2003; Thorne, 2003). Hoic-Bozic et al. (2009) add that BL is a mixture of online and traditional learning environments, with technology and media for learning content delivery. These are accompanied by individual and group activities, including synchronous and asynchronous interaction. The above authors consider that this mixture significantly motivates and supports learners, as they attempt to complete a course successfully. Sharma and Barrett (2011) take a similar position, describing the term with regard to its application in language teaching and viewing it as a combination of the F2F classroom component and appropriate technology use. Nevertheless, previous definitions may be problematic when attempting to clarify the essence of BL and the various specific elements used to construct the blended process. Both these and the interpretations that have been offered for each definition have led to almost anything being viewed as BL.

Littlejohn and Pegler (2007) represent BL as the integration of virtual and physical learning spaces, with the inclusion of technology and the consideration of a virtual learning environment (VLE) for students. A VLE provides access to course materials and opportunities for students to ask questions, whether on or off campus. This definition was adopted in the current study, because it successfully defines BL by describing the variations occurring in a learning context and potentially affecting learners' understanding and learning outcomes (Oliver and Trigwell, 2005).

### 3.1.1 Blended Learning (BL) Strengths and Pitfalls

In terms of BL's potential, the power of its implementation mainly relates to the use of two approaches, online and F2F, each complementing the other (Garrison and Kanuka (2004). However, George-Walker and Keeffe (2010) and Bonk and Graham (2012) assert that BL is not just about mixing technologies, but is rather about rethinking and redesigning the teaching and learning relationship. BL offers several other positive elements to support this. These include collaboration (Klimova, 2011), flexibility (time and place) (Kay, 2001), learners' control (Wankel and Blessinger, 2013), and satisfying learners' curiosity (Kinzie, 1990) (see Figure 3.2), which are further described below.



**Figure 3.2 The merits of BL implementation, as described in the literature**

Regarding the issue of collaboration, BL can provide better opportunities for communication, rather than mere content dissemination, through the development of

interactive strategies for learning and activities that focus on learners' interaction and collaboration (Klimova, 2011). The involvement of synchronous as well as asynchronous tools can facilitate this. There are several types of synchronous tools that can be used to simulate real-life interaction using text or audio chat (O'Byrne and Pytash, 2015). Furthermore, asynchronous tools for interaction, such as videos and reading or writing blogs, can help build up learners' metacognitive abilities by giving them time to learn, without them having to provide an immediate response (O'Byrne and Pytash, 2015).

Additionally, the use of on-line tools may significantly enhance BL through the modification of time, place and space to improve learning and teaching practice (O'Byrne and Pytash, 2015). Reflecting on this issue, flexibility is a potential result of including BL. For instance, the adoption of an online approach in BL can offer what may be described as 'learning on-demand' (Kay, 2001). Flexibility is a very important element, especially for learners with other commitments aside from their studies (Bonk and Graham, 2012). BL introduces flexibility by personalising the timeframe for learning, whereby learning can take place at times when learners are free of other obligations (Kay, 2001; Hoic-Bozic et al., 2009). This flexible feature of BL can also increase cost-effectiveness – a major issue for any institution – permitting a larger audience for teaching, even distributed globally and within a shorter period of time (O'Byrne and Pytash, 2015).

Another important issue to be taken into account is the element of learner-control. Learner-control refers to the amount of control the learner has over pace, content, sequence, guidance and the design of the training content (Wankel and Blessinger, 2013). The significance of learner-control in a BL environment can be explained on various theoretical bases; firstly through Vygotsky's Zone of Proximal Development (ZPD). Within the ZPD, the teacher's role is more collaborative, whereby learners require his or her assistance to reach the target level and as they improve their competence, they eventually shift towards learner-control. This is where they will be able to take more responsibility for their learning and carry out the activity without any assistance (Kay, 2001).

Ryan and Deci (2000) point to the role of personal control in learning satisfaction and motivation. When learners have personal control over their learning, they are self-controlled and intrinsically motivated, without requiring any external pressure (Kinzie, 1990). They can thereby tailor the learning process to suit their needs and interests (Kinzie, 1990). In this regard, BL provides support for learners as they strive to attain engagement and self-determination in their learning – particularly when a course encourages them to build their own blend according to their needs (George-Walker and Keefe, 2010). Thus, BL's feature of flexibility supports learner-control.

Learner-control can be further attained by transforming traditional lectures into a more active learning experience. BL affords this by personalising the timeframes and elements to be studied (O'Byrne and Pytash, 2015). In a study conducted by Chou and Liu (2005), an experimental design was used in a Junior High School in Taiwan, with a sample of 210 students on an EFL course. The aim was to examine the impact of using a VLE on the relationship between *learner-control* (the learning environment which allows learners to make decisions over the flow of instruction) and *learning effectiveness* (learning outcomes). It was subsequently found that the learners taught using a VLE were more self-controlled and satisfied with their learning, because this approach opened further opportunities for them to be involved with the learning content and teaching materials, based on their preferences concerning time and place. Curiosity can be counted as another major element to be considered in relation to the interactive instruction provided by BL. It can be stimulated through the use of graphics, animation or music (Kinzie, 1990) to help construct instruction that is intrinsically motivating for learners.

However, the effectiveness of any instructional design incorporating technology relies on many intervening elements, such as learning habits, preferences and the individual characteristics of learners (Beyth-Marom et al., 2005). This has led to several criticisms of the viability of BL. For example, even though the flexibility afforded by BL is of merit, learners may vary in their ability to make decisions about the material they should consider or reject (Reeves and Reeves, 1997). They may consequently find online systems complicated to use in practice, creating overload for them. Furthermore, they may find the idea of controlling their own learning to be quite unappealing, if they

believe this to be the teacher's role (Kay, 2001). Moreover, some learners may favour one approach over another, while others dislike the combination of teaching approaches (Hoic-Bozic et al., 2009). Teachers could thus end up with a blend of modes that does not please anyone (ibid.). Besides the above, in adopting BL, careful consideration must be given to the design, which should match the course objectives and learners' needs. This will be further explained in the next section.

### **3.1.2 Blended Learning (BL) Designs**

It is not only difficult to identify a single definition of BL, but this type of instruction is even complex in its practical application (Garrison and Vaughan, 2008; Klimova, 2011). A balance must be struck between innovation and the production of a suitable design (Bonk and Graham, 2012). According to Littlejohn and Pegler (2007), there is no one perfect blend for a specific context, but an effective and interesting blend can be achieved based on careful consideration of the ways in which each individual component affects the others. More specifically, BL is considered to be mid-way between full F2F instruction and full online instruction, whereby the teacher identifies the type and proportions of the mix (O'Byrne and Pytash, 2015).

In the construction of a BL course, there are certain parameters that can be observed to help create an optimal design, such as the choice and distribution of both environments. These must relate to the course aims and take into consideration the available resources (Neumeier, 2005). The creation of any BL design is not only about including technology, but rather about the course objectives and requirements. Taking this into account will help ensure that the design is far more sustainable, disruptive and transformative in confronting the challenges that prevent learning development in a traditional context (Sharma and Barrett, 2011; O'Byrne and Pytash, 2015).

There are several classifications of BL design described in the literature. One of these relates to the balance between the two approaches (offline and online) and how they are used to create a course. Graham (2006) identifies three different types of BL, according to the level of integration involved (the proportion of online and F2F instruction). These are referred to as enabled, enhanced and transforming blends. An enabled blend provides a learning experience using both the F2F and online approach, whereas a



transforming blend involves the use of an online learning approach as the main instructional mode alongside conventional teaching. An enhanced blend provides online supplementary material for a predominantly F2F course, e.g. the flipped classroom, where the aim is to ensure enhanced rather than equivalent experiences of conventional teaching, using technology in blended environments (Hung, 2015).

Enhanced blends involve a minimum level of integration of both environments, while an increase in that involvement leads to transforming blends. However, transforming blends are not that common, since they are greatly affected by class size and duration, along with the availability of technology to support transformation in the educational setting (Bonk and Graham, 2012). Moreover, in this typology, there is no clear identification of the sequence in which content will be delivered. In this regard, Hoic-Bozic et al. (2009) provide two models developed by Bersin (2004): the programme-flow model and the core-and-spoke model. In the former approach, learners go through a pre-specified learning process in a well-defined linear sequence. This is followed by an exercise or test to assess the learning outcomes. Conversely, the core-and-spoke model involves setting up a single primary approach to provide content, with interactive elements, resources and tests as additional modules. Each element (the spoke) can be optional or mandatory, corresponding to the primary approach (the core). In this model, the sequence of each element is not specified.

Thus, previous categorisations of designs do not present fixed recipes to be followed. There are in fact many ways of including the two teaching approaches in a purposeful order. BL should be implemented with the principal approach of establishing the best of both worlds; otherwise, it will lead to the worst of both worlds (Neumeier, 2005; Sharma and Barrett, 2011). Basically, BL must be constructed to provide learners with additional self-regulated learning, allowing for their preferences regarding the type of involvement they seek in either of the two approaches (online or F2F) (Hoic-Bozic et al., 2009).

The change in focus when selecting the proportion and type of teaching approach is an important factor for consideration (Oliver and Trigwell, 2005). This will include turning attention from the teacher to the student, from the type of technology to the pedagogy, and from the content to the experience. Aside from this, the consideration of each

approach is important when designing a blended course. It will identify which type of instruction should be obligatory and which should be optional. This can be further determined by deciding on the extent of control given to the learners over their learning, in relation to the material provided for them online (Kinzie, 1990).

In addition to the previously described issues surrounding BL implementation, the distribution of different approaches is an important element (Neumeier, 2005). This relates to quantifying the use of a certain approach over an entire course, in order to help determine the leading approach, which can be measured by considering the average amount of time that is purposefully spent in each learning environment (*ibid.*). However, BL is not only about the amount or proportion of online work, but also pertains to the adequacy of the relevant ICT tools selected and whether they suit the course requirements and the learners' demands (*ibid.*).

Therefore, the focus in building a BL course is not about choosing the 'right' or most innovative technology to contrast with traditional approaches. Instead, it is about creating a learning environment that will work as a whole to explain new materials. A further issue relating to successful construction is cost. All new technology is costly when it is first introduced onto the market and this can affect its usage (Sharma and Barrett, 2011). The incorporation of BL into the EFL classroom is discussed further in the next section.

### **3.1.3 Blended Learning (BL) and EFL Teaching**

In language teaching, BL has been described as providing instructors and learners with enhanced pedagogical richness, active involvement in teaching and learning strategies, various platforms for interaction and communication, and extended access to knowledge; potentially leading to positive learning outcomes (So and Lee, 2013). Previous studies have appraised EFL learners' perceptions and attitudes to BL and found that it is generally considered helpful for learning (Adas and Shmais, 2011; Al-Dosari, 2011; Fageeh, 2011; Ghandoura, 2012; Al Zumor et al., 2013; So and Lee, 2013; Said et al., 2013).

In a similar context to the current study, research was conducted by Al-Mansour and Al-Shorman (2012) at a University in KSA. The above researchers found a positive impact of computer-assisted language learning (CALL) on the development of EFL learners' achievement. An experimental design was used, where the researchers developed software based on the existing textbook and asked the learners to practice for 30 minutes a week, over a period of five weeks. The software contained two main parts. The first of these included reading texts with explanations of the grammar items and presentation of vocabulary items. The second contained activities to practice the content included.

Sixty randomly-selected students were involved. These were divided equally into two groups (control and experimental). The experimental group was taught using both software and traditional teaching, while the control group was taught using a traditional approach. However, the researchers did not clarify how the learners should use the software – whether during instruction in language labs, or at their own pace, determining for themselves how to use the software. The results revealed that using CALL alongside a traditional approach had a positive impact on the experimental group's achievement.

In consideration of blended writing courses, the following Table (3.1) summarises several previous studies in the context of EFL and ESL. ESL refers to learning English within a culture where the language is not used natively (Brown, 2006) and so there are few immediate opportunities to practice the language within the environment of that culture (*ibid.*). The following synthesis is based on sample size, the instruments used for data collection and the type of intervention.

**Table 3.1 Studies on BL in teaching EFL and ESL writing courses**

<b>Study</b>	<b>Intervention</b>	<b>Participants</b>	<b>Data collection tools</b>	<b>Comments</b>
(Miyazoe and Anderson, 2010)	Online writing activities (forums, blogs, wikis) on Moodle, as supplementary material for a writing course.  Examining learners' perceptions of each of the tools in a blended design.	61 students (upper-intermediate level) on an EFL course in a university in Tokyo	Mixed methods (surveys, interviews and text analysis)	Learning outcomes were not assessed
(Ghandoura, 2012)	The use of WebCT for computer-aided composition in a language lab.  Investigating learners' attitudes to an intervention.	13 English as a second language (ESL) students	Qualitative study (student diaries, classroom observations, interviews)	- Cannot be generalised.  - No pre- or post-test language assessment to objectively measure learning.
(Aljumah, 2012)	The use of blogs as a supportive practice outside the classroom to develop writing skills.  Examining learners' motivation in this regard.	35 Saudi undergraduates majoring in English	Survey at the end of the study	Limited sample size.  The need for assessment to measure progress in writing skills.
(Said et al., 2013)	An examination of learners' perceptions of the use of blogs on an EFL writing course.	33 undergraduates completed the course, 'Technology in teaching' in a university in Malaysia	Online survey	Limited sample.  Results reveal that the learners found blogging to be a useful tool for enhancing their writing; further empirical evidence is needed.

(Adas and Bakir, 2013)	The use of an online platform (Moodle) for writing, used to post activities relating to material presented in F2F teaching and in support of writing instruction.	60 undergraduates at a university in Palestine	Experimental design (pre- and post-test) with experimental and control groups	<p>The focus is on the accuracy of the final product, rather than on the development of the writing process.</p> <p>There is a need for subjective tools to investigate learners' perceptions of and attitudes towards the intervention.</p>
------------------------	---	--	---	--

It is evident from Table 3.1 that BL has a positive impact on learning in both EFL and ESL writing courses. In the studies presented in the previous Table, the online approach was used as a supporting element for learners, after they had been exposed to F2F instruction. Meanwhile, in Said et al. (2013) and similar studies, learners' perceptions of the use of technology were exclusively investigated. From the previous description, it may be deduced that further investigation into the efficacy of placing equal emphasis on an integrated online approach and F2F instruction is still required in the EFL/ESL context.

Thus, there are important elements to be considered in the construction of BL for language classrooms. These relate to the attitudes of learners and teachers, the level of learners' ability or knowledge, teacher training, learners' access to resources, and cost (Sharma and Barrett, 2011; O'Byrne and Pytash, 2015). To clarify this, both teachers and learners can have either positive or negative attitudes and these will impact their level of usage and attainment. The level of the learners is also a key factor in that the resources provided need to correspond to their educational and technological abilities (Sharma and Barrett, 2011). Moreover, a teacher might not be well prepared for involvement in such practice; suitable training must therefore be considered (*ibid.*), with teachers gaining a basic understanding of the inclusion of technology in the EFL classroom. This basic understanding would include knowledge of suitable websites or useful interactive materials (*ibid.*). In addition, accessibility must be considered as another important factor that could affect the way in which technology is incorporated into language courses – teachers must ensure that learners have access to an Internet connection at home or in school (*ibid.*).

The choice and construction of suitable materials for use in BL in language classes is an additional issue of importance. For example, building up culturally relevant material in a target language can facilitate learners' understanding (Bonk and Graham, 2012). This means that it is not only the type of program that is important, but also what the teacher intends to do with it. For example, the teacher might use software to expose learners to authentic language, which they can then consolidate and practice by themselves at home (Sharma and Barrett, 2011).

All the above explanations point to the complexity of designing blended courses, especially in the context of language learning. This can lead to further demands and extra workload for teachers throughout the process. The online approach can be used to teach new content and provide supplementary material after class as additional practice. This approach was implemented in the current study within the flipped classroom design and it will be further explained in the following section.

### **3.2 The Flipped Classroom**

The concept of the flipped classroom is not recent; assigning materials for learners to prepare in advance and preserving classroom time for higher order activities was once common, even without online materials (Touchton, 2015). However, Strayer (2012) asserts that technology can be used with this strategy to introduce students to course content outside the classroom, so that the content can be more deeply explored in class. The flipped classroom represents a shift towards devoting classroom time to discussing material, which proponents of the flipped classroom recommend for developing learning outcomes (Touchton, 2015).

A key element in the flipped classroom is prior exposure to content before receiving F2F instruction. Flipped teaching practice relates to the exposure of learners to new content in advance, where they can practice and examine their abilities; later, they practice their skills and reiterate knowledge with peers and instructors in class, in order to clarify content and receive feedback. Kim et al. (2014) add that the flipped classroom includes the exchange of traditional activities and events between in-class and online environments. Even though the flipped classroom is traditionally described as substituting traditional instruction with videos, in order to afford students more

classroom time for additional practice, this definition is still considered to be narrow (Bishop and Verleger, 2013; Uzunboylu and Karagozlu, 2015), since it presents the flipped classroom as merely a simple means of reordering classroom instruction and out-of-class work, which is not generally the case (Bishop and Verleger, 2013). In contrast, Bishop and Verleger (2013) perceive the flipped classroom as an educational technique composed of two main parts: direct (computer-based, individual instruction outside the classroom), and interactive (group activities within the classroom). Additionally, Maxson and Szaniszlo (2015) distinguish between the flipped classroom and flipped learning. Flipped learning is a shift towards personalised learning through pre-exposure to new learning materials, which can help learners further engage in the learning process. The flipped classroom, however, is an approach adopted at instructional level; inverting the teaching process between home and classroom time. Thus, these two terms are interrelated, with the instructor playing an essential role in directing learners and assembling materials to provide further opportunities to learn, either in isolation or in a collaborative manner.

The flipped classroom should in fact be viewed more broadly. Flipping the classroom is more of a pedagogical approach that replaces standard F2F lectures with a format that provides learners with a chance to review, discuss and examine course content with their teacher in class (Hughes, 2012). In this sense, the flipped classroom could be seen as personalised learning, whereby learners are given responsibility for their own learning (Uzunboylu and Karagozlu (2015). In the current study, a broader definition of the flipped classroom is adopted, with the use of videos and a collaborative environment to support interaction between the students themselves.

### **3.2.1 The Potentials and Pitfalls of the Flipped Classroom**

There are many merits of adopting the flipped classroom as a teaching procedure, but there are also major concerns related to it. Regarding its potential, the learners' planning of and responsibility for their own learning are major features of the flipped classroom (Uzunboylu and Karagozlu, 2015). Here, learning becomes an active process, which can produce higher-level of learning. For example, learners can be given the choice of viewing a video, reading a paper, or finishing a computer-assisted module at their own pace (Moffett, 2015). The use of a flipped classroom was examined by

Gilboy et al. (2015) using 142 undergraduate students in an experimental design. The participants found the flipped classroom preferable to traditional F2F instruction, expressing a preference for this approach in terms of engagement with the content and scope for additional self-regulated learning. The shift in the teaching and learning process is presented at lower levels of Bloom's Taxonomy, whereby 'understanding' and 'remembering' take place outside the classroom (Uzunboyulu and Karagozlu, 2015). Thus, time spent in the classroom will comprise the highest levels of Bloom's Taxonomy, with learners and instructors engaging in the higher-level skills of 'application', 'analysis' and 'synthesis' (ibid.).

The flipped classroom is also characterised as allowing more opportunities for self-centred learning, since teaching followed by practice can become self-learning before practice. It consequently enhances self-confidence, with more self-regulated learning being the result (Strayer, 2012). This is a feature of the flipped classroom, traditionally consisting of switching around the work to be done in class with material assigned as homework (Gilboy et al., 2015). Furthermore, the enhancement of learner-centred instruction in the flipped classroom can develop a learner's sense of autonomy by permitting the application of different learning strategies to a greater extent than traditional F2F approaches will allow; which can help to accommodate the diverse learning styles that exist among learners (Uzunboyulu and Karagozlu, 2015). Learners are consequently encouraged to be self-reliant, choosing for themselves the strategy that best suits their learning needs (ibid.). They will therefore be able to think much more deeply about content and in turn, this will give them an opportunity to further engage in problem-solving activities (Mehring, 2016). As a result, the learning process can shift to a higher level, compared to learning via a traditional approach.

This feature has also been emphasised by Touchton (2015), since it makes learning more enjoyable and appealing for learners. They can also revisit the material that they wish to learn and use it for revision. Furthermore, learners can gain a positive impression of learning in itself (ibid.) and the opportunity to examine new material and identify knowledge gaps before F2F classroom time. This material can then be discussed with their teacher (Mehring, 2016). Furthermore, in the flipped classroom, learners have more opportunities to work collaboratively with their friends and benefit



from their experience. Touchton (2015) implies that the flipped classroom stimulates peer-instruction, if learners work in groups, whereby informal exchanges will help maintain their progress while the instructor is busy providing individualised instruction elsewhere. Learners consequently have the chance to teach each other, enabling them to gain a more thorough grasp of the material than a simple homework task would offer (ibid.).

In fact, teacher-learner interaction is critical for the promotion of learning (Fraga and Harmon, 2015). The flipped classroom allows teachers greater opportunity to work more closely with learners and provide them with feedback on newly learned content. In turn, this will encourage further learning, with learners receiving support and clarification as they work towards solving problems (Moffett, 2015). In the flipped classroom approach, teachers are presented as facilitators, whereby there is increased interaction and personalised discussion between learners and teachers (Kim et al., 2014).

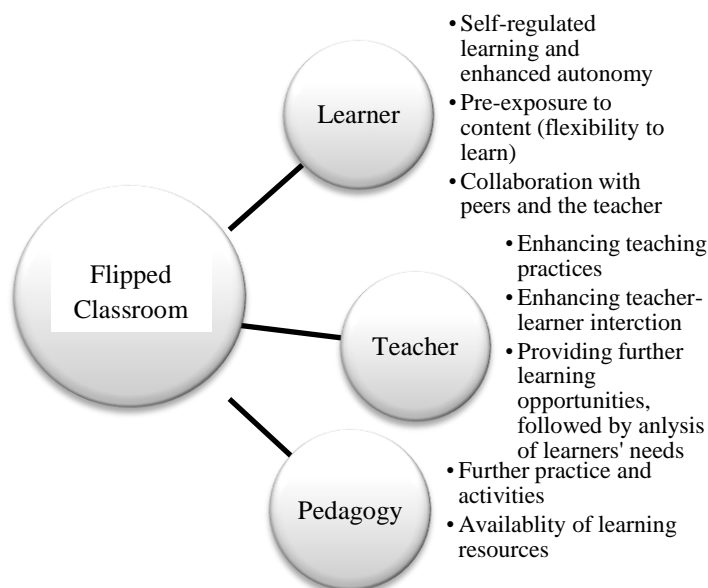
In addition, teachers who engage in the flipped classroom can make use of their background knowledge of learners' abilities to establish the learning needs (Touchton, 2015). They will then be able to construct learning materials for the learners to watch, read, listen to, etc., in order to improve their abilities (ibid.). This can benefit the learner, because instruction is more effective when it is specifically delivered on the basis of learning goals, with learners consequently being more motivated to work towards and achieve them (ibid.).

A further advantage of integrating online tools into the flipped classroom is that teachers can tailor ways of flipping the classroom based on learners' needs; for example, by increasing learner-centeredness by watching videos and engaging in interactive activities (Touchton, 2015). This type of instruction can help the teacher identify and assist those learners who need more attention, such as learners with ongoing difficulties in completing online tasks (Moffett, 2015). Teachers will consequently be able to provide learners with better feedback, so that they can work on their areas of weakness and attempt to remedy them (Touchton, 2015). This timely feedback may be hard to provide in the F2F classroom, due to time limitations, but it can be compensated for by using online tools. Even though the above represents the

impact of the flipped classroom in relation to learning, it still has implications for instructors' abilities. This approach encourages the sharing of expertise, whereby instructors enhance their resources by sharing their instructional methods with others (Uzunboylu and Karagozlu, 2015). In a comparative study conducted by Unruh et al. (2016), comparing the attitudes of six flipped classroom and six traditional in-service teachers in Texas, the survey and interview results revealed that the flipped classroom teachers displayed more teaching and technology efficacy and were more comfortable with using technology and encouraging student engagement.

In general, however, there is little research to demonstrate the impact of the flipped classroom on IM and learning; most studies are primarily concerned with the satisfaction of learners and teachers with this approach (Gilboy et al., 2015; Moffett, 2015). In relation to the above, Mok (2014)'s intervention on an undergraduate Information Systems course found that the learners in the flipped classroom enjoyed watching educational videos more than attending a conventional classroom and this held significant advantages for preparing them to practice in class.

In this regard, the flipped classroom can be described as sharing certain merits with BL, in that the approaches may overlap in terms of their potential for learner control, flexibility, and multiple exposure to e content. The above-mentioned characteristics of the flipped classroom are summarised in the following Figure (3.3):



**Figure 3.3 The potential of the flipped classroom, as described in the literature**

Nevertheless, in considering the positive aspects of applying the flipped classroom, several challenges and potential pitfalls remain and these must be considered. In this regard, the adoption of this approach does not guarantee development in learning outcomes. This was clear in the results of one study conducted by Mason et al. (2013) of 21 learners on an Industrial Engineering course. The researchers found no change in the learners' course grades after the intervention, despite the fact that they had very positive perceptions of the course. Accordingly, the above researchers pointed to the need to pay attention to learners' achievement in subsequent research and not just to perceptions of the flipped classroom.

Learners can face additional problems related to their skill in dealing with technology. In fact, Engin (2014) points out that a major problem reported for the flipped classroom is the risk that the students will not be able to deal with the technology involved, combined with a lack of institutional support. Accordingly, providing learners with a trial session can help overcome this obstacle. Nevertheless, the use of computer-mediated communication (CMC) is potentially time-consuming (Hoic-Bozic et al., 2009). Even though online tools can facilitate learners' engagement with both the content and their peers, teachers still need to pay particular attention to their students' engagement (Engin, 2014). This is due to the psychological and physical distance between the participants (ibid.). In addition, teachers must accept the extra workload involved, if they include videos, especially when attempting to produce suitable videos of a satisfactory quality (Hoic-Bozic et al., 2009). This could discourage them from applying the flipped classroom (Hoic-Bozic et al., 2009). Furthermore, it can be difficult for a teacher to construct activities using online tools and access to them can be problematic for learners, because they will evidently need online access to be able to view online material and teachers will need to acquire the appropriate technical skills for developing the learning resources.

Providing learners with in-class feedback is an integral element of the flipped design and this is a major source of support for learners in this approach (Touchton, 2015). Large class sizes can prevent teachers from providing each learner with adequate feedback. However, this could be resolved by a teacher electing to provide specific feedback in the classroom, with the help of an assistant to manage the workload (ibid.).

Many other solutions are presented in the literature to describe the best application of the flipped classroom, such as providing training for teachers as well as for learners. In this regard, Moffett (2015) recommends the use of training sessions to inform educators of key features of the flipped classroom, such as technical resources and resources that can be flipped. In particular, with this approach, learners move from a passive lecture environment towards additional active learning, where they will require help to ‘buy into’ the new approach (ibid.).

Despite the challenges presented, the flipped classroom is reported as a practical instructional approach in most studies throughout the literature, more specifically in the EFL context. The lack of negative findings from studies that highlight the use of flipped approach prevented from identifying the barriers in applying this teaching method. Hence this shortness could be due to the fact that it is a relatively recent approach, which could attract the attention of educators. It fosters active and self-centred learning to a higher degree through pre-exposure to learning materials, as presented earlier in this section. However, the development of a flipped approach needs to be systematic in order to achieve the specified course aims, which is also clarified in the following section (3.2.2).

### **3.2.2 Flipped Classroom Construction Strategies**

The considerations for constructing the flipped classroom are similar to those described for BL in the previous section; more specifically, regarding the elements to be transformed into online materials and the way this will be achieved. Generally speaking, teachers choosing to adopt the flipped classroom concept can convert traditional F2F lectures into narrated PowerPoint videos, create instructional videos, or select educational videos from websites (Hung, 2015). Classroom time can then be used to enhance the overall learning environment. As a result, this prepares students for participation in more interactive higher order activities, such as problem-solving, discussions and debates (Kim et al., 2014). However, ‘flipping’ is not necessary for all lectures; it can be limited to the most problematic elements that need to be grasped and which require additional practice.

The construction of the flipped classroom is not only about developing different methods, but rather represents a critical consideration of F2F instruction, together with

pre-exposure to content through, for example, the posting of videos. Moffett (2015) argues that before starting the ‘flipping’ process, the teacher needs to make a decision about the elements to be taught outside the classroom and what will be practiced in class. Since the flipped classroom includes both in-class and out-of-class activities, the design must enable online and F2F instruction to work together dynamically, so that learners can use both approaches. This will render the teaching more systematic and goal-oriented in terms of the basic elements to be taught (Kim et al., 2014).

More specifically, Hughes (2012) developed strategies for constructing the flipped classroom, consisting of course content, lecture production tools, lecture delivery systems, and course design strategies. He provides a framework to move lectures outside the classroom; proposing methods of application for each type, including selection, organisation, creation, extension, reviewing, publishing and monitoring (see Table 3.2, summarised from Hughes, 2012).

**Table 3.2 Strategies for ‘flipping’ instruction (summarised from Hughes, 2012)**

<b>Strategy</b>	<b>Methods of Application</b>
<i>Selection</i>	Deciding on the part of the course that one wishes to ‘flip,’ whereby classroom time will be used for instructional problems. This selection will be made based on the most problematic elements for learners to grasp.
<i>Organisation</i>	Ensuring that the time students are required to spend on their work, both in- and out-of-class, does not exceed the hours allotted for the course.
<i>Creation</i>	Developing the material learners will use outside the classroom
<i>Extension</i>	Using learners’ formative feedback for formative assessment of the course.
<i>Reviewing</i>	Asking an expert in the field to review the content of the materials created for out-of-class lectures and developing them before publishing them for the students.
<i>Publishing</i>	Ensuring that learners have access to material outside class.
<i>Monitoring</i>	Creating virtual class hours.

In addition to the strategies to be considered when constructing the flipped classroom, there are two different types of flipped approach to be borne in mind when moving instruction outside the classroom. The flipped classroom can be classified as *partial flip*, where only parts of the course are flipped and *full flip* where the approach includes

the complete course (Bishop and Verleger, 2013). This study used partial flip to construct the instructional design of an EFL writing course.

In the flipped classroom, each approach (online and F2F) must serve the goal of forming the overview of the instruction. As regards the in-class activities, there are various ways of checking learners' understanding and metacognitive abilities, such as beginning the lesson by asking them about the material they have covered outside the classroom, or using problem-based, small group activities related to course concepts during classroom time and summarising the main points learned from an in-class activity, before introducing the learners to the materials that must be covered outside class (Hughes, 2012).

As far as exposure outside the classroom is concerned, one means of achieving this is through the use of video (Bishop and Verleger, 2013). Nevertheless, although video-based instruction can be considered in the flipped classroom, videos might not be easy for every teacher to produce. In relation to this, Moffett (2015) presents several other ways of delivering the specified content, which require less technological expertise. For example, teachers can use external resources through websites such as Vimeo or iTunes. They can even simply synchronise audio-narration with a series of PowerPoint slides. Other simple solutions include screen-casting applications, like ShowMe. However, not only is it difficult to produce videos, but the teacher will not be able to guarantee that the learners actually access the videos to be prepared for classroom time. The teacher can address this problem by building the video in segments. This will include interactive activities to help assess the learners' development (Mehring, 2016). There are several free software packages that can be used for this purpose, such as eduCanon ([www.educanon.com](http://www.educanon.com)). Regarding the positive impact of using videos, Choi and Johnson (2005) designed a quasi-experimental study that included the use of videos, using a sample of 16 participants enrolled on an online Master's degree programme in a university in the US. The questionnaire results indicate that video-based instruction is more memorable than traditional, text-based instruction. Choi and Johnson's study also implies that videos used during online courses can enhance learners' retention and motivation.

Together with videos, Touchton (2015) used various media for teaching via the flipped classroom approach. He developed a quasi-experimental design for undergraduate participants specialising in Biostatistics. The number of participants and duration of the intervention were not specified in the above study, but the researcher did describe the participants as heterogeneous in their proficiency and used the flipped classroom as an approach to help them develop problem-solving skills. By accounting for characteristics such as GPA and gender, the results reveal greater progress amongst the learners in the flipped classroom than amongst those attending traditional lectures. Furthermore, the experimental group actually enjoyed the flipped class.

In addition to the above strategies for building up online content, the types of online tool for delivering that content were also an important part of constructing the design. These are essentially used to support the application of the flipped classroom and, more specifically, the creation of out-of-class materials. There are several online tools which can be used in this process, involving hardware, software and lecture delivery systems (see Table 3.3, summarised from (Hughes, 2012)):

**Table 3.3 Types of tool for delivering online content (summarised from Hughes, 2012)**

<b>Tools</b>	<b>Examples</b>
<i>Hardware</i>	Mobile devices; tablets; laptops; computers; desktop computers; video cameras; microphones
<i>Software</i>	PowerPoint/Keynote; Adobe Presenter; Voice Thread; iMovie; Garageband; Echo360; Camtasia
<i>Lecture delivery systems</i>	Content management system (CMS); VLE; Blog platform; iTunes U; Voice Thread; YouTube

The benefits of using a VLE as an online tool is that it can support learners with a wide range of materials and is available at any time they might wish to learn (Kinzie, 1990). It therefore provides opportunities to learn in a less stressful way, with the possibility of choosing suitable times and places for learning (Bonk and Graham, 2012). Learners can also return at any time they wish to view and revise any critical content that they found difficult. This enables learners to control and be more self-regulated in their learning. Moffett (2015) points out that these interactive instructional systems provide different options for collaboration and interaction at different levels: learner-content, learner-

learner and learner-teacher. Each of these can help improve learning outcomes. Regarding learner-content interaction, learners are able to interact with the learning materials by discussing them via asynchronous tools; for example, a discussion board or wiki and, more recently, Padlets. Furthermore, as these systems support learner-learner and teacher-learner interaction, teachers can make use of them by encouraging online group activities and supporting learners with feedback.

The use of hardware devices, such as mobile phones, can further help increase the effectiveness of the flipped classroom, since they provide access to educational materials, peers and Internet resources (Traxler and Kukulska-Hulme, 2005). With the flipped classroom, learners need a device that facilitates access to learning materials when they need them. The use of mobile phones for learning is related to the area of mobile learning (m-learning). Mobile phones have converged and created the all-in-one tool in the form of the smartphone, with such devices becoming functionally similar to desktops and laptops in more recent times. Traxler and Kukulska-Hulme (2005) further demonstrate that mobile devices are attractive, as they offer different communication channels through email, voice and text message. These asynchronous tools further enhance collaboration in the educational context and so mobile phones can support the inclusion of the flipped classroom in contemporary education.

Despite these potentialities, however, there is a dearth of research on the impact of the flipped classroom on learning and motivation; specifically research examining learning objectively through the use of a quasi-experimental or experimental design (Bishop and Verleger, 2013). This is the case in EFL teaching. Besides, additional research is required to be able to outline further specifications for the implementation of the flipped classroom (Uzunboyulu and Karagozlu, 2015). This will be explained in more depth in the next section.

### **3.2.3 The Flipped Classroom and EFL Pedagogy**

The integration of the flipped approach into language classes can have an impact on learning practice, with the adoption of technology in such instruction on EFL courses, thus enabling a shift from the teacher-centred classroom to a more communicative one (Mehring, 2016). Furthermore, it could compensate for the difficulties encountered in



traditional classroom teaching. This would include learners of different levels and involve building a programme that corresponds to various types of expertise. It may be achieved by carefully designing pre-class work, so that the online and F2F activities are tailored towards the actual expertise of each individual (Abysekera and Dawson, 2014). In an exploration of the implementation of the flipped classroom in EFL teaching, one of the few studies examining its impact on English language learning was conducted by Engin (2014), describing the use of a peer-constructed video tutorial. The video-material created by the learners was based on researching a specific academic writing topic, preassigned by the teacher. The study was conducted according to a pre-established flipped classroom model in a university in the Emirates, using a sample limited to 18 female L2 learners. The primary research tools were questionnaires, used to gather the participants' feedback on the flipped classroom, their perception of the process of constructing videos, and their evaluation of how this activity had helped them build knowledge. Follow-up interviews were conducted with five of the participants to check their perceptions of creating the videos, through which a theme relating to the trustworthiness of the material emerged. The results revealed that the participants had improved their language skills as a result of attending the flipped classroom, but were not so satisfied with the peer-constructed videos.

In another study, Hung (2015) examined the effect of the flipped classroom on a general English course, using a sample of 75 EFL learners. The above study was conducted in Taiwan, where the researcher applied a flipped classroom approach for six consecutive weeks. The online material was prepared by the instructor and delivered via WebQuest. Using a quasi-experimental design, with only a post-test administered, the results revealed learning progress. However, Hung's study did not use a pre-test to ascertain the learners' level of proficiency before the intervention.

More recently, in a study conducted by Huang and Hong (2016), the researchers implemented a flipped classroom in Taiwan with a sample of 40 High School students, randomly selected to attend 12 hours of flipped classroom instruction. A further 37 participants were included in a comparison group. The impact of the flipped classroom on reading comprehension and ICT literacy was measured through this experimental design. The quantitative data revealed development in the respective skills, whereas the

observations and interviews demonstrated positive attitudes amongst the learners to this type of instruction. The implementation of the flipped classroom in the context of the current study could subsequently have a positive impact on EFL courses. This will be further examined in the coming chapters.

### **3.3 Conclusions**

In conclusion, this chapter has reviewed previous literature related to the use of BL in general, helping to define the use of the flipped classroom as a new method to be examined in relation to EFL learners' IM and learning outcomes. The two approaches (BL and the flipped classroom) share most features and the flipped classroom may be considered as part of BL. Nevertheless, there are some elements that are unique to the flipped classroom design, particularly the pre-exposure to learning materials.

The most important aspect of constructing a flipped classroom is support for the instructional design with the appropriate theory underpinning each of the stages implemented, since the involvement of both approaches can either help increase the efficacy of the learning, or lead to worse outcomes. In the transition towards the application of the flipped approach, the use of a recognised educational theory is necessary to get the best out of practice (Moffett, 2015). This will help move towards measuring the effectiveness of the applicable design. Therefore, this study built its implementation on the basis of SCT (Vygotsky and Cole, 1978), which emphasises the environment, defines mediation, supports scaffolding and collaboration, and enables movement within the ZPD cycle. In addition, an examination of the efficacy of the design is included. A description of the flipped classroom's instructional design, with its underlying theoretical framework, will be further described in Chapter Four.

## **Chapter Four: Designing the Flipped Classroom on an EFL Writing Course**

This chapter provides a description of the flipped classroom design implemented in the present study. The design involves a specific approach to teaching writing within a flipped classroom (the process approach, reviewed in Chapter Four, section 4.1). The design was developed on the basis of SCT, in order to best achieve the research objectives related to IM and learning outcomes. SCT operationalised the possible strategies for providing a supporting environment based on SDT. Chapter Two reviewed the literature on language learning motivation, particularly the applicability of SDT for examining the change in IM and consequent learning outcomes. In SDT, the satisfaction of the need for competence, autonomy and relatedness is necessary to support a change in IM. In turn, this will have an effect on learning outcomes. However, the supporting environment plays a critical role in determining the level of satisfaction of these needs and this notion helped formulate the conceptual framework for the current study (sections 2.2.3 and 2.2.4). In Chapter Three, the literature on the flipped classroom was reviewed. This Chapter comprises several sections, starting with a description of the process approach to teaching writing, since this study relates to a writing course. It then moves on to a detailed description of the instructional design, which involves merging the process approach with the flipped classroom through the use of videos, followed by the theoretical basis for this. SCT was considered in the current study, as it relates the use of the process approach to teaching writing. It can also help justify the use of online materials and online communication in the flipped classroom. Further to this, SCT would provide the necessary supporting environment for meeting the identified psychological needs, as explained by SDT through mediation, scaffolding and the notion of ZPD. A detailed explanation of each of these elements is given in this chapter.

### **4.1 The Process Approach to Teaching Writing**

There are different types of rhetoric to consider when teaching writing. Mora-Flores (2008) categorises written texts into different types: narrative, expository,

persuasive/argumentative and poetry. She further adds that each of these types contain genres, which fit into the context and construct of each type. In her view, a genre is a type of literary work with a specific form, such as a report, article, letter, essay or composition. English teachers can facilitate the development of academic language using explicit instruction in these various types of writing, as well as considering their subsequent genres (ibid.).

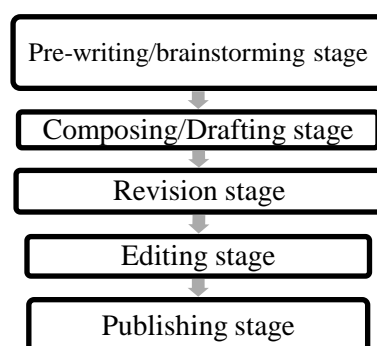
Saudi EFL learners continue to experience difficulties in developing these different types of writing. AlKhairy (2013) investigated writing difficulties amongst EFL students at university, implementing a survey administered to 75 English-major undergraduates. The results revealed that Saudi EFL learners are extremely weak in extended writing, such as descriptive, argumentative, narrative and expository essays. Furthermore, they consider themselves unable to go beyond paragraph level. A previous study conducted by Grami (2010) is compatible with AlKhairy's (2013) findings, with Grami (2010) reporting that Saudi EFL learners have serious problems with extended writing, which is evident from their low IELTS writing scores, compared to other skills. Grami further recommends a reconsideration of teaching practices; more specifically, he states that the approaches adopted in Saudi Arabia require attention (ibid.).

When teaching writing, especially in the EFL context, there are different approaches that can be adopted and the choice of approach will depend on the learners' needs and the course requirements (Oraif, 2016). In order to be able to teach writing adequately, decisions must be made about such approaches. In this section, various possible approaches are described, indicating the one implemented in the present study. In relation to teaching writing, a classification of these approaches has been provided by Badger and White (2000) and Brown (1994), who hold that for teaching writing, product, process and genre approaches are valid.

For example, the product approach mainly emphasises the mechanical aspects of writing, such as syntactical and grammatical issues (Badger and White, 2000). Here, writing is considered to consist of knowledge of language structure, which develops as an imitation of text input provided by the teacher (Khansir, 2012). A major criticism of the product approach relates to the difficulty involved in ensuring accuracy in the final product at the first attempt (ibid.). Moreover, given that it requires constant error

correction, this approach could potentially affect learners' motivation and self-confidence (Grami, 2010).

A more recent approach put forward is the genre approach. This is similar to the product approach in the sense that it emphasises the social context of the text (Cope and Kalantzis, 2014). 'Genre' is a term used to reflect the literacy pedagogy connecting different types of text, with variation in social presence. It adds that learners following this approach must critically understand the social effect of different language patterns (ibid.). Although this can be an advantage, Hyland (2003) explains the major drawbacks as being possible imitation, partial understanding and conscious application. Genres in this approach are taught as moulds into which content can flow, instead of as ways of constructing meaning (ibid.). In the present study, however, a prototypical linear process approach is adopted, as illustrated below. A movement arose in the 20<sup>th</sup> century to replace the teaching of writing, moving from a process based on grammar accuracy to one that was believed to be more meaningful. As a result, the process approach emerged (Cope and Kalantzis, 2014). Here, writing was considered to be a developmental process, with the final product resulting from the self-discovery of meaning (Khansir, 2012). The terminology presented is supported by Tribble (1996), namely *pre-writing/brainstorming stage*, *composing/drafting*, *revising* and *editing stage*, although Mora-Flores' (2008) description of the process also includes the *publishing stage*, serving as the end of each of the writing cycles. In relation to this, Mora-Flores (2008) described it as a linear process of pre-writing, drafting, revising, editing and publishing. The latter identification was applied in the current study to construct the intervention as described below in Figure 4.1.



**Figure 4.1 The process approach adopted in the present study (adapted from Tribble, 1996; Mora-Flores, 2008)**

Several merits are associated with the process approach. For instance, the learners become much more active in their learning, because they learn by doing, rather than through the mere acquisition of facts (Cope and Kalantzis, 2014). The central aim of this approach is to produce a meaningful text, with an intended meaning to communicate, rather than just a syntactically accurate one (Hyland, 2009; Cope and Kalantzis, 2014). The process approach could therefore contribute to solving the problem of learners producing a text that is syntactically accurate, but not suitably meaningful (Hyland, 2009). This approach focuses on learners' ability to express themselves clearly and effectively (Khansir, 2012) and is concerned with learners' self-motivation, rather than an authority figure driving the learning, as is the case with more traditional approaches (Cope and Kalantzis, 2014).

Another important advantage is that throughout the various stages of the process approach, core significance is assigned to revision. This occurs by providing learners with feedback from peers and/or the teacher (Shih, 1986). Through the integration of feedback, this creates a collaborative environment, where learners can work together throughout the writing process, with the minimum of scaffolding and ample time (Kroll, 1990). In other words, interaction among peers and between the learners and their teacher is a major element in this approach, whereby learners can work in groups to refine and enhance their written texts. It will help them better prepare for writing by refining their thoughts (Horowitz, 1986; Tribble, 1996; Cumming 2006).

Furthermore, the process approach reinforces the idea of text ownership (Cope and Kalantzis, 2014), in the sense that the text is 'owned' by the writer. The teacher's role is then shifted to that of facilitator; supportive rather than merely passing on knowledge to passive recipients. Such 'knowledge providers' are now considered by many to be 'old school' (Badger and White 2000; Cope and Kalantzis 2014). In fact, teachers can play an important role in helping learners to identify their own mistakes and develop their writing (Mora-Flores, 2008). Correspondingly, learners taught using this approach are provided with enough time to enhance their ideas and writing, while receiving feedback on content (Ramies, 1983). However, a major drawback in this approach is that it defines the writing process in the same way for all types of text (Badger and White, 2000). For example, the above authors cite the problem of equal weightings for writing

a postcard and writing an academic essay. Therefore, the following section (section 4.2) provides a comprehensive description of various types of feedback.

## **4.2 Types of Feedback**

In relation to feedback, a decision must be made about the form it should take, based on the teaching context and the students' learning abilities. According to Ellis (2009), there are two main types of feedback, oral and written and the paradox between the two cannot be resolved. Ellis further notes that there is no one 'corrective feedback recipe' that can be used in all instances. Moreover, he clarifies that it can be hard to identify the ideal type of corrective feedback, given that the specific classroom, institution, task context and students' level of proficiency must all be taken into account.

Written feedback is divided into two types: direct and indirect (Hyland and Hyland, 2006). Direct feedback emphasises the correction of linguistic forms. For example, this can be achieved by omitting unnecessary words, phrases or morphemes (Brown, 1994). A further approach to direct feedback could include meta-linguistic explanations, such as providing students with grammar rules and examples at the end of a script, while also notifying them of where their errors occur in a text (Bitchener and Knoch, 2008).

In relation to the merits of direct written feedback, there are various positive reasons for implementing the approach, as described by Bitchener and Knoch (2008): (1) To minimise the confusion that may arise when learners fail to understand the code provided by the teacher, (2) Where the information provided may be insufficient for resolving the complex errors in, for example, syntactic structure, and (3) To provide further immediate feedback, based on any hypotheses that have been formulated .

Nevertheless, although direct feedback can be helpful for the reasons cited above, learners must become independent in their learning and where less explicit feedback is provided, they can get more involved in effective learning. This can come about through indirect feedback. In fact, Lalande (1982) found indirect feedback to be more effective than direct feedback for promoting engagement amongst learners. Furthermore, it helped increase the likelihood of long-term learning.

Alternatively, with indirect feedback, the teacher indicates errors by circling or coding, as opposed to directly providing the correct form (Ferris and Hedgcock, 2004). This helps students become more attentive to their mistakes and can be helpful, as it is likely to develop students' language proficiency and meta-linguistic knowledge (ibid.), since learners are directed towards errors that they can correct themselves (Elwood and Bode, 2014). Furthermore, there can be development because the teacher will give the students a chance to encounter problem-solving situations, thus promoting long-term language acquisition (Bitchener and Knoch, 2008). Consequently, this type of corrective feedback is suitable for intermediate-advanced learners, according to their proficiency (Ellis, 2009). The use of indirect feedback was in fact investigated by Chandler (2003) in a quasi-experimental study conducted over the period of one whole semester with 36 mixed-gender participants. These subjects were considered to be at high-intermediate level, based on their Test of English as a Foreign Language (TOEFL) scores. It was subsequently found that indirect feedback was more helpful than direct feedback and enhanced the students' writing ability. This outcome was reflected by the students themselves in their self-reporting after experiencing four different types of feedback: direct, underlying feedback with explanation, explanation, and indirect feedback with underlined errors alone.

A further distinction between different types of written corrective feedback was provided by Ellis (2009), who also emphasised the importance of highlighting different types of error when giving feedback. Here, the teacher can either focus on all errors, or just select one or two types to correct. This distinction is applicable to the types of feedback explained above. In other words, two types of corrective feedback are possible: extensive corrective feedback (unfocused) and intensive corrective feedback (focused). Electronic feedback represents a further type of feedback, where the teacher provides students with hyperlinks, giving them examples from which they can correct their own errors. Furthermore, the original text created by the students could be reformulated by a native speaker, making it look like it was actually written by a native speaker, as far as this is possible, but without changing the original content. Ellis (2009) also considers the importance of students' responses to feedback; they may have a chance to redraft their work through revision, or else merely be required to study their mistakes. Sometimes, they may even just be given feedback.



In relation to oral forms of feedback, through which the teacher provides students with meta-linguistic explanations in mini-lessons, students can be given rules and examples to practice. These can be discussed one-to-one, or in small group conferences between the teacher and students (Chandler, 2003). This approach was examined by Stefanou and Révész (2015) in an experimental study using a sample of 89 low-intermediate EFL learners in Cyprus. The above authors assigned three different groups to a specific type of feedback (direct feedback, direct feedback with meta-linguistic explanation and no feedback). In the respective pre- and post-tests, no significant differences were revealed between direct feedback with, and direct feedback without meta-linguistic explanation. However, a significant difference appeared between the groups provided with direct feedback and the one where no feedback was given.

Another major difference in the various forms of feedback rests in how they are provided, namely whether through peers or by the teacher. Each of these types is significant in its own way for writing development. In an experimental study conducted in Saudi Arabia by Grami (2010) over a period of three months, the researcher used questionnaires and pre- and post-assessment with interviews to detect changes in EFL learners' levels of proficiency and their attitude towards peer-feedback in the case of the experimental group. Both groups (the experimental and control groups) received feedback from their teacher, although the experimental group received peer-feedback as an additional treatment. The participants were all university students and homogeneous in their level of English proficiency. The results revealed more development in the treatment group than in the control group, with the students being eager to see the same technique applied on other courses. However, at the beginning of the study, the participants were anxious about receiving feedback from their peers, whom they considered to be less knowledgeable than their teacher.

Meanwhile, in a study conducted by Yang et al. (2006), the researchers found contradictory results. This was despite using a comparative design with different techniques, as their research strategy. In the above-mentioned study, peer-feedback alone was used in one group and teacher feedback in the other. Through textual and questionnaire data, the results revealed more development in the groups receiving teacher feedback. On the other hand, the peer-feedback helped learners develop more of

a sense of autonomy. These findings are in line with another comparative study conducted in Japan by Ruegg (2015) over a period of 10 months, using two mixed-gender treatment groups. The total sample included 51 participants from the English department of a university. Through pre- and post-assessment, the researcher found further development in the group that had received teacher feedback on meaning and content. Accordingly, the students in this group demonstrated enhanced ability in terms of grammar and content. The researcher consequently recommended that peer-feedback be limited to organisation and academic style.

From the above, it may be deduced that it can be difficult to select an appropriate form of feedback out of the many different options, in terms of the type of delivery and implementation applied. However, it is ultimately the timeframe of the teaching, the objectives of the instruction and the level of the learners that will help determine the most suitable approach. In the current study, the researcher included teacher feedback alone, as the learners were already working collaboratively to help each other complete other activities online. In addition, I drew upon one description of indirect corrective feedback, where only the teacher provided feedback. Here, indirect written feedback was provided for both groups by the teacher and the students had the chance to revise their mistakes and rewrite their essays (Ellis, 2009).

Feedback was also given in relation to the respective teaching aims for the week, together with feedback on grammar and the mechanics of writing. For example, if the objective of the week was to write a thesis statement, then the students would receive feedback on that. This focused use of corrective feedback can be especially effective, as learners will discover several alternatives to their mistakes (Ellis, 2009). Moreover, they will come to understand in greater depth what is incorrect in what they have written and why (ibid.). As discussed earlier in the description of indirect feedback, errors were simply underlined or circled to direct students towards their mistakes and the researcher trained the students in how to address this type of feedback.

Along with the process approach, the integration of an online mode was considered for the present study through the use of a flipped classroom, whereby a specific procedure was followed. This was designed on the basis of a theoretical foundation to suit both approaches. The learners in the flipped classroom group (FCG) moved from one stage

to another, according to the specific categorisation of the writing approach adopted. This is further explained in the coming sections (4.3 and 4.4).

### **4.3 The Flipped Classroom Design and Implementation**

In this section, a description of the setting is given for both the (FCG) and the non-flipped group (NFG). The details include the course description, instructional procedures and online environment used in the flipped classroom.

#### **4.3.1 Course Description**

This research was conducted in the Second Term in Saudi Arabia's national educational calendar of the academic year 2015, for five weeks during February and March. The writing course specified in this study is one offered by the Department of European Languages and Literature. On this course, different types of essay writing are taught (such as cause-and-effect and argumentative essays) and the course objectives are as follows: 1) To attain a level of writing suitable for producing a comprehensive essay, and 2) To identify different types of essay from the ways in which they are constructed. The argumentative essay was selected for this study and the main objective for both groups was to help the participants understand the key elements of writing this type of essay. These were identified as follows: 'Week1: The general structure of the argumentative essay'; 'Week 2: Developing a suitable thesis statement'; 'Week3: The development of the organisation and tone of the argumentative essay through the use of connectors and modals'; 'Week 4: Writing the refutation paragraph' and 'Week 5: Avoiding faulty logic'.

I created the course materials related to the previous elements based on the description of argumentative essays provided for the Department's relevant writing course using the course textbook, *Great Writing 4* (Folse, 2010). Furthermore, I used the course textbook to source the activities implemented, based on each week's teaching aims. The book *Great Writing 4* (Folse, 2010) had already been selected for the writing course by the Department. It includes a description of the argumentative essay and other types of essay used by the Department to teach the writing course.

I preassigned the essay topics that the learners would write about each week by considering their cultural relevance and appropriateness to the context. These topics included, for example, the benefits of learning another language from an early age; whether violent video games change young people's behaviour; forcing kids to read story books from an early age, and the possible effects of reading English language novels on learning the language. The learners in both groups were assigned a new topic to write about each week, except for the final week of the study period - this was because I needed to complete the data collection within the time constraints and according to the accessibility of the respective institution. I did not want to overload the participants.

To reduce the effects of teaching style and materials, I constructed lesson plans for both groups, which the teachers then followed in the classroom. Both groups of learners were assigned the same number of activities on a weekly basis, with the same learning objectives being established for both groups and the participants receiving similar types of feedback on their writing each week. However, the participants in the FCG used the VLE wiki for their discussion as a means of completing the activities assigned to them. Meanwhile, the NFG completed their activities through classroom discussion. The FCG were also provided with two hours of training before the start of the teaching period and trial sessions helped familiarise them with the procedure.

#### **4.3.2 Instructional Procedures**

In this section, the different components of the flipped and non-flipped classrooms are presented with a description of the instructional design used. The flipped classroom deviated from the non-flipped approach, mainly due to the way in which it provided new content and how the activities were carried out. This is further described in Table 4.1 and for a detailed instructional procedures (see Appendix J).

**Table 4.1 Components of instruction for both the FCG and NFG**

	<b>Flipped Classroom Group (FCG)</b>	<b>Non-flipped Group (NFG)</b>
<b>VLE training</b>	2 trial sessions (1 hour each)	None
<b>Course duration</b>	5 weeks	5 weeks
<b>Number of F2F classes per week</b>	3 classes (1 hour each)	3 classes (1 hour each)
<b>Online activities</b>	Yes	No
<b>Online learner-learner interaction</b>	Yes	No
<b>The teacher's role</b>	To facilitate, evaluate, and synthesise new knowledge	To facilitate and provide knowledge
<b>The approach of teaching writing</b>	The process approach	The process approach
<b>Type of feedback</b>	Indirect/focused/written teacher feedback	Indirect/focused/written teacher feedback
<b>Working with peers</b>	Online	In whole classroom discussion
<b>Assistance from the teacher</b>	Online and F2F	F2F
<b>Writing two drafts</b>	Yes	Yes
<b>Accessibility of online content</b>	Yes	No

Regarding instructional procedures, the flipped classroom developed in this research consisted of five stages to be completed each week in sequence, based on the process approach. This meant working interchangeably between the online and offline environments in a series of steps. With the non-flipped approach, however, the process approach was exclusively applied in an offline environment (see Figures 4.2 and 4.3). Meanwhile, at the beginning of the teaching period, the FCG learners were assigned to the following:

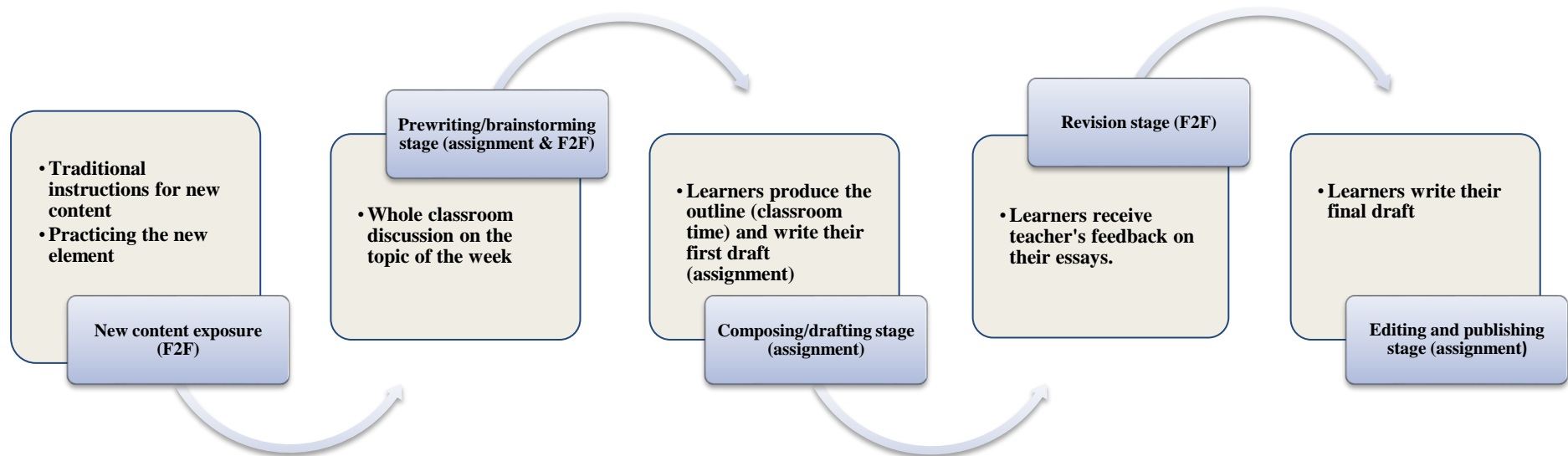
- Induction and trial sessions to verify that they could use the system properly and that they were not resistant to change. Therefore, prior to the flipped classroom instruction, two trial sessions of two hours (one hour each) were provided for the learners, in order to check that they were comfortable with using the technology (Hughes, 2007). In these sessions, the learners were also allocated to groups, assigned group leaders, and provided with the VLE access details.

The subsequent process of instruction for both the NFG and FCG can be described as follows:

- **New content exposure:** During this stage, the FCG were exposed to new concepts through video lectures, relating to the material taught throughout the teaching period (Abeysekera and Dawson, 2015). These lectures did not exceed 15-25 minutes, so as to avoid losing the learners' interest (McConville and Lane, 2006). The videos were structured based on the week's objective; more specifically, they described the element planned for the week. An automatically corrected test was used to check the learners' understanding after watching the videos. The test was intended to check the learners' understanding. Next, the FCG interacted asynchronously in groups via the VLE wikis to complete the week's assigned activity, with the group leader submitting the group's work to the teacher. The weekly collaborative activity ensured additional practice of the new content described in the videos. In the present case, the learners even had to make decisions over the most suitable answers to be sent to the teacher. Additionally, wikis can help create a collaborative environment, with learners experiencing positive feelings about the exercise (Miyazoe and Anderson, 2010). The learners in the FCG checked their answers with the teacher in subsequent F2F meetings, as well as checking their proper understanding of the intended element. In class, each online group sat together. Meanwhile, the NFG learners were taught new elements in traditional F2F lectures, which they then practiced during classroom time and class discussion. The NFG spent the first two classes completing their tasks for the week.
- **Prewriting/brainstorming stage:** The FCG participants interacted asynchronously in their online group using the VLE wikis to build an outline for their essays on the topic assigned (see Figure 4.3). Based on this, each group had its own outline and the learners brought a copy of it to use in the next class for the drafting stage. The use of group work at this stage is positively emphasised in the literature, as it helps develop learners' analytical skills, since they comment on each other's work (Storch, 2005). Collaborative writing has previously been examined in a study conducted by Storch (2005), where pair-work on a collaborative writing task was

investigated, using a sample of 32 ESL adult learners in Australia. Through a qualitative analysis of interviews, the results revealed that collaborative work helped the learners to pool their ideas and refine each other's work by giving peer-feedback. Moreover, the learners studied were positive about the experience. In contrast, during the final class of the week, the NFG learners in the present study engaged in a whole class discussion about the week's topic and wrote their outline based on what they had learned in class. For the NFG, this took place in the final F2F meeting of the week (the 3<sup>rd</sup> F2F meeting); this is because the first two classes were spent teaching the new material related to essay writing.

- **Composing/drafting stage:** At this stage, the FCG participants were ready to write their first draft in class, using the outline they had prepared online. They therefore practiced writing their first draft in the second class of each week. In the NFG, however, the learners wrote their first draft as an assignment, before handing it in to the teacher at the beginning of the week during their first F2F meeting.
- **Revision stage:** The teacher subsequently provided FCG with immediate indirect feedback in class. The FCG participants then wrote up their memos based on the teacher's feedback, so that they could use them in the next class. They also had the chance to work asynchronously with their peers on wikis, discussing the teacher's feedback. This collaborative revision involved scaffolding, where pair-work partners benefited from the joint revision task, regardless of their level of writing proficiency (Hanjani and Li, 2014). In the NFG, the teacher collected the learners' first drafts at the beginning of each week and added her written feedback during her office hours, before handing out the drafts in the next class (before the end of the week).
- **Editing/publishing stage:** The FCG participants brought their memos to class and started writing their second drafts. Subsequently, in the publishing stage, they were ready to write their final draft in the final class of the week. Conversely, in the NFG, the learners were instructed to complete their second draft as an assignment. Learners from both groups were not asked to return the final draft.



**Figure 4.2 Non-flipped classroom using the process approach**



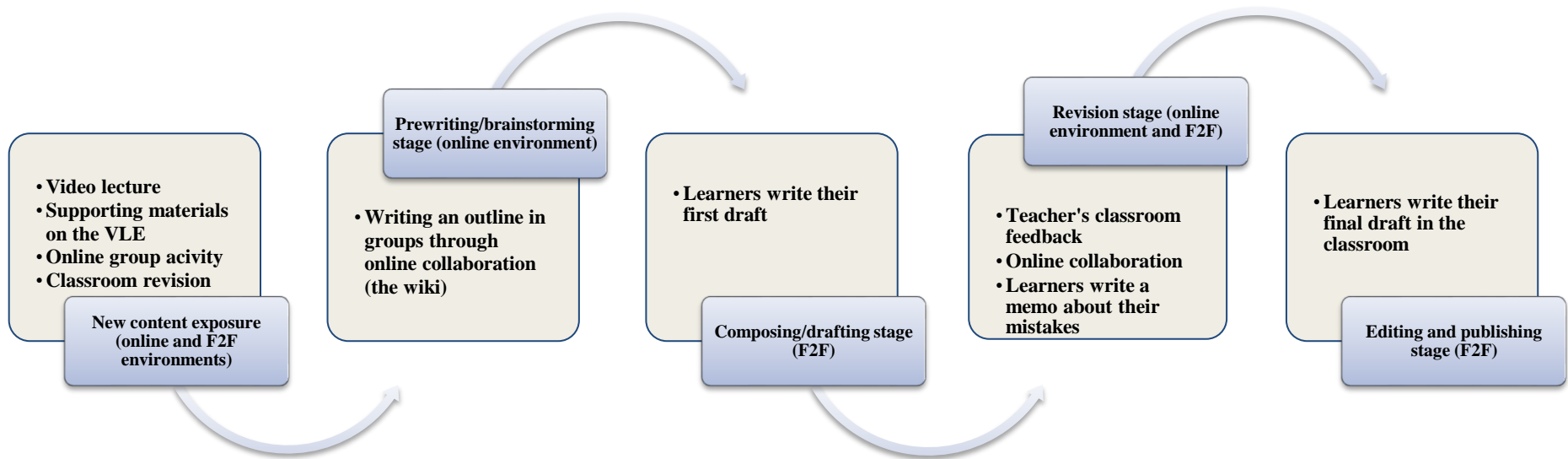
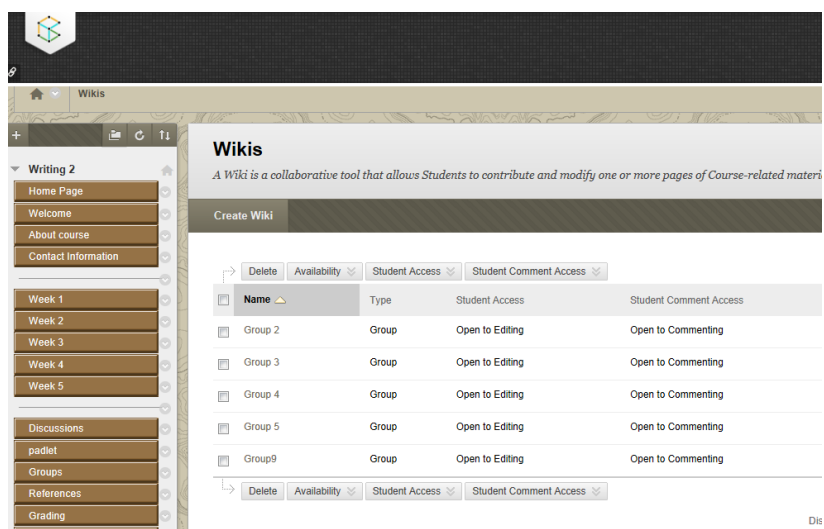


Figure 4.3 Flipped classroom instructional design

#### 4.3.3 Online Environment in the Flipped Classroom

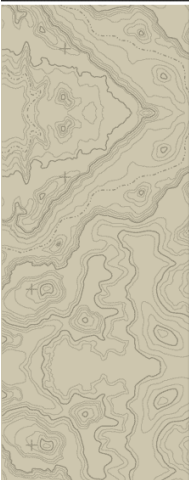
As mentioned above, the online approach was used in the flipped classroom to provide and practice new content using a VLE system. Via the platform, the participants had one video and two weekly activities, which included practicing an activity based on a new element and developing an outline for the weekly essay topic. Regarding the construction of the platform in the VLE system, each week was indicated by a different title and distinct primary objective for the week. For example, week (1) was entitled ‘The structure of the argumentative essay’, with the objective of *understanding the structure of the argumentative essay* (see Figure 4.6). Moreover, all materials for the whole five weeks were accessible to the participants from the start of the teaching period. Every week, the participants watched the videos that had been posted and practiced new material by completing the activities assigned in group discussions on their wiki page. In order to facilitate the process of submitting their answers to the teacher, I uploaded a Word file onto each week’s content page, together with the activity on the system. This enabled the learners to add their final answers and send it to the teacher by email. The group leaders were subsequently responsible for submitting the final answers to the teacher within the allocated time. These activities were selected from *Great Writing 4* (Folse, 2010). The participants also worked asynchronously on the wiki to build up their essay outlines and were provided with links to read from, so that they could develop their arguments.

The FCG participants were divided into subgroups of five, with one group consisted of four learners, working collaboratively in an online environment. At the start of the study, the participants formed their own groups and assigned themselves a group leader in each case. Based on this, I provided access details for each participant according to the group she had joined. In the asynchronous online discussion, each group worked autonomously and each set of students had their own wiki page within the VLE system (see Figure 4.4 below).



**Figure 4.4 The construction of the groups on the VLE wiki page**

Within the course materials in the VLE system, the learners were provided with a welcome page stating the course objectives, as well as a work plan (see Figure 4.5 below). The overall format of the platform was constructed in a similar way for every week, making it easier for the learners to accomplish their tasks.

	Weekdays	Mission
	Whole week	Watching videos at any time I wish
	Fri.-Sat.	Answer the online activity with the online group and send it to the teacher
	Sun.	Check the online activity with the teacher and do the outline
	Mon.	Discuss any difficult materials with my group on wikis
	Tue.	Write my first draft in class and get my teacher's feedback

**Figure 4.5 The learners' work plan on the VLE welcome page**

Contact Information

Week 1

Week 2

Week 3

Week 4

Week 5

Discussions

padlet

Groups

References

Grading

Tools

Help

COURSE MANAGEMENT

Control Panel

Content Collection

Course Tools

Evaluation

Grade Center

The structure of the argumentative essay

Enabled: Statistics Tracking

1.1. The objective of this week: (to understand the structure of the argumentative essay)

In the following video, you will learn about argumentative essays, namely the major elements involved in writing them. You will also learn about the different parts of an argumentative essay: the introduction, body and conclusion. In addition, you will be given some clues about how to write your thesis statement and the refutation paragraph, which are major components of your essay.

Furthermore, you will be provided with an example, illustrating how to present your reason or argument and then support it.

1.2. Video lecture (The structure of the argumentative essay)

1.3. Video lecture (The structure of the argumentative essay-Example)

Availability: Item is not available.

1.4. Week1 Quiz

True, false Quiz

Learning

Grade Center

Users and Groups

Customization

Packages and Utilities

Help

1.5. Things to consider as you write

1.6. Online group activity "write an outline, homework to submit on Sat."

Attached Files: 1.6. Online group activity to write an outline for a given reading text.docx (196.771 KB)

Outline practice:

Now sign in to (Blackboard / wikis); and work with your group to complete the following outline of an argumentative essay about (Mandatory Physical education in school). You can use your textbook pages (118 + 119) to do that.

Note: Please save the file with your group number (for example: group 1 answers) and indicate your group number on the top of your answers.

Hint:

solve it in word file then send the word file using " File To Attach" from (view/complete) below.

1.7. Print it out

Availability: Item is no longer available. It was last available on Jan 30, 2016 6:00 PM.

Enabled: Statistics Tracking

Now print a copy of the outline you made with your friends about "Mandatory physical education in school" to use in the class, and submit through (view/complete) option

>> View/Complete

1.8. Create an outline (Group discussion only through wiki)

Think about the following topic, take a stand and discuss your position with your friends on blackboard wikis (Learning a foreign language "e.g. English" for kids before mastering the First one "e.g. Arabic" can be helpful), you will write about this topic in the coming class.

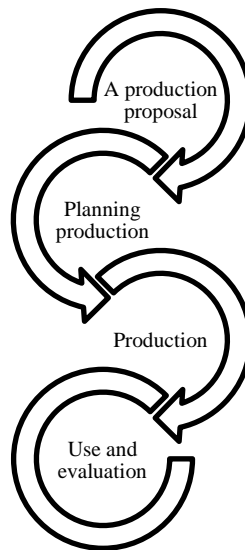
Tip: use the following links , they might help you in building up your ideas.

<http://www.earlychildhoodeducationzone.com/why-your-kids-should-learn-a-second-language/>

**Figure 4.6 Example of the week's content on the VLE (Week 1)**

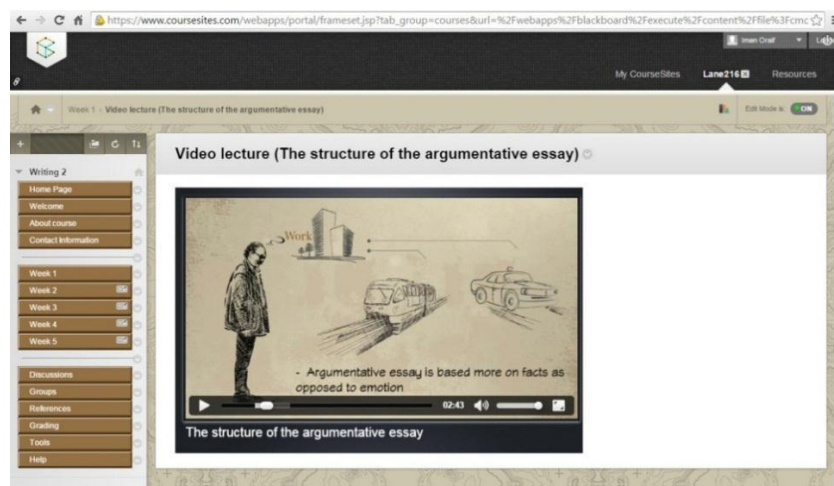
Regarding the procedure for creating the videos, their content was based on the constructed teaching objectives related to argumentative essays, mainly structured using the selected text book, *Great Writing 4* (Folse, 2010). Each week, there was a different video. The videos were constructed using a special software (Adobe After Effect) with

the assistance of IT services in the hosting institution. The construction of the videos corresponded to specific stages of their construction, as per McGovern (1983), whereby implications were taken into account to ensure that resources would be used as effectively as possible. A summary of this is presented in Figure 4.7 below.



**Figure 4.7 The video production process**

In the previous dichotomy, each stage of video production is important and in this case, it helped to enhance the quality of the content; moving from building up the materials, to ensuring the appropriate quality of the audio- and video -recording, before ending with use and evaluation. To ensure the accuracy of the video content, I asked a colleague, who is a language teacher and specialised in TESOL, to provide feedback. Based on this, any necessary adjustments were made. An example of the final outline of the video appears in Figure 4.8 below.



**Figure 4.8 Sample of the video lecture**

The instructional design for the flipped classroom was constructed around a framework based on SCT, with each step being supported by its underpinning theory. A holistic description of SCT is provided in the coming section, as well as a descriptive analysis of other theoretical frameworks (the community of inquiry) that can be adapted to the flipped classroom. Justification is also provided for the appropriateness of the above framework in the current research.

#### **4.4 Theoretical Foundation for the Implementation of the Flipped Classroom**

Since the 1990s, debate has been generated around theories of L2 acquisition and their relationship to the use of computer-assisted language learning (CALL) (Chapelle, 2009). The interconnectedness between student-led activity and CALL was determined by theories such as Krashen's monitor theory. However, this is closer to the cognitive perspective in student-led activities (Chapelle, 2009). Chapelle (2009) found that the use of tele-collaboration emphasised a reliance on theories that are more concerned with social interaction.

The implementation of technology in the classroom must be developed in a way which will best meet the corresponding teaching and learning demands. Moreover, the inclusion of technology or online tools must relate to the theoretical foundation, in order to support their use. On the other hand, SCT (Vygotsky, 1980) can be used to shape strategies in a flipped classroom. Here, the basic concept is related to self-regulated learning, which is at the core of the instructional design for the flipped classroom in this

study. To clarify this, learners need to carefully reflect on their thoughts and actions, based on the available learning resources. The above-mentioned exercise can help build up learners' meta-cognitive awareness, so that they realise what they have actually learned about a topic. Based on SDT, the environment providing the necessary support to meet each of the psychological needs for competence, autonomy and relatedness can have an impact on IM and learning outcomes. To elaborate on this, collaboration is important to satisfy the need for a sense of relatedness, while feedback has an effect on competence and autonomy. Other constructs of the flipped classroom and its possible impact on IM and learning outcomes will be examined in the current study.

Even though other theoretical foundations can be used to support the flipped classroom, such as the community of inquiry, some shortcomings may still be observed. To start with, student-centred learning is a key issue and Kim et al. (2014) propose strategies for creating the flipped classroom on this basis. The above authors identify nine principles, founded on four factors within the revised community of inquiry framework (RCOI), originally devised by Garrison et al. (1999). These factors are presented in the theory as: *teaching presence*, *learner presence*, *social presence* and *cognitive presence*. Each of these elements has its own strategies to be used in a flipped classroom design based on Kim et al. (2014) (see Figure 4.9 below):

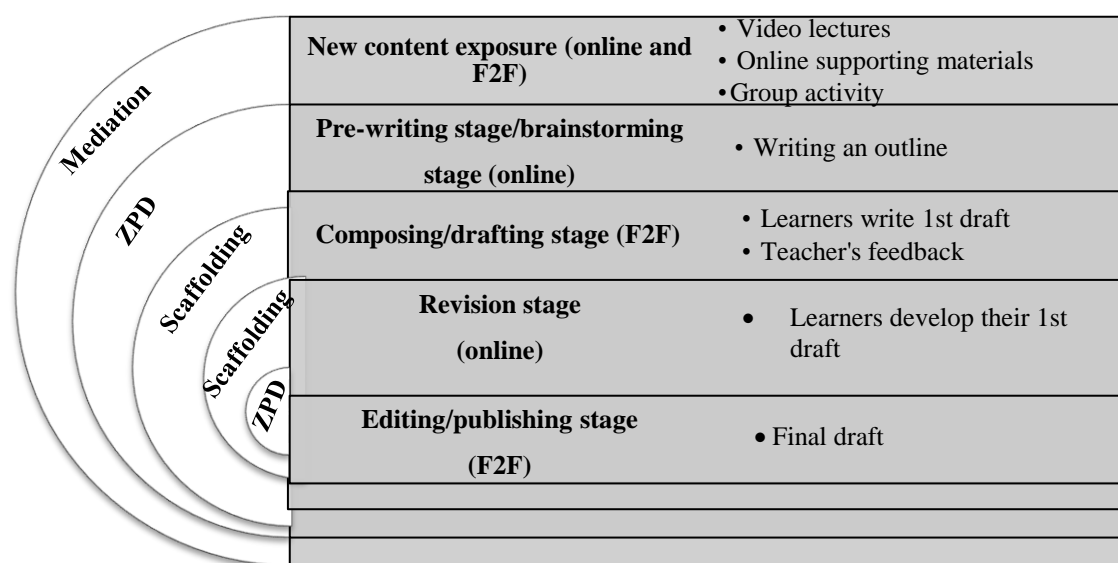
Teaching Presence	Learner Presence	Social Presence	Cognitive Presence
<ul style="list-style-type: none"> <li>•Instructional orchestration appropriate for the learning environments</li> </ul>	<ul style="list-style-type: none"> <li>•Self- and co-regulation of learning</li> </ul>	<ul style="list-style-type: none"> <li>•Encouraging a collegial setting</li> </ul>	<ul style="list-style-type: none"> <li>•Knowledge-building through critical and creative thinking</li> </ul>

**Figure 4.9 RCOI framework used in the flipped classroom**

Most of the elements described above are applicable to the flipped classroom in the current study. However, an interpretation of the use of media, such as videos and ways of implementing them, does not show up clearly in a community of inquiry; the theory

still does not give any comprehensive justification for the use of computer-mediated collaboration or videos in the learning process (Fraga and Harmon, 2015). However, in SCT, it is justified and so the design for the flipped classroom in the current study draws upon this theory as its underlying theoretical framework for the teaching design (Vygotsky and Cole, 1978).

According to Wertsch (1991) and Lamy and Hampel (2007), for example, SCT theorists conceptualise language learning as an interpersonal process, placed in and mediated by a socio-cultural context. Therefore, they view learning as a social practice. Moreover, from the SCT perspective, learning in language classes needs to be a collaborative achievement, rather than an isolated effort where the learner is unassisted and unmediated (Turuk, 2008). Language socialisation is consequently an important element in SCT; it opens the lens on the learner in context, while also considering factors such as the learner's identity, which can affect his or her learning possibilities (Chapelle, 2009). A further description of the rationale for adopting this particular theoretical framework in the present study is discussed below.



**Figure 4.10 The application of SCT to the flipped classroom in the present study**

From the above Figure, the use of CALL and computer-mediated collaborative learning (also known as CMCL) in the language classroom suggests the application of a socio-cultural approach (Hawkins, 2004). From a socio-cultural perspective, CMCL can be helpful for providing learners with a chance to interact and collaborate with each other



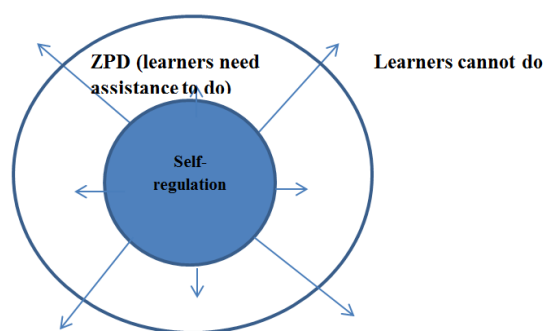
in many different ways (Lamy and Hampel, 2007). Moreover, collaborative learning can be facilitated through various forms of asynchronous CMC, in which learners with different abilities and interests work together in small groups to resolve a problem or complete a project (Hoic-Bozic et al., 2009).

Several studies have adopted SCT and its social dimension in the development of technology-enhanced learning (Sharma and Hannafin, 2007; Ticheler, 2013). In the present research, however, three constructs of Vygotsky's SCT theory are considered in the flipped classroom design: *Mediation*, *ZPD* and *scaffolding*. Regarding mediation, SCT views human learning as mediated through or formed by interaction with others (Lamy and Hampel, 2007). Lantolf and Lantolf (2000) assert that Vygotsky describes humans as acting indirectly on the physical world, in that they use tools which allow them to affect their environment and living conditions. Furthermore, Vygotsky believed that understanding occurred via mediating tools or devices (Hawkins, 2004).

Warschauer (1997), on the other hand, describes the mediation of text through the use of language in interaction as an integral element in CMCL for language in terms of SCT. In this regard, SCT explains the role of social interaction to create an environment for learning a language, learning about a language and learning through language. From this perspective, the interaction can be examined within a broad cultural and social context (Warschauer, 1997).

According to Lantolf and Lantolf (2000), there are different domains of mediation in language learning: 1) Social mediation by experts or peers, 2) Self-mediation through private speech, and 3) Artefact mediation through language, portfolios, tasks and technology. Lamy and Hampel (2007) also consider software and hardware to be mediating tools or artefacts. In the context of this research, mediated learning helps determine the appropriate tools to be used in constructing the respective flipped design. As a result, the EFL learners under study received video lectures to mediate their development. The use of asynchronous communication on the LMS further reinforced peer-mediation in this process.

The other SCT construct applied in this study was the Zone of Proximal Development (ZPD). According to Vygotsky and Cole (1978, p.86), ZPD is the distance between the actual developmental levels, 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. Van Lier (1996) describes ZPD quite simply as the things a person can do confidently within an area of self-regulation. Beyond this will be a range of knowledge where the learner needs assistance with their ZPD and still further will be areas that are unattainable for learning (Figure 4.11 below). According to IM theory, the teacher's assistance in the current study, consisting of providing feedback on the learners' drafts, serves as a constructive power for guiding learners across their ZPD (ibid.).



**Figure 4.11 ZPD in SCT**

According to Lantolf and Lantolf (2000), an important implication of ZPD for language learning pedagogy is that the instructor must know what a person can do with help, since this relates to what the individual will eventually do when this help is internalised. In the current research, the ZPD concept sheds light on how learners accomplish their tasks with the guidance of their teacher and through interaction with their peers (Van Lier, 1996). Accordingly, the teacher's feedback helps the learners develop their drafts. Barnard and Campbell (2005) note that the entire cycle of the process approach for teaching writing can be considered as taking place in ZPD: Learners move from their current writing level to a higher one via a structured framework.

The final construct to be presented in this part of the Literature Review is 'scaffolding'. Scaffolding is the process of providing a situation where entry into learning is easy and successful, before gradually pulling back (Van Lier, 1996). An effective ZPD scaffold

can be developed either by teachers or fellow learners (ibid.). In the present study, the principles of scaffolding described by Van Lier (1996, p.195) are adopted. These principles also applied in a study conducted by Barnard and Campbell (2005), in consideration of tutor scaffolding and within a process approach through the use of SCT for an 'English for Academic Purposes' (EAP) writing course, these principles are:

1. Continuity: Repeated occurrence over time of a set of actions characterised as a mixture of ritual repetition. In the current design of the flipped approach, the learners followed a routine for in- and out-of-class collaborative work at different stages of the cycle. Another example, in both approaches during the drafting, revision and editing stage, on a weekly basis the learners had to write a first and revised draft based on the teacher's feedback.
2. Contextual support: The activity is structured to create a safe but challenging environment, in which learners are encouraged to participate. Errors are tolerated, if not expected as part of the learning process. In the present study, this initially took place in the FCG through video lectures and online links and in the NFG through classroom discussion to support the learners and through the challenge of creating the outline.
3. Inter-subjectivity and flow: Mutual engagement and support and the communication between participants is not forced as it flows in a natural way, whereby for example in the FCG, the learners in this study worked collaboratively to reach a specific goal at each stage of the writing process, such as the learners assisted each other in doing their outline activity, using the online tool.
4. Contingency: Activities can be changed, deleted or altered, based on learners' reactions. Regarding that, the scaffolding provided is related to learners' reactions. In this design, the teacher provided assistance and focused feedback for the learners throughout the writing process in both approaches the flipped classroom and the non-flipped approach. However, the extent of the scaffolding differed, based on the learners' proficiency at each stage (Barnard and Campbell, 2005).

5. Handover: The ZPD ends when a learner is ready to undertake similar tasks without help. This stage is achieved in both groups, in this study, when they write their final draft. Here, the learners attained a high level of writing proficiency and this ZPD then ended, with a new one opening another writing process.

## **4.5 Conclusions**

Concerning SDT, working through ZPD by providing learners with the necessary feedback from their teacher could have a positive impact on the sense of competence and autonomy in both sample groups, leading to enhanced IM and learning outcomes. Moreover, an additional source of collaboration between the learners can build a sense of community and establish a better sense of relatedness. This chapter provides a comprehensive description of the design for the flipped classroom in the present research. It begins by presenting the writing approach adopted and then moves towards its integration into the flipped classroom. It then ends with a clarification of the theoretical framework applied. An investigation into the impact of such an approach on IM for learning is covered in the upcoming chapters. A holistic identification of the ontological and epistemological stance of this research is described in the next chapter, where several different research approaches, methods and tools are described. Both quantitative and qualitative tools are used in the present study. They are described and validated in Chapter five. Their purpose is also outlined, namely to gather the data that will be used to answer the research questions.

## **Chapter Five: Research Methodology**

The existing literature underpinning my research questions and the design for my flipped classroom intervention have been reviewed in previous chapters. In Chapter Four, this primarily referred to the flipped classroom used in this study, whereby it was described in full. The corresponding instructional design was then constructed on the basis of SCT and implemented on a specific EFL writing course - as discussed in Chapters Three and Four. Chapter Five described the study design, including the tools used to measure the impact of both teaching approaches on IM and learning outcomes in an EFL writing class.

This study attempts to answer the following questions: 1) What is the impact in terms of learning outcomes and IM of implementing the flipped classroom approach, in comparison with the non-flipped approach, on the English writing skills of EFL learners?; 2) In both approaches, what is the relationship between, on the one hand, the supporting environment offered and on the other, the satisfaction of psychological needs, IM and learning outcomes?; 3) What is the relationship in the two environments between IM and learning outcomes?, and 4) How do the learners perceive the supporting environment provided by the flipped classroom, in comparison with the non-flipped approach? Several methodological approaches are consequently adopted in order to determine the most suitable approach for fulfilling the research aims and answering the research questions.

This chapter is divided into eight sections. In the first section, the pragmatic stance adopted for the research is described. The rationale for selecting this approach to designing this study is also provided. The next three sections describe the study design, methods of data collection used and discusses the combination of research methods applied. These comprise quantitative tools (questionnaires and a writing assessment) and qualitative tools (semi-structured interviews, EFL learners' diaries and online interaction logs). These methods are then outlined to demonstrate their validity and reliability. In the penultimate section, the methods of analysis adopted are described, taking into account the relevant reliability issues. For the final three sections, ethical considerations and risk plans are also presented in relation to the participants and their involvement in the teaching period with describing my role as a researcher.

## 5.1 The Research Paradigm

Conducting research in the area of social science requires a comprehensive understanding of the research design that is to be applied. In general, research is an activity that is characterised by a thorough examination of a topic. The research process must also be balanced, fair and ethical (Thomas, 2013). Mackenzie and Knipe (2006) define research as a systematic investigation, which is underpinned by a specific paradigm. Basit (2010) describes a paradigm as a perspective that organises thoughts, views, beliefs and practices into a logical whole, thereby informing the research design. Paradigms are partially determined by research questions. Furthermore, all paradigms must address the following questions:

- Ontological: What is the nature of reality?
- Epistemological: What is the relationship between the knower and the known?
- Methodological: How should the inquirer find out about the knowledge – what can be known? (Guba, 1990).

Paradigms can generally be classified into *positivism*, *post-positivism* and *interpretivism* (Guba, 1990; Mackenzie and Knipe, 2006, Teddlie and Tashakkori, 2009). With regard to positivism and post-positivism, the primary methodology adopted is quantitative, although qualitative methods may also be used within this paradigm. In positivism, reality is viewed as a single concept, through which the ‘truth’ needs to be objectively ascertained (Feilzer, 2010). Meanwhile, post-positivism reveals a broad, complex and dynamic approach to understanding knowledge (Guba, 1990); it accepts a multiple as opposed to a single coexistence of reality (Cohen et al., 2013). Conversely, interpretivism tends to involve qualitative data. Basit (2010) and Holliday (2002) call this approach the ‘constructivist’ or ‘naturalistic’ paradigm and it assists with in-depth analyses of human behaviour.

Following the above description, and in consideration of the research questions and aims, the current investigation requires a combination of both positivist and constructivist paradigms. A positivist-realist ontology and objective epistemological stance is important for examining changes in learners’ IM and learning outcomes, both before and after the application of a flipped classroom and in comparison with a non-

flipped approach. According to Thomas (2013), the researcher's mission in positivism is to apply situated variables and to measure the extent of the variation, looking at the relationship between these variables. In addition, a hypothesis will be developed about these relationships, with the possibility of manipulating the variables for experimentation to test a hypothesis and to derive conclusions from these studies. Furthermore, the researcher must be as objective and as neutral as possible.

Conversely, an interpretivist-naturalistic ontology and subjective epistemology are required for understanding the nature and effect of environmental support, as demonstrated by the participants. Creswell (2013) states that the researcher's mission in this approach is to behave naturally, because being 'naturalistic' for the purpose of understanding the world properly will involve listening and watching with an underpinning knowledge of the world. In this way, the researcher will be subjective in his or her interpretation of an existing phenomenon (Thomas, 2013). To clarify this, the present study poses a series of research questions and establishes aims to be addressed using various methods. These are underpinned by positivism and an interpretivist view.

Positivism conceptualises reality in terms of variables and examines the relationship between them (Punch, 2009). This relates to one of the main aims of the present study, namely to determine the relationship between different variables, such as the satisfaction of various psychological needs and IM. Positivism primarily relies on causality, whereby researchers work with quantitative methods of a kind which claim that 'X causes Y' (Thomas, 2013). This also relates to the first main research question in this study, where cause and effect are examined and tested to identify the changes in writing ability and IM brought about by the teaching approach.

The final research question concerns participants' perceptions of the support provided by the teaching environment for meeting each psychological need. These elements are examined statistically in the study and so a more subjective and realistic approach is required, using qualitative data to add richness to the explanation (Punch, 2009). This is because the naturalistic (quantitative) approach is unsuitable for studying human behaviour and the complexity of social phenomena (Cohen et al., 2013). Qualitative methods have the advantage of being more flexible than quantitative methods, which rather facilitate the investigation of natural phenomena (Punch, 2009). Furthermore,

non-positivist interviews are expected to benefit from interactivity between the interviewee and the interviewer, which can provide in-depth inter-subjectivity through twofold discussion, thus revealing social phenomena in greater depth (Silverman, 2016).

To synthesis the above, the present study seeks to examine the impact of a flipped classroom on IM and learning outcomes, in comparison with a non-flipped approach. In addition, this study aims to add richness and explanation to the participants' perceptions of the supporting environment in both groups (the FCG and NFG) and compares their responses. To achieve this, a co-constructed methodological decision was made in the present study, whereby quantitative and qualitative designs were used to collect different types of data as a means of measuring the impact of the teaching approach, followed by further subjective involvement of myself as the researcher through the integration of interviews.

When different types of methodological approach are combined, this also applies to paradigms. In other words, the use of both quantitative and qualitative approaches in a single study will involve combining realities from different philosophical views. This concept is not new; in fact it relates to pragmatism and forms the foundation of mixed-method research, together with mixing modes of analysis to obtain socially useful knowledge (Feilzer, 2010). Pluralism and the combining of different epistemological and ontological, realist and constructivist stances was considered important for fulfilling the current research aims and answering the research questions. Therefore, the theoretical framework applied here was the pragmatic paradigm. This philosophical view focuses on the research questions and ways of approaching them, so that they become more important than any conflict that may exist between paradigms (Punch, 2009).

The pragmatic logic of inquiry involves deduction (i.e. testing theories or hypotheses), induction (i.e. the discovery of patterns) and abduction (i.e. understanding and reflecting on the best interpretation of results) (Onwuegbuzie and Leech, 2005). Furthermore, combining results from different approaches is the core of mixed-method research, in which the variety of data can help provide deeper insights into complex aspects of the phenomena under examination (Onwuegbuzie and Leech, 2005). An explanation for the mixed-method approach employed in the current study is given in the coming section



## **5.2 The Mixed-method Approach**

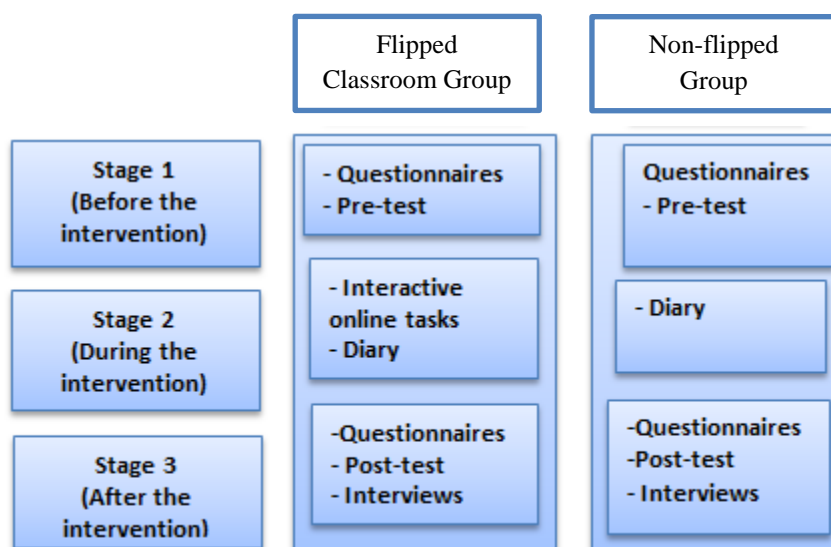
As previously discussed, this current research is based on a pragmatic approach, with a mix of methods being used to answer the corresponding research questions. According to Teddlie and Tashakkori (2009), the mixed-method approach brings together diverse philosophical worldviews and designs, and a range of techniques and tools. Meanwhile, Morgan (2014) holds that approaches can be combined to promote a productive social inquiry. Aside from this, the mixed-method approach measures and observes phenomena comprised of different layers (Feilzer, 2010). For example, a quantitative design is used to measure certain aspects and a qualitative design is used to explain and observe others (Feilzer, 2010). Heigham and Croker (2009) explain that the main characteristics to be considered in mixed-method research include timing (the sequence in which quantitative and qualitative data are collected, such as sequentially or concurrently); weighting (the priority of each type of data, such as QUAN=QUAL, QUAN vs. qual, QUAL vs. quan), and mixing (how the two methods are integrated into different stages of the study).

Accordingly, in this study, a parallel convergent design was applied to combine methods (Creswell, 2013). This design is generally found where a researcher takes into account concurrent timings for conducting quantitative and qualitative strands during the same phase of the research process. This is to give equal priority to the methods, while the strands remain independent during analysis. However, the results are combined during the overall interpretation (*ibid.*). The data are therefore merged, bringing in the two data sets by the end of the analysis. I began by collecting quantitative data (the pre-questionnaires and pre-writing assessment), as well as distributing diary forms to the participants. In the teaching periods, the online interactive task was recorded from Week 2. During the final stage of the period of instruction, quantitative data were once again collected (the post-questionnaire and post-writing assessment), together with qualitative data (the interviews). In the analysis, each set of data was analysed and then merged to answer the research questions.



approach on IM and learning outcomes on an EFL writing course. To maximise the probability of the conclusion that ‘X causes Y’, I ensured that both groups were as alike as possible. Following the experiment, a correlation test was considered to understand the relationship between variables, as stated in SDT. Furthermore, a qualitative comparison was made for the two groups involved, within the designated environment.

The comparison between the groups permitted a broader understanding of how students can benefit from a flipped classroom environment, compared to classroom-based instruction (i.e. the non-flipped approach). In contrast, the flipped classroom is defined as a learning approach that facilitates exposure to new learning content using online tools, such as videos and additional practice, prior to actual classroom time. This is then expected to facilitate communication with others. In the current study, the flipped classroom involved new content being taught via a VLE and additional online collaborative practices, whereas classroom time was invested in actual writing practice using a process approach (see section 4.3). Meanwhile, the non-flipped method applied in this study involved teaching writing in F2F mode, but also using a process approach. Both quantitative and qualitative data were therefore collected from the groups during the same period and at different stages of the study (see Figure 5.2 below).



**Figure 5.2 The experimental study design**

### 5.3.2 Sampling Procedure

The mixed-method approach applied in the current study had an impact on my selection of the study samples. More than one kind of sample (i.e. probability and non-probability) may be used in research, comprising different sizes, types and scope (Teddlie and Tashakkori, 2009). With regard to the sampling procedure, the current study used a simple random sampling technique (Punch, 2009). This is the most basic type of probability sampling, whereby each segment of the population has the possibility of inclusion (Bryman, 2012). In the institution identified as the current study context, the students had already been randomly assigned to groups, using the University's computerised system as part of the course registration. The population from which the sample was drawn subsequently comprised female Saudi EFL undergraduates taking a writing course, with a total of 125 students grouped into seven classes. These were expected to be homogeneous in terms of gender, specialty and level of proficiency. This assumption was based on the fact that they were all studying English Literature in the Department of European Languages and Literature at the School of Humanities, with almost similar EFL educational experience and a minimum of six years of English education. Part of this English instruction had involved an additional mandatory year on the University's Preparatory Programme. Furthermore, all the learners had to successfully pass the entry test stipulated by the Department. Based on this, they were determined as being of intermediate to higher-intermediate proficiency.

As shown in Figure 5.2 (above), two writing classes were randomly selected from the existing classes, whereby the FCG and the NFG were included as a study sample comprising 55 students. I was not permitted to assign the learners to different groups myself, due to the relevant institution's restrictions; the groups were rather determined as 'non-flipped' or 'flipped', based on the participating teacher's preference. After explaining the teaching procedure, all the participants voluntarily agreed to participate, with 24 in the FCG and 31 in the NFG. Regarding the ethical considerations surrounding the participants' involvement, all students from both groups signed a consent form before the start of the study period. This consent form explained the timeframe of the study and the participants' right to withdraw at any stage of the

research (see Appendices A and B). I also informed the participants that they would take part in data collection throughout the different stages of the study.

In both groups, the participants were exclusively female and homogeneous in terms of age: 18-21 years (n=45), 21-24 years (n=9), and slightly under the age of 24 (n=1). In terms of their level of registration in the Department, the participants varied slightly between both groups, but with no significant difference: 21 at level two and 17 at level four. Other participants were distributed across levels 3-7. Quantitative data (using questionnaires and the writing assessment) were drawn from all the participants.

Regarding the ideal sample size for implementing qualitative tools, Marshall (1996) concludes that this primarily relate to the research questions. Moreover, the requisite number of participants may be determined as a study progresses, to the point where no further themes emerge from the data. This is where the data are said to have reached saturation point. A purposive sampling procedure was consequently applied here in selecting a non-probabilistic sample from both groups (Cohen et al., 2013).

With non-probabilistic sampling, the researcher usually includes cases based on a judgment of the candidates' typicality, or the presence of specific desired characteristics (Cohen et al., 2013). In addition, this type of sampling has the merit of enabling access to individuals with in-depth knowledge of a specific issue. A total of six participants from each group agreed to participate in the interviews and four participants from each group volunteered to keep their diaries. The diary participants from the FCG were Students 1, 2, 4 and 6 and Students 1, 3, 4 and 5 from the NFG. The characteristics of these participants were identified on the basis of the demographic information given in response to the questionnaire (see Table 5.1). These participants had varying levels of proficiency, determined in the pre-test writing assessment. Even though they were all designated as being of intermediate to high-intermediate level, their scores for the pre-test ranged from low to high.

**Table 5.1 The interviewees' background**

<b>Group</b>	<b>Name</b>	<b>Years of Studying English</b>	<b>Age</b>	<b>Previous Encounters with Blended Learning (BL) Courses</b>	<b>Number of Weekly Diary Entries Returned</b>
Flipped Classroom Group (FCG)	(Student 1)	7	18-21	No	4
	(Student 2)	10	18-21	No	3
	(Student 3)	8	18-21	No	-
	(Student 4)	7	18-21	No	4
	(Student 5)	7	18-21	Yes/it was found to be hard	-
	(Student 6)	10	18-21	No	4
Non-flipped Group (NFG)	(Student 1)	8	18-21	No	2
	(Student 2)	8	18-21	No	-
	(Student 3)	8	18-21	No	3
	(Student 4)	9	18-21	No	3
	(Student 5)	9	21-24	No	3
	(Student 6)	8	18-21	Yes/last year	-

Different instructors were recruited for the flipped and non-flipped classrooms. They all had experience in teaching EFL courses, particularly writing courses, ranging from 10-15 years. Moreover, they were female, non-native English-speaking university staff from the Department of European Languages and Literature, all with higher degrees in English Literature. In particular, the flipped classroom instructor possessed advanced computer skills in using the Internet and Microsoft Office. She also had a special interest in improving the Department's teaching environment through the development of technology in the language classroom. Furthermore, she was familiar with the specified VLE system, but only for distance learning purposes and had not previously encountered using an online mode merged with F2F instruction. I therefore provided her with training in the use of an instructional design for the flipped classroom. Meanwhile, the NFG teacher demonstrated an interest in applying the process approach, as she already had an extensive experience of teaching writing through F2F instruction. Before the application of the intervention, I explained to both teachers how feedback would be provided and gave them lesson plans to follow.

## 5.4 The Research Instruments

In terms of the intervention, it was applied in both groups in the current study. First, in the process approach, the learners were asked to write two drafts, for which they were provided indirect feedback after writing their first draft. Hence, the FCG received immediate feedback in the classroom, while the NFG was supplied with feedback in a subsequent class, as the teacher presented her feedback during her office hours.

Together with the process approach, the FCG was introduced to the flipped approach, so that they are taught new material through using videos. They also engaged in collaborative activities using wikis, while the NFG worked in isolation throughout the writing process and in classroom activities, but with the involvement of classroom discussion.

Regarding the tools and procedures for collecting data in the fieldwork, I started by collecting quantitative data through questionnaires and writing assessments. The diaries were collected throughout the study for four weeks, using a sub-sample of the participants and the online interactive tool during Week 2 of the study. In the final stage of the data collection, both quantitative data (gathered through questionnaires and writing assessments) and qualitative data (gathered from in-depth interviews) were collected once more (see Table 5.2 below). Each dataset was then analysed separately. Detailed explanations of the methods used are presented in sections 5.4.1 and 5.4.2.

**Table 5.2 The research instruments**

<b>Data Collection Method</b>	<b>Rationale</b>	<b>Number of Collected Items</b>	<b>Number of Participants</b>	<b>Statistical Tests</b>
Pre- and post-writing assessment	To examine the development of writing skills	Two tests for each participant	Total (n=55) NFG (n=31) FCG (n=24)	-The Wilcoxon and Mann-Whitney U tests
Questionnaires, before and after the teaching period	To detect any changes in IM before and after the teaching period, in order to examine the correlation between IM, learning achievement and the satisfaction of psychological needs, as well as the correlation between learning achievement and the supporting environment.	Two questionnaires for each participant from both groups	Total (n=55) NFG (n=31) FCG (n=24)	-The Wilcoxon and Mann-Whitney U tests - The Spearman's rho test

Semi-structured interviews	To gain a comprehensive understanding of the supporting environment in the flipped classroom; compared with the non-flipped process approach.	12 interviews, involving six participants from each voluntarily participating group	Total (n=12) NFG (n=6) FCG (n=6)	Thematic analysis
Diaries	<ul style="list-style-type: none"> <li>- To ensure an immediate data record in both environments.</li> <li>- To identify the learners' concerns, for consideration within the in-depth interviews.</li> <li>- To help generate questions during the interviews.</li> </ul>	26 diaries were collected out of 32 assigned	Total (n=8) NFG (n=4) FCG (n=4)	Thematic analysis
Online interactive tasks	To investigate the type of learner interaction and collaboration in the VLE (wiki pages).	One week of interaction for the FCG participants (Week 2)	FCG (n=24)	Content analysis

#### **5.4.1 Quantitative Instruments**

Quantitative methods were used to examine the change in IM and learning outcomes for the two groups, as well as to compare them in terms of psychological needs satisfaction and environmental support. These tools were used to answer the first three research questions.

##### **5.4.1.1 Writing Assessment Tool**

Assessment is important for identifying learners' abilities and levels of development (Carr, 2011). This tool was used in the current study to answer the first research question. Here, the test was conducted to determine learners' levels in both groups and to compare their development, according to the different kinds of instruction delivered. Together with using the final grade in the correlation analysis to answer second and third research questions. This approach has also been used in previous studies to detect changes in FL writing achievement, following the implementation of a new approach (Grant and Ginther, 2000; Alghamdi and Gillies, 2013), whereby pre- and post-tests are administered to examine the writing development of EFL learners before and after instruction. In the present study, the tests were administered before the teaching period and during the final stage of data collection.

A criterion-referenced test was set for the participants. These types of test are usually given in language programmes to measure development in EFL skills (Carr, 2011). In



the present case, it was an open-ended test (Nation, 2008); taking the form of a responsive writing task, which required the learners to undertake a limited level of discourse by connecting sentences to form two or three logically-connected paragraphs. Moreover, it was a test that had been specifically developed by the Department of European Languages and Literature for the writing course in question and consequently included an evaluation of different types of essay. However, the question was necessarily limited in this study to an argumentative essay-writing task (see Appendix H).

Throughout the procedure for developing the test instrument, further instructions were formulated based on the Michigan English Language Assessment Battery (MELAB) (Nation, 2008). For example, prompts were given, such as, '*You should consider the organisation of the essay (introduction with a thesis statement, main body and conclusion)*'. The main aim of these prompts was to ensure that the participants had a fair chance of performing well in the task (Carr, 2011).

Scoring procedures to assess writing may follow either holistic or analytical scales (Brown, 2010). The current study utilised an analytical scale. According to Carr (2011), in these types of scale, the descriptors are grouped into sub-scales, each of which is focused on a specific performance feature in the overall score. The above author further clarifies that it is impossible to find a scale that will perfectly match the specifications of any test constructed, while at the same time successfully satisfying the purposes of the assessment. Therefore, it was necessary to modify an existing rating scale by making minor changes to its wording. In the current study, Brown's (2010) assessment-scoring procedure was used, with the four constructs of the scale being applied to the following elements: organisation, the logical development of ideas, grammar, punctuation, style and quality of expression. Nevertheless, some descriptors were added to each construct in the present study. These ranged from 1-20 points, depending on the specific requirements of the scale. However, mechanical accuracy (such as in spelling), was not considered, because the learners had gone beyond this stage (Weir, 2004).

The use of an analytical scale has several merits, based on recommendations by Nation (2008). For example, it is considered much more reliable than a holistic scale (Brown, 2010). According to Nation (2008) and Brown (2010), analytic scoring uses a marking

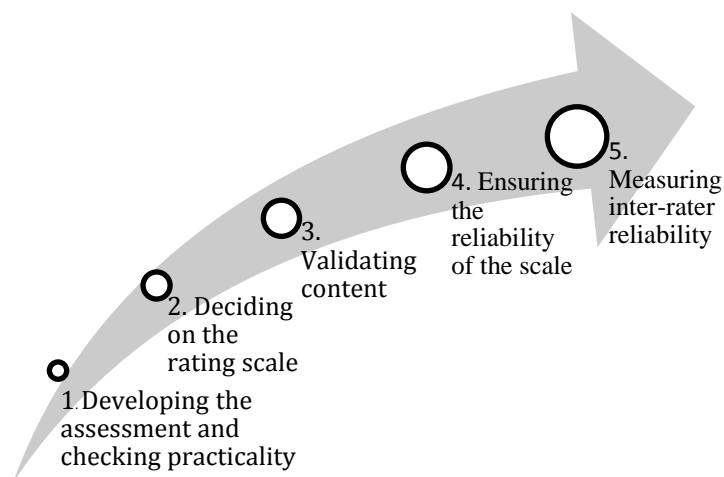
scheme that enables learners to improve on their weaknesses and capitalise on their strengths. The use of analytic scoring in this study had the potential to assess different essay constructs more accurately. In other words, the analytic scale was deemed to be the most appropriate means of testing the current unit's objectives (i.e. writing an argumentative essay) on the respective course (see Appendix I). This is despite the fact that analytic scoring is generally regarded as time-consuming and expensive; it was considered appropriate here, because the sample was small.

In terms of the rating procedure, two raters were involved in attempting to improve the reliability of the scoring and to minimise the subjectivity of the rating. Two is considered a customary number of raters in such an approach (Carr, 2011) and so two independent raters were consequently engaged in correcting the writing test, while another rater and myself marked the pilot test. I therefore trained the rater in a systematic process for consistently applying the rating scale and marking scheme (Weir, 2004). In addition, the rater found the scoring system to be feasible and was able to finish the task within the specified time limit. Two anchor scripts were thus identified for this rater, representing the borderline between a pass and a fail (Weigle, 2002). The rater concerned was a member of the University staff and held a Ph.D., as well as specialising in TESOL. The similarities in the scoring were high and the average of the two scores was used. Based on the adapted analytical rating scale, the following grid was applied by both raters to score each learner (see Table 5.3).

**Table 5.3 The grading grid**

<b>Construct</b>	<b>Score</b>
I. Organisation, introduction, body and conclusion	/20
II. Logical development of ideas: Content	/20
III. Grammar	/20
IV. Style and quality of expression	/20
	/80

In the process of constructing the test, an important element was considered, namely practicality. In this regard, one issue was the suitability of the length of time allocated for the test. In this study, the participants were able to finish the assigned task within an hour. Moreover, the test was administered with ease, avoiding any need for procedural preparation. It also remained within budget and the learners were provided with the printed test and answer sheets. A synthesis of the process of constructing the test is presented in Figure 5.3 below.



**Figure 5.3 The process of developing the writing assessment tool**

#### **5.4.1.2 Questionnaires**

In the current study, a questionnaire was used to address the first, second and third research questions by examining the relationships between variables. In addition, the data collected from the questionnaires were used to measure the change in participants' IM before and after the teaching period (Fotos, 2004; Hussein, 2011). In this regard, the questionnaire was designed to examine three main constructs: 1) The satisfaction of basic psychological needs (for perceived competence, perceived autonomy and perceived relatedness - the intervening variable); 2) Environmental support for each need (the independent variable), and 3) The level of change in IM and learning outcomes before and after the teaching period (the dependent variables).

Questionnaires were considered for the current study, as they have several advantages over interviews, such as their capacity to collect a large amount of information within a limited time (Bryman, 2012). Furthermore, if a questionnaire is well constructed, then it is straightforward to process data gathered in this way. As a result, a questionnaire used

to collect data can reduce the potential for bias - compared to an interview, where bias may be injected by the interviewer. This feature of questionnaires therefore serves to increase the reliability of results (Bryman, 2012).

Nevertheless, according to Dörnyei and Taguchi (2009), questionnaires do have certain drawbacks. These relate to respondents providing simplistic and superficial data, mainly because of a lack of interest or time for completing the questionnaire. This could consequently affect the quality of the results, which will then vary from one respondent to another, depending on the time and care they dedicate to their responses.

Furthermore, the language of a questionnaire can be intimidating, especially for EFL learners with limited proficiency. To compensate for these drawbacks, additional qualitative tools were used in this study, in order to elaborate on the information provided in the questionnaire and avoid including any invalid responses, such as a respondent failing to correctly understand an item (Dörnyei and Taguchi, 2009).

In terms of the type of items included, the questionnaire for the current study consisted of closed-ended questions (Cohen et al., 2013), all in English. A range of possible responses was presented, from which the respondents could choose their answer (multiple-choice questions). A six-point Likert scale of ordinal data was therefore included for different sub-scales, comprising the options: Strongly disagree/Disagree/Slightly disagree/Slightly agree/Agree/Strongly agree. The Likert scale is the most commonly used scaling type and most researchers employing this technique obtain a six digit figure, because the method is simple and reliable (Dörnyei and Taguchi, 2009). I also applied this scale because I was already aware that the sampled learners were likely to be reluctant to express their thoughts, given that this was typical behaviour in the context. In a study conducted in Japan (Dörnyei and Taguchi, 2009), the researchers realised that the participants were anxious about choosing from a range of options and so they opted for the middle point as a safe choice. Therefore, 'Neither disagree nor agree' was amended to 'Slightly agree or disagree', which helped ensure that the required responses were obtained from the participants.

In constructing the questionnaire items in the current study, previous literature was taken as the basis for building up the items and deciding on the constructs (Cohen et al.,

2013), with each sub-scale consisting of four items. According to Hinkin et al. (1997), this number is considered to be adequate for establishing a satisfactory level of reliability. Moreover, the above authors recommend keeping the length of the questionnaire to a minimum, so as to reduce the potential for response bias caused by fatigue. The number of items in the final version of the questionnaire totalled 34. In addition, the current study applies Punch's (2009) recommendations for developing questionnaire items, whereby a wide range of information is usually sought using correlational survey questionnaires.

To elaborate further, the creation of a clear conceptual map of the questionnaire to be implemented is a fundamental step, best conducted in diagram form. In the current study, SDT shaped the conceptual framework. This involved the supporting environment for the satisfaction of the psychological need for competence, autonomy and relatedness, IM, and learning outcomes (see Figure 2.3). This map must begin with general aspects and move towards more specific components, starting with general variables, such as the supporting environment considered in the current study. It will then cover more specific items, namely the satisfaction of psychological needs, IM and learning outcomes.

Furthermore, the length of the questionnaire was considered; ensuring that it was suitable. The post-questionnaire consequently consisted of four parts: demographic information, the IM scale, the psychological need satisfaction scale, and the supporting environment. Meanwhile, for the pre-questionnaire, only demographic data and IM were included. In addition, the wording of the items was reflected upon, with a view to formulating a questionnaire that would be easy for the participants to understand, especially as it would be drafted in English. Simple language was therefore used to construct the questionnaire items and any words that were likely to be difficult for the respondents to understand were substituted during the pilot stage. Through the pilot study, the learners' level of proficiency was found to be sufficient for them to understand the items.

#### ***5.4.1.2.1 Demographic Data***

Regarding the content of the questionnaires, the pre-questionnaire contained questions designed to elicit information on the participants' background. The participants were therefore asked to write their names, so that their responses concerning IM before and after the teaching period could be compared and related to their test marks. However, anonymity was also guaranteed throughout the study in that it was assured that the results would not be discussed with others. Further demographic data were included, such as age, level of study at the University, and prior experience of BL. Age is an important factor to consider, because young people are usually much more eager than the older generation to use online tools (Greenhow et al., 2009). Meanwhile, their respective levels of study at the University would help indicate their proficiency and for the BL experience, it would show the extent to which this approach was already being implemented at the University.

#### ***5.4.1.2.2 The Intrinsic Motivation (IM) Scale***

In the second part of the questionnaire, an IM scale was included. This consisted of 11 items, functioning as a baseline for both groups in the pre-questionnaire (see Appendix G). In contrast, the post-questionnaire included the IM scale, a scale of perceived autonomy, relatedness and competence, and the supporting environment measure (see Appendix G).

The IM sub-scales were modelled on Vallerand et al.'s (1992) Academic Motivation Scale (AMS) and Noels et al.'s (2000) motivational orientations. The items included were created according to a definition of IM, which mainly relates to performing activities for the pleasure that accompanies them. This IM scale originally consisted of seven points, but in the current study, a scaling system with an even number of points was determined as a more feasible option (Cohen et al., 2013) to ensure that the learners did not choose a mid-point - as this is a notable issue amongst East Asian respondents. On the other hand, the IM sub-scale designed consisted of IM-knowledge, which relates to the sense of performing an activity to acquire new knowledge (Items 1-3); for example, 'For the pleasure I experience when I learn more about how to write a good essay'. Conversely, IM-stimulation relates to the sensation stimulated by performing an

interesting task (Items 4 -7), ‘Because I believe the English writing course is stimulating’. With regard to IM-accomplishment, this mainly refers to the sensation of mastering a task (Items 8-11): ‘For the pleasure I experience when I can work out difficult writing activities’ (see Appendix G).

#### ***5.4.1.2.3 Satisfaction of Psychological Needs***

In the present study, the scale for measuring the satisfaction of psychological needs was constructed based on SDT to measure perceived competence, autonomy and relatedness. In terms of SDT theory, these needs are important for establishing higher self-determined motivation and enhancing learning outcomes (Ryan and Deci, 2000). Within each relevant subscale, some items were adapted from an existing measure, while others were generated in the present study based on the literature. The new items constructed were intended to meet the study objectives more adequately (Cohen et al., 2013). Furthermore, Noels (2001) used a similar approach to construct the motivation questionnaire in their study, through which they adapted items for the scale and built up further elements. The items in the present study were selected based on their relevance and appropriateness for the learners’ level of understanding. In different sub-scales of competence, autonomy and relatedness, four items were included in each case; while in the sub-scale of relatedness, one item was deleted after conducting the pilot study, thus enhancing reliability. Different scales were also used to measure the satisfaction of each psychological need, as explained in more detail below.

The psychological need satisfaction scale for autonomy, competence and relatedness was correspondingly adapted from Standage et al. (2005). An example of the perceived autonomy scale is the option: ‘I force myself to write the essay’, while on the perceived relatedness scale, a further example would be: ‘My classmates understand me’.

Meanwhile, an example of the scale measuring perceived competence in the present study was: ‘I am satisfied with my performance in the essay writing’. All the sub-scales adapted here were originally constructed with seven points, but in this study, a six-point Likert scale was applied, for the reason explained earlier. Moreover, in the competence scales, the options originally ranged from ‘Not at all true’ to ‘Very true’, while in this current study, these moved between ‘Strongly disagree’ and ‘Strongly agree’, which

was thought to be easier for the learners to understand, as they are familiar with such scales. The total mean of the three constructs was used to indicate the satisfaction of the learners' basic psychological needs.

#### ***5.4.1.2.4 Support for Satisfying Basic Psychological Needs***

The scale used to measure support for satisfying basic psychological needs was adapted from Standage et al. (2005). Here, different sub-scales were included to measure the level of support for meeting each need, namely the need for autonomy, competence and relatedness. For the scale measuring support for autonomy, the four items in this sub-scale were subsequently modified for the current study. To compensate for this, follow-up interviews were conducted to verify and expand on the learners' responses.

With regard to the sub-scale measuring support for relatedness, one example in the present study was, 'The writing teacher encourages us to work together on the activities'. Meanwhile, to assess the instructor's support for competence, two items were adapted from the previous scale, exemplified in: 'The teacher makes us feel we are good at writing' and a further two items were drawn from the literature and added to this measuring tool, as they served an important purpose for the present research. These related to feedback and the performance of the activities (Items 2-4). The total mean of the three variables was then used as an indicator of the supporting environment, while a reliability test was conducted for each scale and sub-scale, revealing acceptable-satisfactory internal consistency (see section 5.4.5.2).

Concerning the administrative process conducted during the fieldwork, the questionnaires were distributed to both groups. I then collected them myself to guarantee adequate response rates. Distribution and collection were performed during, before and after the teaching period, but in classroom time. The learners were correspondingly given instructions and asked to be honest in their responses. The confidentiality of their responses was also guaranteed, with the reassurance that these would not influence their final marks. The participants required approximately 20 minutes to complete the questionnaires and I provided assistance wherever necessary. At the end of the procedure, I thanked the participants and collected the completed questionnaires.



#### **5.4.2 The Validity of the Quantitative Research**

The most important consideration in quantitative research relates to internal and external validity (Bryman, 2012). According to Cohen et al. (2013), there are different ways of ensuring validity in a quantitative study, such as internal validity, history, testing, selection bias and external validity. Internal validity is demonstrated using different elements. One is the explanation of a particular event or issue provided by a piece of research, which can be sustained by the data. In other words, the findings describe the phenomenon being studied. In the current study, the findings were used to detect any change in the learners' IM and learning outcomes after the application of the flipped classroom. The concept of validity in terms of history relates to the time elapsing between the pre- and post-test. In the present study, this period between the two tests was short.

Cohen et al. (2013) also consider testing to be an important element, potentially impacting internal validity. This is because a pre-test can produce results that differ from those of a post-test, wherein sensitising subjects to the true purpose of the research may lead to higher post-test scores. Thus, I explained to the participants that the test was not part of the actual scoring procedure. Furthermore, more than one rater was involved in correcting the test, using an analytical scale. Instrumentation is another important element for consideration, because unreliable tests and instruments can lead to serious errors in a study. To ensure reliability in the current study, an appropriate reliability test was conducted for each instrument. Additionally, the instruments were constructed on the basis of recommendations from the existing literature. Finally, selection bias is a further important issue, as it can be introduced during the selection of participants and groups. Thus, the current researcher randomly selected groups of students, who had already been pre-assigned to the course by the Department concerned.

In addition to the above, external validity is an important aspect of quantitative research (Cohen et al., 2013). It represents the degree to which results can be generalised to a wider population, cases, settings, times or situations. Several factors can affect external validity, such as the failure to explicitly describe independent variables. This will in turn negatively affect the future replication of the research. Therefore, in the current study and based on SDT, the independent variable of the supporting environment was pre-

specified, together with other dependent variables, such as IM and learning outcomes. A random sampling procedure was then implemented to produce a sample that represented the population from which the participants were drawn. The reliability and validity of each quantitative tool involved is further described in section 5.4.4.

### **5.4.3 Qualitative Instruments**

Qualitative methods were applied to address the final research question, aimed at gaining deep insights into environmental support from the learners' perspective. These qualitative data were collected from the participants through interviews, diaries and online interactive tasks.

#### **5.4.3.1 Interviews**

In social science research, interviews have several merits (Cohen et al., 2013). According to Thomas (2013), an interview is defined as a tool for holding a discussion with someone, in order to retrieve necessary information, such as opinions, attitudes, or a combination of these. Interviews therefore help explore research participants' perspectives of specific social phenomena (Silverman, 2016). However, Cohen et al. (2013) point out that interviews have both merits and drawbacks, in that they can be controlled as well as spontaneous. In addition, the interviewer can press an interviewee to give a fuller answer, thus gaining a more comprehensive understanding of a deep issue. However, the interview method can be expensive to implement and is prone to interviewer bias and fatigue. In order to overcome these obstacles, I set out a specific protocol to follow, so that the interview process could be conveniently conducted within a short period of time. This protocol was based on the results of the pilot study, whereby it was ensured that the duration of each interview did not exceed one hour.

Regarding another issue concerning the use of interviews, Basit (2010) observed that data collected in this way can be unreliable. This is due to the fact that interviews have a strong potential for bias. Nevertheless, Cohen et al. (2013) clarify that bias can be eliminated in various ways, such as by asking interviewees to explain their responses or provide an example. This approach was adopted in the current study with asking the participants to provide examples of their responses. Another way of enhancing the

reliability of interview data is through participant validation, whereby the interview transcripts are sent to the interviewees, so that they can check whether the transcripts match their recollections. However, this strategy is risky, because research participants sometimes delete comments that they have made in interviews. Furthermore, the use of several qualitative tools to triangulate data can help reduce bias and this was the method applied here.

Several types of interview are used in social science research, such as structured, semi-structured and unstructured interviews (Bryman, 2012). Semi-structured interviews were used in the present case. This type of interview is conducted to investigate an agreed topic using open-ended questions. The interviewee consequently has a degree of freedom to talk and the interviewer may exert control if needed (Silverman, 2016). In the current study, semi-structured interviews were conducted to allow for prompts and probes, which were not present in the data collected using questionnaires. Probes were added to the interview protocol to ensure the clarity of the questions and to support the participants in their responses (Miles et al., 2013). Furthermore, each probe was added for a specific purpose in relation to the two instructional environments involved in the study. For example, Question 4 asked: ‘Did you find that completing some of the coursework outside the classroom supported your learning? Why or why not?’ and the probe, ‘Performing the assigned activities on Blackboard and improving drafts outside the classroom’ was added (see Interview Protocol in Appendix D and for the Translated Interview Protocol, see Appendix E).

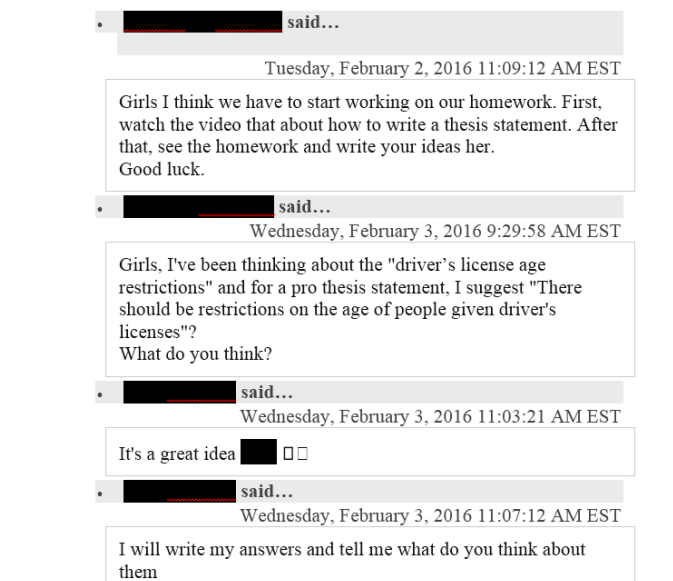
In terms of the interviews, I conducted individual F2F interviews during the post-teaching period. The interviews took place in the college hall or cafeteria to ensure that the participants felt as comfortable as possible. Each interview lasted an average of 30-45 minutes and was digitally recorded after permission to do so had been granted by the participants. I began by explaining the aim of the interviews and addressing the issue of confidentiality. I also provided my contact details, so that the learners could seek further information about the interview content (Turner III, 2010). The interviews were conducted in Arabic, which made it easier for the learners to express themselves. To elicit long answers and the expression of feelings, it was deemed to be easier to use the participants’ mother tongue, and that would serve the main purpose behind using

interviews for understanding participants' feelings towards the used teaching approach. Finally, I transcribed and translated the audio-recorded interviews into English and subsequently sought help from an experienced translator, specialised in Arabic-English translation, to check the accuracy of the translation and make any necessary amendments. The corresponding data analysis is explained in detail in section 5.5.2.

#### ***5.4.3.2 Online Interactive Tasks***

To address the final research question and to provide a source of data for triangulation, the learners' online interactive tasks undertaken via the VLE wikis were used to gather evidence of online interaction and explain the procedure for performing the activities. The students' logs on the wikis were recorded at all stages of the writing process. The discussion threads produced by all five groups were subsequently considered. The typical message length ranged from a single sentence to 20 sentences. Most of the group members took part in discussion, especially when undertaking the weekly activity and writing the essay outline. However, only Week 2 was analysed, because it fell within the middle of the study, at which point the learners had been given enough time to practice using the wikis. Moreover, in Week 2 the focus was on writing thesis statements, which proved to be problematic for most of the learners, as identified in the pre-assessment.

The resulting peer-interaction was recorded and transcribed into Word documents to facilitate the analysis. Around 150 logs maintained by the learners in all five groups for the two activities of the week were captured (see Figure 5.4). These represent a sample of the interaction taking place in one of the groups. I sent a segment of the discussion thread to a colleague, in addition to the analytical framework. This verified the correct use of codes, thus reducing the potential for bias.



**Sample of a discussion thread in the VLE wiki**

#### **5.4.3.3 The Diaries**

Further qualitative data were used to complement the previous tools implemented in answering the final research question. The main purpose of including diaries in the current study was to obtain eyewitness accounts of the educational phenomena being studied (Scott and Morrison, 2005). The diary tool has the potential to substitute observations by recording events from the point of view of the participants (Thomas, 2013). Moreover, the researcher or participant keeps a diary, because it provides a structured record of their thoughts, feelings, actions, conversations and responses to specific activities (ibid.). This means that diaries have the advantage of capturing data that cannot always be obtained in either F2F interviews or observations (Briggs et al., 2012).

With regard to the operability of this tool, Briggs et al. (2012) clarify that diaries are rarely used alone, but rather serve as supplements to interviews. The above authors identify three kinds of diary-interview, each of which is significant for explaining and understanding educational phenomena: 1) Pre-diary interviews are used to explain the purpose of the diary and to reinforce participation; 2) Mid-diary progress interviews

help maintain the commitment of the diarist, and 3) Post-diary interviews help explore issues in greater depth. The third type of diary-interview design is used in the current study. These post-diary interviews involved a brief record of data being retrospectively discussed in interviews (Briggs et al., 2012). I therefore conducted the interviews after collecting the diaries in the present study, in order to help further explore the participants' attitudes to the teaching environment. Most of the participants were limited in expressing their feelings and so they needed to elaborate on these in the follow-up interviews.

To be more specific about this instrument, interval-contingent diaries were implemented (Thomas, 2013). This type of diary is important for gaining access to an immediate record of learners' feelings and their experiences of the teaching environment (Briggs et al., 2012; Thomas, 2013). In this current study, these consisted of paper-based diaries written in English, with the learners being requested to write just a few sentences about what they had encountered during the week. The diaries were then used to reflect on the personal experiences of the FCG and NFG, the availability of the learning materials, the performance of the activities, and the teacher's feedback. These items were considered important for validating the participants' interview responses, as well as to ensure their availability throughout the teaching period in both environments.

Regarding the structure of the diary, it was introduced with a covering letter to explain the purpose of the research and the information to be entered in each diary interval. The participants were asked to include their names, so that their responses could be linked more easily to the interviews. In the diary form, my contact information was included, in case the participants needed help. Moreover, a further information option was added to allow the participants to express their thoughts freely.

The participants therefore received four copies of the diary form - a copy for each week over a period of four weeks - at the beginning of the data collection procedure. I explained to the participants how to use this form and provided any other necessary information. The participants were then asked to submit the form by the end of the week, whereby I would collect the diaries myself, in order to guarantee an adequate rate of return and to be able to answer any of the participants' questions. In total, 26 diaries were collected, with a minimum of two sets of diaries being maintained over the four

weeks of the study (see Appendix F). The analysis of the data collected from these diaries is described in detail in section 5.5.2.

#### **5.4.4 Validity and Reliability in Qualitative Research**

With a qualitative paradigm, validity and reliability are interpreted differently from how they are understood in quantitative research (Cohen et al., 2013). Hence, in qualitative research, internal consistency is mainly concerned with credibility (ibid.). Several methods may be used to ensure credibility, such as prolonged engagement in the field and the triangulation of data (Lincoln and Guba, 1985). These were both practiced in the current study. Other issues to be considered in qualitative research are transferability and comparability, which relate to whether the research findings can be generalised to another study. Lincoln and Guba (1985) argue that it is not the researcher's mission to provide transferability; instead, the researcher must provide rich data for those who will read the research and it is they who will determine whether transferability is possible. An example of this type of validity is the action validity described by Onwuegbuzie and Leech (2005), which refers to the potential influence exerted by research over stakeholders and decision-makers. This study's findings could have an impact by providing an instructional design for use in teaching EFL writing courses and shedding light on the incorporation of an online mode into FL courses.

One of the main concerns of internal validity in qualitative research relates to subjectivity, or researcher bias, since the researcher plays a major role throughout the data collection and analysis (Cohen et al., 2013). To overcome this potential bias, the researcher can triangulate data collected using different resources, such as questionnaires, observations and diaries (Heigham and Croker, 2009). In the current study, I adopted this approach by including interviews and diaries, which reduced the potential for subjectivity resulting from my interpretation and relied more on participants' reflections on the teaching environment.

On the other hand, in qualitative research, reliability is related to the credibility, confirmability, dependability, consistency, replicability and trustworthiness of the results of a study (Cohen et al., 2013). The replicability of research can be addressed using parallel forms (Denzin and Lincoln, 1994, cited in Cohen et al., 2013), but across

different groups. This is applicable to the current study, because comparative groups were studied to investigate responses concerning any environmental support that may have been present in the classes. With regard to dependability, Lincoln and Guba (1985) relate this to respondent validation. It was the approach adopted in the current study by triangulating the qualitative data collected using different resources, but from the same respondents.

#### **5.4.5 Research Tools and Piloting Procedures**

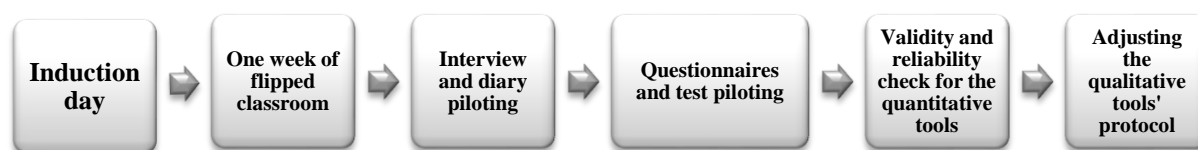
Pilot studies represent a major step towards ensuring the suitability of research tools that have been selected or designed. Prior to the main data collection, I sent an email request to the head of the Department of European Languages and Literature for permission to carry out a pilot study. Approval for this was subsequently granted and the study was conducted during the First Term of 2015. This pilot study consequently validated the research tools and I was able to investigate access to the VLE system for full-time students. In total, 31 undergraduate students specialised in English Literature in the Department of European Languages and Literature at the School of Humanities, of which 20 were voluntarily engaged in using the VLE for one week through implementing the designed flipped approach. These students had already finished their Preparatory Year at the University, and they are similar in their characteristics with the main study's participants.

During the induction day, the pilot study's participants signed the consent form and were assured of confidentiality. The course instructor was given responsibility for carrying out this task with the learners and explaining the procedure to them, and provided the learners with login details for accessing the VLE system according to her group for watching the video, and attempting one of the activities posted in the system. These tasks were to be accomplished by groups of five, working collaboratively, with each participant selecting her group. There were four groups in total.

As a general definition, reliability is referred to as the measurement of consistency on different occasions (Thomas, 2013). On the other hand, validity reflects whether the instrument measures the attributes it is intended to measure (Bryman, 2012). Each tool in the present study was piloted to check its reliability and validity (see Figure 5.5



below).



**Figure 5.4 Description of the fieldwork tasks for the pilot study**

#### **5.4.5.1 Writing Assessment**

Several methods may be used to ensure the validity of an assessment procedure, one of which is to consider content validity. In this study, the validity of the test content was assessed after the first draft of the assessment had been written. This type of validity relates to whether the content of the conceptual definition or the intended item under examination is represented in the measure (Punch, 2009). Content is validated in two steps: 1) Specifying the content of a definition, and 2) Generating indicators that relate to all areas of the content in the definition (Punch, 2009; Brown, 2010). In the present study, I set the test objectives together with prompts in the test form to ensure that the assessment examines the most important elements of an argumentative essay, which includes the organisation of the essay and the quality of expression.

In addition to the above, two TESOL experts were engaged in examining the content validity of the test. Accordingly, I limited the number of topics to one, as opposed to five for the final version. This was because there was a selection of topics, which could have made it difficult to compare performance (Weir, 1993). The topic used in the pilot test consisted of: *'Is working as a cashier a suitable job for women in Saudi Arabia?'* by which it was then used in the main study. This topic was considered to be closely related to the candidates' background and cultural knowledge (Weir, 1993).

Several types of reliability were applied to the constructed test. Following the main data collection and during the pilot study, the reliability of internal consistency was applied (Carr, 2011). This type of reliability examines whether the multiple items of a measurement are consistent and work in the same direction (Punch, 2009). The best-known technique for achieving this involves an alpha coefficient (Carr, 2011). Here, the

test was conducted with 17 voluntary participants who took a part in the one week flipped approach trial and the results revealed a high Cronbach's alpha measure of reliability for the writing assessment (see Table 5.4 below).

**Table 5.4 Cronbach's alpha of the writing assessment tool**

Items	Cronbach's Alpha
4	.931

Following the main fieldwork, I conducted an inter-rater reliability test, measuring the degree of consistency across scores awarded by different raters (Carr, 2011). Because there were only two raters, a Spearman's rho test was also used to determine the correlation between the two scores (ibid.); the Spearman's rho correlation coefficient being  $r = .927$  ( $p < 0.001$ ), thus indicating a strong relationship between the scores awarded by each rater.

#### **5.4.5.2 Questionnaires**

Once the questionnaire items had been prepared in full, the tool was piloted with the learners, who displayed similar characteristics to those of the target respondents. Based on their reflections, the items were adjusted. This process began with an initial piloting stage, whereby I received feedback from three university professors, two of whom were specialised in Applied Linguistics and one in Learning Technology. Their feedback contributed to modifications made to the questionnaire and helped reduce the initial item pools. Unclear, unnecessary, inadequate and missing items were subsequently flagged (Dörnyei and Taguchi, 2009). Based on this feedback, the questionnaire was revised, but further investigation was required to determine how the items would work in practice (ibid.). For example, in one of the items on the competence scale, a recommendation was made by one of the reviewers to replace 'pretty good' in Item 1 with 'developing knowledge', as this comes closest to the study context. Hence, this first draft of the questionnaire was administered to respondents who resembled the target population (ibid.), with the voluntary participation for all of the 31 learners. This number of participants is considered sufficient for conducting pilot studies, as the range

is 10-30 (Isaac and Michael, 1971). The participants signed the consent form and their confidentiality was assured at this stage. One reflection made by the pilot test respondents related to the competence scale, whereby they generally failed to understand the word ‘competent’ and so this was replaced with ‘better’.

To test this version of the questionnaire, the Cronbach’s alpha reliability measure of internal consistency was used to indicate the homogeneity of the items in the same target area. In psychometric terms, this measure indicates how each item correlates with other items and with the total scores on the scale (Bryman, 2012; Creswell, 2013). Some items were deleted to enhance the level of internal consistency, whereas others were retained to avoid compromising the soundness of the scale. Table 5.5 (below) lists the Cronbach’s alpha coefficients for each sub-scale. These were found to range from an acceptable level of 0.65 to a satisfactory level of 0.83 (Cronbach, 1951; DeVellis, 2016).

**Table 5.5 Summary of the reliability of the multi-item scales**

<b>Parts</b>	<b>n</b>	<b>Cronbach's Alpha</b>
IM	11	0.89
Perceived relatedness	3	0.75
Perceived autonomy	4	0.72
Perceived competence	4	0.73
Total for Part 2 (basic psychological needs)	11	0.83
Support for autonomy	4	0.70
Support for competence	4	0.65
Support for relatedness	4	0.83
Total for Part 3 (supporting environment)	12	0.90

#### ***5.4.5.3 The Interviews and Diaries***

With regard to the interviews, inferences of validity mainly refer to face validity, which signifies whether the interview questions measure what they are supposed to measure. One way to approach validity is through the careful formulation of research questions (Cohen et al., 2013). Silverman (2016) suggests piloting the interview scheme and training the interviewer, which is what took place in the current study. After constructing the first draft of the interview scheme, it was piloted and two learners, who

had already participated in the one-week of flipped approach as part of the pilot study, volunteered to participate once more in the interviews. I conducted these interviews checking for leading questions; I rephrased them when required and assessed the appropriateness of the questions for meeting the research objectives (Cohen et al., 2013). This important step was applied to both the diary and the interview.

The pilot study also allowed me to check the clarity of the questions and make any necessary adjustments. For example, two questions were found to provide the same information, so one was excluded, namely ‘Was your teacher able to support you whenever you needed help? If so, can you explain how?’ However, the following question was retained: ‘How did you find your teacher in terms of supporting you in improving your writing skills? Can you please explain further?’ The latter was considered easier for the learners to understand and respond to. Furthermore, attempts were made to reduce the effect of power on the interview’s reliability, by conducting the interviews in a place chosen by the respondents and at a time that was convenient for them (Cohen et al., 2013).

The main purpose of piloting the diary was to check the rate of return, the clarity of the items and whether they served their intended purpose. The course instructor helped conduct this procedure during the pilot stage by distributing the forms at the beginning of the week and later collecting them from the participants at the end of the week. She asked the students to circle any ambiguous words or unclear items, but no items were identified as unclear in the diary form. Finally, 20 learners who volunteered to participate in the one-week flipped approach were given diary forms, while 14 participants completed the diary forms and returned them. This was considered to be a reasonable rate of return. Moreover, the participants responded to the items in a proper manner.

## **5.5 Data Analysis**

In the following two sections, the types of analysis used in this study are explained in detail. The first section (section 5.5.1) relates to the different statistical methods used with the questionnaires and writing assessment. In section 5.5.2, a description of the thematic analysis approach is included, based on Miles et al. (2013). A detailed presentation of the approach used to analyse the online interaction logs is also included in section 5.5.2.

### **5.5.1 Quantitative Data Analysis**

Coding was carried out during the first stage of the data analysis. After the data were extracted from the questionnaires, they were coded and transferred into a specially designed data entry format. Taking into account the coding procedure for ordinal data, each category was given a value: Strongly disagree (1), Disagree (2), Slightly disagree (3), Slightly agree (4), Agree (5), and Strongly agree (6), while the nominal data on age were coded as 1 (18-21 years) and 2 (21-24 years). In reference to previous BL experience, 'Yes' was then coded as 1 and 'No' was coded as 2.

Different variables were measured based on the study's theoretical framework, namely SDT. These were broken down as follows: supporting environment (independent variable), the satisfaction of psychological needs (intervening variable), IM, and learning outcomes (dependent variables). The Statistical Package of Social Sciences (SPSS) version 21.0 (IBM Corp.) was used for data entry and analysis. The basic descriptive statistics were then calculated for the questionnaire items including the mean and standard deviation and writing scores, including the mean, standard deviation, minimum, maximum and range.

To conduct tests of significance on quantitative variables, a normality test was undertaken using the Shapiro-Wilk test (Bryman, 2012). This test was selected, because it is the most suitable for a sample of less than 50. Non-parametric tests were carried out in the analysis, where the results revealed data that were not normally distributed ( $p < 0.05$ ), small set of data ( $n < 30$ ) or else ordered in ranks (Bryman, 2012; De Winter and Cahusac, 2014; Larson-Hall, 2015). It was noted that the abnormal distribution of data was due to the occasional presence of outliers and so the researcher checked whether deleting them would be an appropriate measure (Larson-Hall, 2015). However, according to Huber (1981, cited in Larson-Hall, 2015), the removal of outliers can be problematic for several reasons. First, it is a subjective procedure, because it mainly relies on the discretion of the researcher. Second, an outlier can sometimes mask another outlier, in which case, the researcher will remove one data point. However, this can affect the quality of the findings and result in the deletion of important data. Therefore, non-parametric tests may be considered to be more effective than the removal of outliers. In addition to that with a sample that is less than 30 per group and

come from population that known to be non-normal, it would be recommended to use non-parametric statistical tests (De Winter and Cahusac, 2014).

Regarding inferentiality, non-parametric tests were used and the Wilcoxon signed rank test applied. These represented a means of examining changes in learning outcomes within the same group, before and after the application of a new approach (Larson-Hall, 2015). Furthermore, the Wilcoxon signed rank test was used to examine changes in IM within each group. In addition, a Mann-Whitney U test was deployed to detect differences in IM and learning outcomes between the groups, drawing upon independent samples. These tests were used to determine cause and effect relationships.

Further descriptive statistical tests were conducted in relation to the correlation test, which helped determine the relationship between the study variables, based on the conceptual framework presented in section 2.2.4. Spearman's rho was applied to determine the relationship between the ordinal data (i.e. IM, the satisfaction of psychological needs, and the supporting environment) (Cohen et al., 2013), and ratio data (i.e. the writing assessment scores). This test was used as data were found to be not normally distributed. In addition,  $r^2$  was calculated in each correlation analysis (Cohen et al., 2013, p.636), showing the proportion of variance in one variable that can be attributed to a relationship with the second variable. In other words, the degree of commonality of the two variables was indicated. The responses from the two groups were subsequently merged for use in the correlation analysis. This approach has been adopted in several studies where there are similar variables by combining groups of different genders (O'Reilly, 2014) from different online courses (Chen and Jang, 2010), and from experimental and control groups (Wu, 2003). Further to the above, a chi-square test was then applied in an investigation of the categorical variables related to demographic information. When the assumption of its use was violated (i.e. more than 20% of the expected count greater than five), it was followed by Fisher's exact test (Larson-Hall, 2015). Finally, a p-value of less than .05 was considered significant throughout the study.

The effect size was also calculated. This is essential to assure the importance of the effect because the significance of a result does not mean that the impact of what is measured is important (Field, 2013). Different methods are used to measure effect size,

such as Cohen's  $d$  and Pearson's correlation coefficient,  $r$ . To interpret the effect size of  $r$ , which is used to measure the effect size of non-parametric tests, such as the Mann-Whitney U, Wilcoxon signed rank, regarding the Cohen's classification of effect,  $r=0.10$  is a small effect that explains 1% of total variance, that is indicating that the finding is unimportant, although it is significant. Meanwhile,  $r=0.30$  represents a medium effect that describes 9% of the total variance and  $r=0.50$  is a large effect that explains 25% of total variance. A large effect size indicates that the finding is meaningful. These estimates are adopted in the current analysis. Based on Ayaz and Sekerci's (2015) meta-analysis, in EFL learning performance, effect size can be as high as 2.743. The above authors based their analysis on Cohen's (1992) classification of effect size, where 0-0.20 consists of a poor effect; 0.21-0.50 consists of a modest effect; 0.51-1.00 consists of a moderate effect, and over 1.01 is a strong effect.

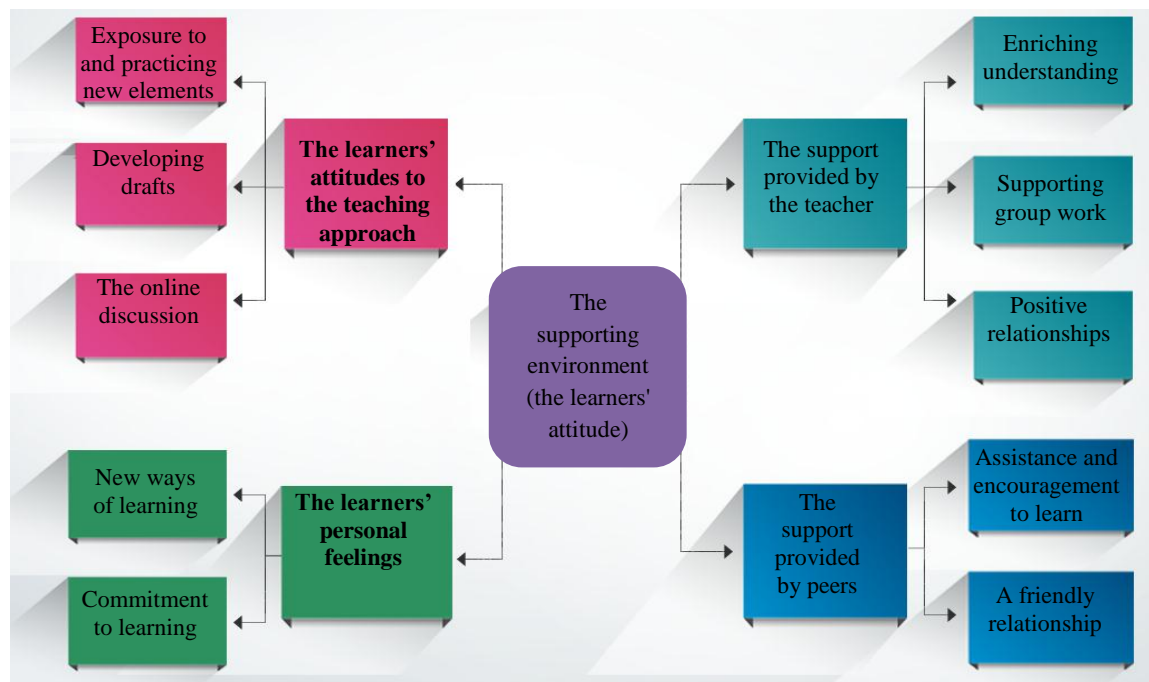
### **5.5.2 Qualitative Data Analysis**

NVivo 10 software was used to facilitate the process of analysis in the present study. The data collected from the interviews and diaries were examined using thematic analysis, in order to answer the second research question. The diary extracts served as illustrative examples of the themes emerging from the interviews (Briggs et al., 2012). This thematic analysis was thus applied to compare the environmental support provided in the flipped and non-flipped classrooms, based on a deep understanding of both groups' perspectives. In thematic analysis, data are interpreted by understanding, analysing and reporting patterns (themes), initially organised into core themes (Bryman, 2012). In contrast, content analysis considers trends in the wording, such as the frequency with which certain words are used, the relationships between them and the structures they form (Vaismoradi et al., 2013). In the present study, a deep analysis of such patterns was required for understanding the perceptions of both groups, as regards the different types of support that enhanced the satisfaction of psychological needs, IM and learning outcomes.

Both inductive and deductive approaches were in fact adopted to analyse the qualitative data from the interviews and diaries, which were divided into pattern codes and sub-codes, as described by Miles et al. (2013). I summarised segments of data to create sub-codes that would provide a basis for the next stage of analysis and develop the pattern

codes. This is known as ‘higher order coding’. In addition, sub-codes progressively emerged from the data and these inductively and deductively derived codes related to the learners’ own reflections on the course. For example, the learners described their personal attitudes to the existing learning resources; these forming part of the supporting environment considered in this study. Pattern codes then emerged, helping to condense the data into smaller and more meaningful units, which were subsequently revised, together with the sub-codes, in order to determine the links between the indicators and the codes (Miles et al., 2013).

In the current study, the pattern codes or themes emerged deductively and inductively from the conceptual framework and related to the environmental support provided by both approaches. Based on the results, four main codes were developed, consisting of the learners’ experience of the teaching approach: their attitudes to the teaching approach, peer support and teacher support, and their personal feelings about the teaching approach (see Figure 5.6 below). I checked the accuracy of coding with my two supervisors.



**Figure 5.5 Codes emerging from the interviews and diaries**



Following the above, the online interactive tasks were analysed using content analysis. The learners' comments were coded and the frequency of the existing codes was counted. In this process, the learners' actual names were not used; instead, they were assigned a number based on their group: for example, Participant 1, Group 1. There were five groups in total, with five participants in each group, except for one group, where there were only four participants. Zhu's (1998) framework coding scheme for interactive online tasks was adopted for this purpose. Within this applied framework, indicators were included based on the data collected from the discussion threads produced by the learners in different activities. This analytical parameter is based on Vygotsky's theory of learning (Vygotsky and Cole, 1978), where so-called 'scaffolding' plays a role in learning. It appears in interaction between peers and between students and their teacher. The scheme fits the main purpose of analysing the discussion threads in the current study, as I sought to understand the role of each participant involved in the group through the online discussion, as well as through the way in which it influenced their relationships with fellow group members and impacted their learning development (Zhu, 1998).

The above-mentioned framework helped to demonstrate the different types of contribution that participants can make to the enhancement of knowledge. According to Zhu (1998), this specific element does not exist in the conversation analysis presented by Schegloff (1981). In terms of the current study, the choice of this framework followed Henry's (1992) recommendation of using a suitable framework to understand and interpret the content of online conferencing. It can help identify learners' personal learning strategies, as well as their strengths and weaknesses, thus contributing to the development of a pedagogy to meet their demands. Based on this analytical model, the analysis included participant categories, types of interaction and categories of notes. These factors were considered in the present study, except for the note category, which relates to the length of the posted notes. This is due to the fact that it has limited importance for the present research aims, given that it was the quality of the comments that was most important for identifying the type of interaction occurring online between the participants in the different groups.

Regarding the categories of participant in this coding scheme, all the participants involved in the online interaction were considered as contributors, because they wrote their ideas and opinions or even asked questions. Other identifications consisted of ‘Mentors’, ‘Wanderers’ and ‘Seekers’. Thus, a few learners failed to contribute, even though they had logged into the VLE system to review the new content. In this way, two learners from two different groups were found to be silent participants. In terms of analytical procedure, indicators were applied to each category in the existing data, in order to facilitate the analysis and ensure its accuracy. This was achieved without deviating from the original descriptions of the categories, but rather added to them (see Table 5.6 below). To validate the categories, one segment was sent to a colleague, a Ph.D. holder specialised in learning technology, together with the existing category, as a means of coding the selection. The percentage of agreement amounted to around 90%. The categories were also checked with the supervisor.

**Table 5.6 The participant category coding scheme, based on Zhu (1998)**

<b>Participant Category Code</b>	<b>Zhu’s Description with Indicators in this Study</b>
Contributor	<ul style="list-style-type: none"> <li>- Each participant in the discussion was counted as a ‘Contributor’.</li> <li>- In this study, each learner posting a log was counted as a ‘Contributor’ in the VLE wiki.</li> </ul>
Mentor	<ul style="list-style-type: none"> <li>- These were participants who read over other participants’ notes, trying to understand their level of knowledge and guiding or helping them to defend and develop their ideas, or to comprehend issues.</li> <li>- In this study, some of the learners read over their peers’ contributions and made suggestions.</li> </ul>
Wanderer	<ul style="list-style-type: none"> <li>- These were participants who seemed to be lost in the learning process in general, rather than in terms of specific issues in the weekly reading. Usually, their notes caused conflict for other readers. This category represents a specific learning stage, where the learners are re-adjusting themselves.</li> <li>- For example, in this study, anyone who was unacquainted with the procedure for performing an activity was considered as a ‘Wanderer’.</li> </ul>
Seeker	<ul style="list-style-type: none"> <li>- These were participants with some inadequacy in relation to understanding specific information and who were seeking clarification.</li> <li>- Following on from the above, the ‘Seekers’ in this study asked about specific issues related to argumentative essay writing.</li> </ul>

These different types of interaction relate to the aims underlying the participants’ notes, which were categorised as reflections, comments, discussion, answers, information-sharing and scaffolding. In addition, information-seeking questions and discussion

questions were also asked (Zhu, 1998, p.825). The indicators from the interactions collected were based on Zhu's descriptions and facilitated the process of analysis (see Table 5.7 below).

**Table 5.7 Coding scheme for different types of interaction (Zhu, 1998)**

<b>Code for Type of Interaction</b>	<b>Zhu's Description with Indicators from this Study</b>
Information-seeking question	<ul style="list-style-type: none"> <li>- The questioner lacks information, which can only be supplied by the answerer. The questioner does not know the answer and so wishes to find out by asking a specific question</li> <li>- An example of this in the current study was, "What did... write about space exploration?"</li> </ul>
Discussion question	<ul style="list-style-type: none"> <li>- This includes initiating dialogue through an inquiry, where 1) The questioner does not expect a ready answer, 2) The questioner seeks an opinion from a peer or expert, and 3) The questioner initiates dialogue among peers, rather than seeking an answer.</li> <li>- In this study, the learners asked for each other's opinions on certain issues related to producing answers in their activities; for example, "So, what do you think?"</li> </ul>
Answer	<ul style="list-style-type: none"> <li>- Providing an answer to an information-seeking question.</li> <li>- In this study, the learners provided each other with answers to information-seeking questions.</li> </ul>
Information-sharing Note	<ul style="list-style-type: none"> <li>- Exchanging thoughts or ideas, including 1) Elaboration on a discussion topic, 2) The exchange of thoughts or ideas on related concepts or issues, and 3) Personal understanding of a given topic.</li> <li>- In this study, the learners shared their answers in response to the activities or outlines with the group. For example, in one of the activities related to age restrictions for driver's licenses, one student added her pro and con thesis statements to share with her group: The pro was, "Plenty of accidents are because of the teenagers and elderly, so the government should restrict the driver's license to a certain age group". Meanwhile, the con was, "I don't believe the government should restrict the driver's license to a certain age group".</li> </ul>
Comment	<ul style="list-style-type: none"> <li>- This is a non-interrogative statement about reading; for example: 'I agree or disagree', or 'the author is right'. The main characteristic of the comment category is that it expresses the student's voice or opinion. It is a judgemental category.</li> <li>- In this study, the learners made judgements in the comment category regarding specific points, such as, "What you wrote and what I wrote are the same".</li> </ul>
Reflective notes	<ul style="list-style-type: none"> <li>- These are reflections appearing in the participants' notes, such as; 1) Evaluations of classes or learning, 2) Self-appraisal of learning and understanding, 3) Instances of self-adjustment of learning goals and objectives, and 4) The main issues of reflection, namely evaluation, self-appraisal and self-adjustment, together with that in the current study an evaluation for classmates' responses is included during online-collaboration, this would help to evaluate the type of relationship that can exist among the participants of the same group.</li> <li>- In this study, comments such as, "I liked what... wrote" and "I am not that good" were considered as reflective notes.</li> </ul>

Scaffolding notes	<ul style="list-style-type: none"> <li>- Peers provide guidance for discussion or reading. This can come from a peer or teacher.</li> <li>- For example, the students commented to encourage fellow learners to perform activities: “We should choose between them”.</li> </ul>
-------------------	---

In this framework, the participant categories relate to the types of post that they added to the discussion thread. The Mentor and Contributor made many different types of contribution, whereas the Wanderer tended to add information-seeking questions and information-sharing notes, while the Seeker posted information-seeking questions.

## 5.6 The Role of the Researcher

Because a mixed-method approach and pragmatic stance were adopted in this research, I was free to use a range of appropriate methods to address the research questions (Creswell, 2013). I consequently played a hybrid role, which involved both subjectivity and objectivity in dealing with the research data, depending on the type of data being collected. To clarify this further, through an analysis of the quantitative data, I had an opportunity to systematically address important research questions; capitalising on objectivity by quantifying the participants’ changes in IM and learning outcomes, both before and after the period of teaching (Punch, 2009).

However, I also needed to consider the data in terms of providing descriptions of the emerging social phenomena (Punch, 2009) and this involved a further subjective role. By using qualitative methods, I was in fact able to gain insider perspectives from the study participants and examine real-life situations. Consequently, I was engaged in an internal analysis of the qualitative data (Berg et al., 2004). In other words, by using subjective tools, I was able to study the real-life experiences of the participants, after introducing the intervention, including their interpretations and perspectives about it (ibid.).

## 5.7 Ethical Considerations

This research was conducted on the basis of the University of Leicester’s Research Ethics Committee’s Code of Practice. Ethical approval was therefore obtained in May 2015 (Application Ref.: immo1-5321). In the initial stages of the research, I obtained permission from the Head of the Department of European Languages and Literature at

the University by submitting a written request for approval, wherein the title of the study, its main objectives and the duration required for its completion were included. A permission was given to obtain access for the pilot and main studies (see Appendix C), with verbal permission being given by the Head of Department concerned to create VLE accounts for the learners during the data collection period.

Some potential ethical issues arose in this study concerning anonymity, confidentiality, the security of the data obtained, the risk of harm to the participants and the risk of researcher bias (Cohen et al., 2013). These issues were resolved in different ways. In terms of confidentiality, more specifically concerning the research data that were generated using various tools, I kept the data gathered from the interviews, diaries and online interactive tasks securely with me, as well as ensuring that the audio-recordings of the interviews were safely stored on my devices. The data from the online discussion threads were not shared with others. The anonymity of the participants was a major concern in this study, since it was possible that the participants' names would be included in the analysis. This was due to the fact that the learners used their real names to log into the system, while using the VLE wikis. Therefore, steps were taken to ensure that the learners could not be identified by anyone else and they were reassured that the data would only be used for this research. The participants' names were ultimately not included in the research report. Moreover, the name of the University was not used in this study and it would not be included in the published data, as this could render the participants identifiable, merely through the dates on which this study was conducted. Finally, the participants were kept anonymous in everyday dealings and conversations with others and the data from the interactive online tasks were not accessible to others outside the study.

Aside from the above, the risk of psychological harm to the participants was also considered. When using an VLE, electronic messages may be stored and learners' login details automatically tracked. This can be annoying for participants and so the students were duly informed and signed a consent form allowing the use of their online data for research and publication. Furthermore, to avoid any risk of harm to the NFG participants, arising from their lack of exposure to the flipped classroom elements, they were also given access to the VLE at the end of the data collection period. This included

the videos and activities. In addition, psychological harm can be caused to participants, if they feel stressed by work overload. This was especially the case in the FCG, as they were requested to complete some of their activities at weekends. I therefore ensured that the video was short and distributed the work to be completed over the course of each week. Furthermore, working on wikis can be stressful for learners, if they are unused to them, and so I provided training sessions for the participants at the beginning of the study. They were then given details of who to contact, if they encountered difficulties. The participants were given the freedom to structure the groups themselves and to assign a group leader. However, there was the risk that using several data collection tools would be stressful for them. Therefore, I avoided formulating long questionnaires, diary forms and interview schedules. In addition to the above, the participants' rights and interests were respected at all stages of the study.

To reduce any risk of bias related to the role of the researcher, especially in the qualitative data analysis and discussion, the data were triangulated. The diary tool also helped reduce the potential influence of my subjectivity as the researcher. Moreover, I did not take on the role of course tutor, but rather assigned this to a different instructor. Overall, the research tools were objectively designed and formulated based on the Literature Review. I also prioritised the dignity of the research participants; each participant was given a consent form in Arabic, which they voluntarily signed to indicate their willingness to take part in the study. This form stated the participants' right to withdraw at any stage and join another class, as well as explaining to them the nature of the study described at the outset. This consent form included a description of the data collection procedures (the type of data and the nature of the class they would be joining) (Silverman, 2016). Furthermore, I explained the study aims without exaggeration, both in the consent form and verbally. Finally, when constructing the tools, I avoided using any offensive language.

## **5.8 Risk Plan**

Various risks could have arisen in this research, mainly concerning the students participating in the FCG. This could have entailed problems with monitoring the learners' online interaction, which can be difficult. Thus, a mitigating strategy was

adopted, whereby I merged different stages of the writing process to encourage online collaboration and interaction, so that offline and online environments could work interchangeably. It is also possible that the learners' lack of experience with computers could have discouraged them from participating in online discussion and so they received training in the form of trial sessions. There was also the risk that they would dislike the online experience and resist using the online environment. I actually encountered this problem with the FCG after the induction in the current study and during the first week of teaching, where one group was disinclined to collaborate. The group leader subsequently strove to engage the rest of the group in interaction through the wiki, while I attempted to establish communication with the participants to identify the source of the difficulty. The participants wrote notes about this and it was found that they did not feel competent in using the online discussion logs. They were then provided with further assistance in the use of the wiki pages and results started to appear the following week. From that point on, the participants began working comfortably in the online discussion mode and completed their work.

Additionally, there was the risk that the learners in the FCG would share material with the learners in the NFG and this would have affected the research results. However, this particular issue is hard to control and so to resolve it, I clarified to the FCG learners that the NFG learners would be provided with the online material at the end of the study. Meanwhile, the NFG were taught using similar material, but with a different mode of providing materials. However, even though the NFG did not collaborate in class, they may have assisted each other outside the classroom. The NFG participants could have used some form of technology to interact with each other or to improve their understanding of a specific point. Both issues were beyond my ability to control. What is more, there was also the possibility that the instructional design of the flipped classroom may have failed to meet the established aims of the identified unit. I consequently sought feedback from my academic supervisor regarding the design, which was based on existing learning theory (SCT). The objectives of the instruction were also specified and every effort was made to meet them.

## **5.9 Summary**

This chapter presents the data collection tools and methods designed to address the research questions and meet the aims of the present study. A mixed-method approach was adopted, in order to construct a more comprehensive picture of the implementation of a flipped classroom to teach EFL writing. Additionally, this experimental design was intended to clarify the possible differences between the participating groups, for whom two different teaching approaches were adopted: a flipped and non-flipped classroom. To be more specific, the data collected using the quantitative tools designed for this study could help evaluate the possible effect of the flipped classroom in an EFL context, as compared with a non-flipped approach. Meanwhile, the qualitative data gathered shed light on the participants' perceptions of any support provided by these different teaching approaches on an EFL writing course. The qualitative data were also considered to be important for triangulating the quantitative findings. Hence, data analysis will be the next important step for determining changes in IM for learning and learning achievement, as well as for identifying the possible relationship between these two variables. This data analysis will consequently be examined in Chapter Six.



## **Chapter Six: Findings Related to the Change in Intrinsic Motivation (IM) and Learning Outcomes amongst EFL Learners and Based on Self-determination Theory (SDT)**

This chapter is comprised of five main sections. The first section presents the characteristics of the study group and the second presents the results of the writing test. The third section includes students' responses to items reflecting their IM on an EFL writing course, whereby the responses from an FCG and NFG were compared. Sections 6.2 and 6.3 relate to the first research question: 'What is the impact in terms of learning outcomes and intrinsic motivation (IM) of implementing the flipped classroom approach, in comparison with the non-flipped approach, on the English writing skills of EFL learners' The fourth section of this chapter presents the findings comparing the students' levels of satisfaction, followed by a comparison of their responses to statements about the supporting environment. The fifth section then examines the relationships between plausibly linked study variables according to SDT, IM and the satisfaction of psychological needs. The relationship between the satisfaction of psychological needs and the supporting environment of the above-mentioned EFL writing course. In addition, the relationship between IM and learning outcomes is considered in this final section. The fourth and fifth sections relate to the second and third research questions: 'In both approaches, what is the relationship between on the one hand, the supporting environment offered and on the other, the satisfaction of basic psychological needs, IM and learning outcomes?' and 'What is the relationship in the two approaches between IM and learning outcomes?' To answer the final research question, qualitative data were used and these are described in Chapter Seven.

### **6.1 Characteristics of the Study Groups**

According to the study design, the 55 students who participated in this study were allocated to one of two randomly selected groups, namely the FCG (n=24) and the NFG (n=31). The background information gathered from the participants included the duration of their English studies so far; age distribution; university level, and experience of BL. This information I outlined in the following section (6.1).

### 6.1.1 Duration of Studying English

As shown in Figure 6.1 below, most of the students had been studying English for eight years prior to this course. These constituted 16.4% from the FCG and 32.7% from the NFG, which may be considered a suitable duration of study for developing FL knowledge. Within the relevant age range, most students would have finished High School and started a college course. Meanwhile, learners in their university Preparatory Year participate in extensive courses covering four English-language skills. This is aimed at preparing them sufficiently for their various university specialisms, which are taught through the medium of English. It would indicate that the study sample had already received at least seven years of English instruction, thus ensuring an intermediate level of proficiency across the different EFL skills, especially rhetoric.

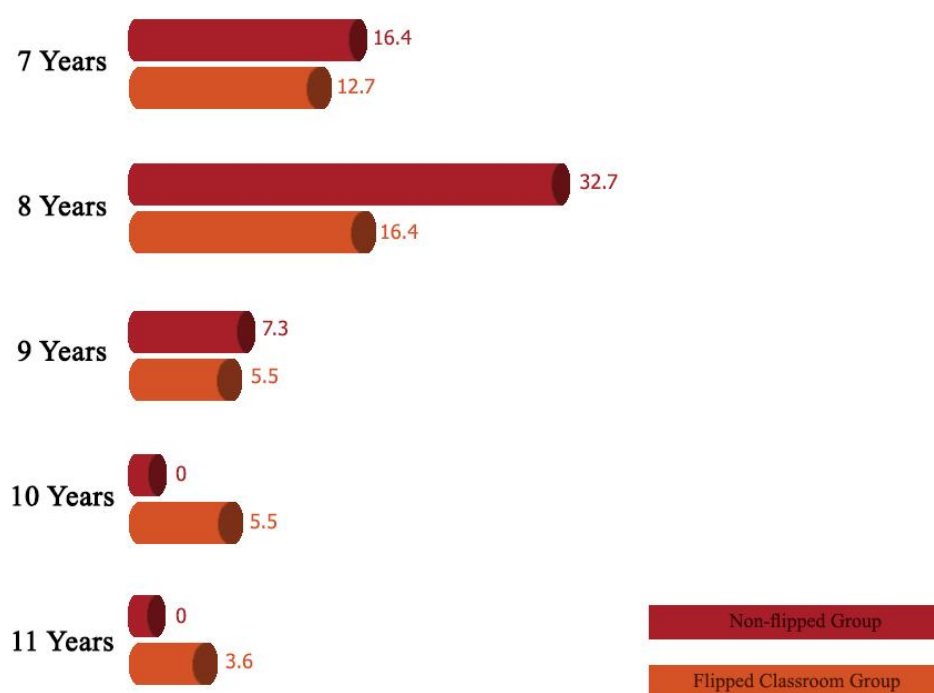
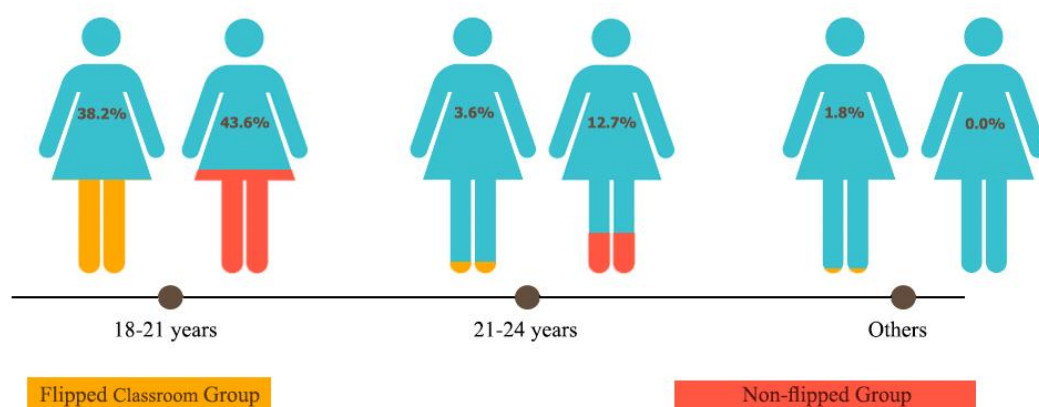


Figure 6.1 Numbers of years of English study

### 6.1.2 Age Distribution across the Groups

The data show that the majority of the students were aged 18-21; constituting 87.5% of the FCG and 77.4% of the NFG (see Figure 6.2 below). This further illustrates that the majority of the participants were at their second level of study in the Department of European Languages and Literature, having completed their Preparatory Year. Moreover, the age of a learner can play an important role in how they use an online mode. For instance, it is generally expected that the youth will be more curious about integrating such practices into their education, corresponding to the current rapid development of technology (Jones et al., 2009).

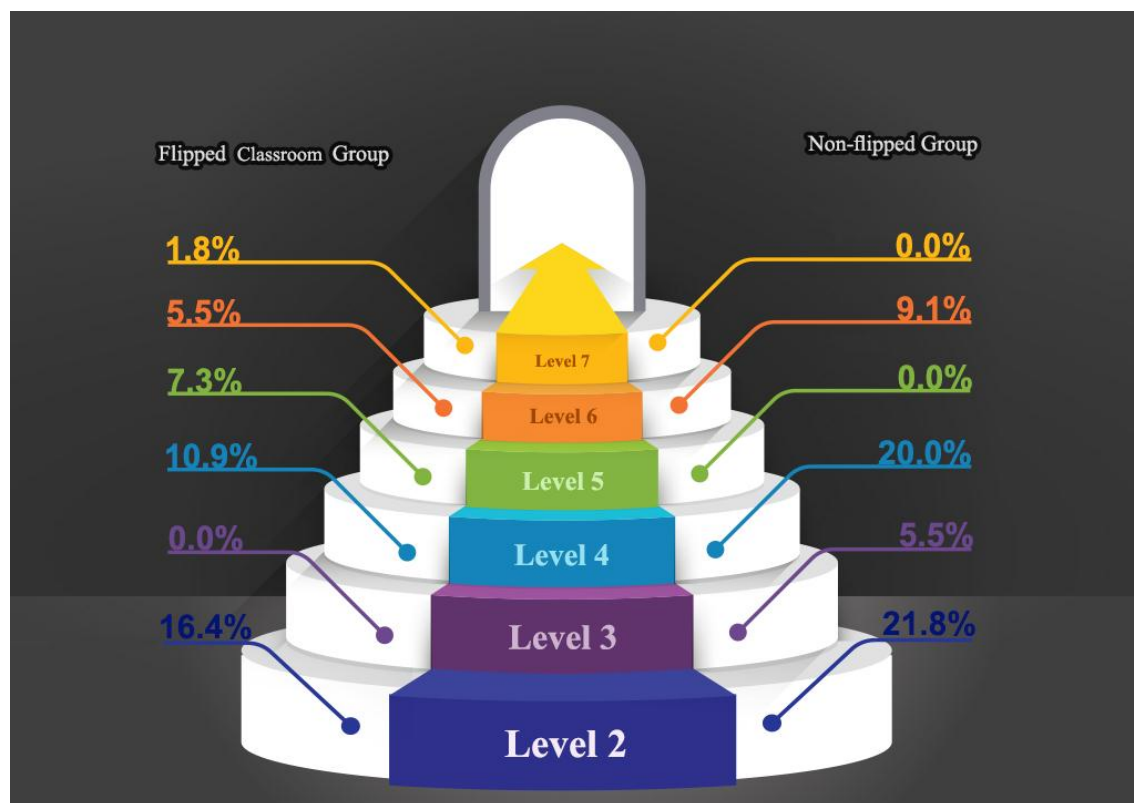


**Figure 6.2 Age distribution across the groups**

### 6.1.3 University Level of the Participants

In the institution sampled for this study, the students move levels each year, with every term constituting a level. For example, the first term of the first year is the first level, while the second term of the same year represents the second level and so on. These levels are very important for identifying learners' duration of study at the University and more specifically, in the identified Department. At the time of conducting this study, over one third of the students were at the second level of their university studies

in the Department of European Languages and Literature, amounting to 39.1% of the FCG and 38.7% of the NFG (see Figure 6.3 below).

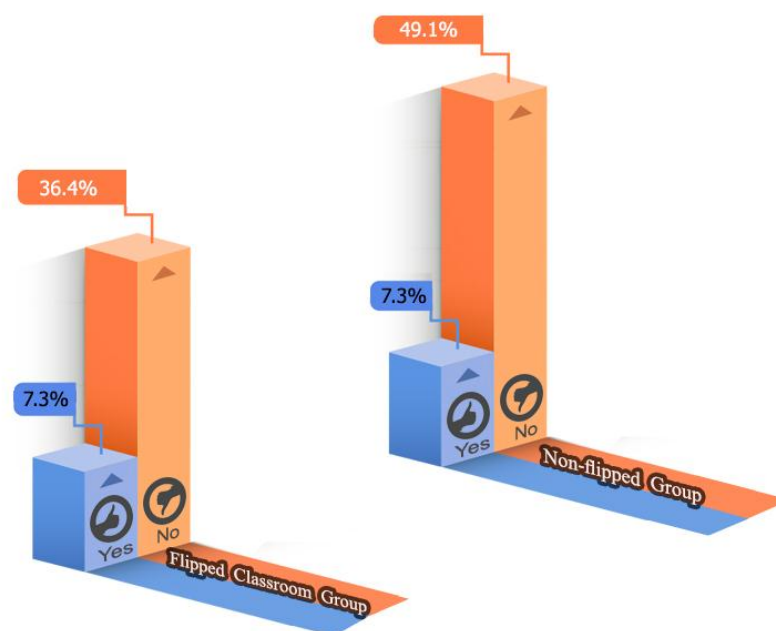


**Figure 6.3 Participants' university levels in the Department of European Languages and Literature**

#### **6.1.4 Previous Experience of Blended Learning (BL)**

Regarding previous experience of BL, only a small minority of the students declared that they had experienced courses combining online and F2F instruction (so-called 'blended learning'). This amounted to just four students from each group, with no statistically significant differences between the two groups based on a chi-square test ( $p > 0.05$ ; see Figure 6.4 below). Regarding the participants' university levels, one member of the FCG was at Level 2 and three were at Level 4. Meanwhile, in the NFG, one member was at Level 4 and three were at Level 2. BL has only recently been introduced into the institution concerned. Moreover, it has not yet fully emerged as an official teaching method on English courses in the study context, but has rather been specified as providing learners with additional practice after class. As a result, it is not evident for all courses, aside from English language courses. On the University website,

BL is defined as a supportive model combining the best of the online environment with F2F teaching, in order to enhance teaching and learning. However, in the University, BL is subject to certain limitations determined by the institution, including its applicability to various courses. This study therefore attempts to provide a design to be used in EFL writing instruction, providing evidence of its impact as a teaching approach. More specifically, it relates to the flipped approach and how it can be integrated into FL courses. This could motivate stakeholders at the university to take a further step towards applying the BL approach in formal education.



**Figure 6.4 The blended learning (BL) experience**

## 6.2 Analysis and Interpretation of Achievement in Writing

This part of the study examines the effect of the flipped classroom and process approach on teaching an EFL writing course. The data were obtained before the first week of teaching and by the final week of teaching. To start with, a normality test was conducted and then descriptive statistics were derived for the overall baseline, with final test results being presented for both groups (as illustrated in Tables 6.2 and 6.3 below).

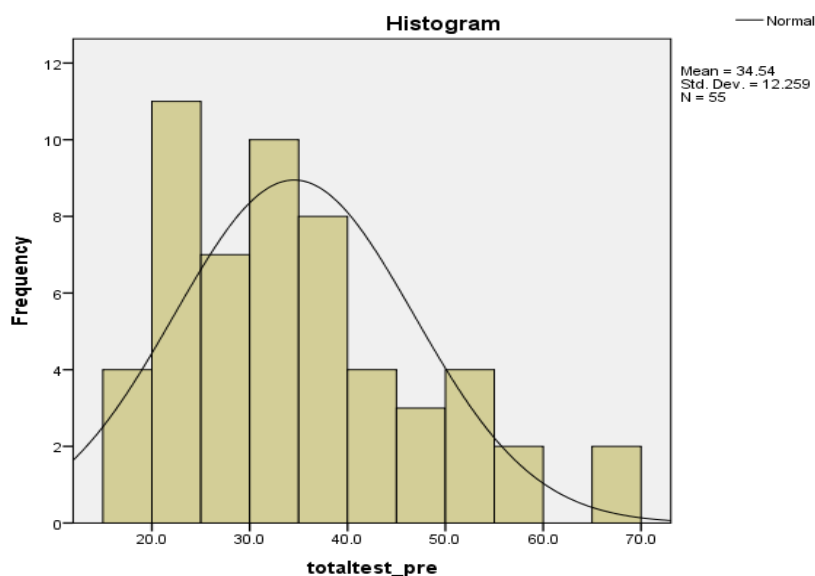
### 6.2.1 Normality Tests

In this section, the normality tests for different types of data are described. This will help identify the type of statistical test to be used in the following sections of the analysis. The normality test is known as the Shapiro-Wilk test. Regarding the level of normality for the writing assessment, a description is provided in Table 6.1.

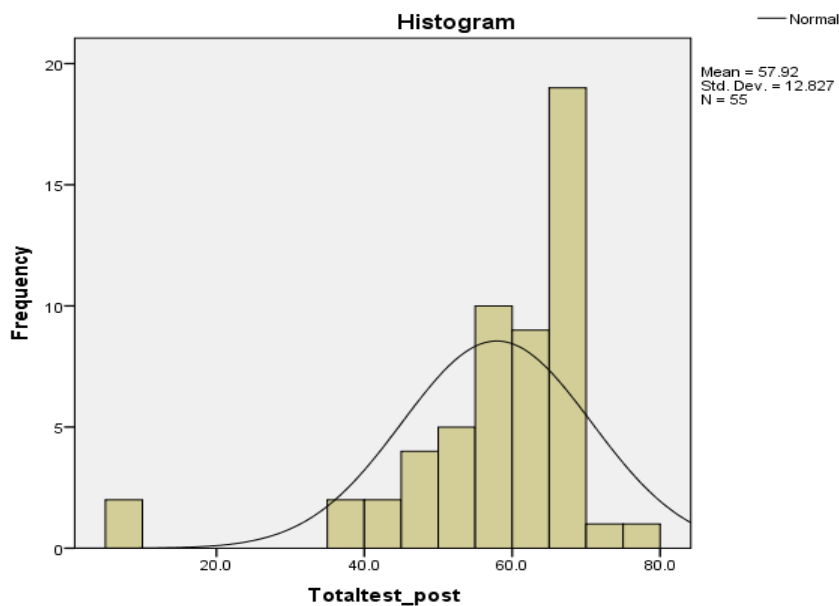
**Table 6.1 Normality test for the pre- and post-test measurements**

Group		Shapiro-Wilk		
		Statistic	Df	Sig.
Non-flipped Group	<i>Writing test_pre</i>	.938	31	.071
	<i>Writing test_post</i>	.841	31	.000
Total for both groups	<i>Writing test_pre</i>	.948	55	.019
	<i>Writing test_post</i>	.790	55	.000

From Table 6.1 (above), the data are indicated as abnormally distributed for both the FCG and NFG in the pre-writing course test, as registered to be  $D(55) = .948$ ,  $p < .05$ . Regarding the data obtained from both groups in the post-writing assessment, they were found to be abnormally distributed, as registered to be  $D(55) = .790$ ,  $p < .05$  (for further detail see Figures 6.5 and 6.6, below).



**Figure 6.5 Histogram of total pre-test writing results in both the FCG and NFG**



**Figure 6.6 Histogram of total post-test writing results in both the FCG and NFG**

In terms of both groups' learning outcomes, the mean of the FCG test score increased from  $33.0 \pm 11.48$  to  $65.8 \pm 2.47$  at the end of the study; compared to the NFG which increased from  $35.73 \pm 12.89$  to  $51.79 \pm 14.23$ . It is therefore evident that the total score for the FCG is higher than the total score for the NFG, which may indicate the better outcomes of using the flipped classroom (see Tables 6.2 and 6.3).

**Table 6.2 Results of the baseline test**

Domains	Minimum	Maximum	Range	Mean	SD
FCG	15	57.5	42.5	33	11.48
NFG	16.5	68	51.5	35.73	12.89
Total	15	68	53	34.54	12.26

**Table 6.3 Results of the final test**

Domains	Minimum	Maximum	Range	Mean	SD
FCG	61.5	70.5	9	65.83	2.47
NFG	9	75.5	66.5	51.79	14.23
Total	9	75.5	66.5	57.92	12.83

Further tests were subsequently carried out to examine whether there was a significant difference between the pre and post-learning scores for a writing test administered to the students in the FCG and the scores obtained by the students in the NFG. To indicate this, the use of non-parametric tests (the Mann-Whitney U and Wilcoxon Signed Rank Tests) proved helpful for revealing the difference in data between two unrelated groups and within the same group, since the data were found to be abnormally distributed across the total for each group. The use of a non-parametric test is also suitable for small numbers of participants, as in the present case with the FCG ( $n < 30$ ), where normality is almost impossible to predict. The total test score is used in the analysis in the following section and will be further applied in the correlation analysis in section 6.5.3.

### 6.2.2 Comparing the Students' Scores in the Baseline Writing Test

Comparing the results from the FCG with those achieved by the NFG through Mann-Whitney U test, Table 6.4 shows that there were no significant differences between the two groups in their total marks at the start of the study with  $U=330.000$ , ( $Z=-0.713$ ,  $p=.476 > 0.05$ ).

**Table 6.4 The students' scores in the baseline writing test (n=55)**

Group	N	Mean Rank	Mann-Whitney U	Z	P-value*
FCG	24	26.25	330.000	-0.713	0.476
NFG	31	29.35			

\*Based on the Mann-Whitney U test

### 6.2.3 Changes Observed for the Flipped Classroom Group (FCG) and the Non-flipped Group (NFG), with Scores Compared to the Baseline Test

Further tests were carried out to demonstrate the differences within and between the groups at the end of the study, as shown in Tables 6.5, 6.6 and 6.7 below.



**Table 6.5 Changes in the FCG's achievement in the writing test, compared to the baseline and by the end of the study (n=24)**

Post- and Pre-learning Achievement	N	Mean Rank	Z	P-value*	Effect Size
Negative Ranks	0 <sup>a</sup>	.00	-4.287	<0.001	0.88
Positive Ranks	24 <sup>b</sup>	12.50			
Equal	0 <sup>c</sup>				
Total	24				

\*Based on the Wilcoxon test

By examining the results of Wilcoxon signed rank test illustrated in Table 6.5 (above), a significant increase can be seen in the marks achieved by the FCG in the final test, compared to their scores at baseline ( $Z = -4.287$ ,  $p < 0.001$ ), and presents a large-sized effect of  $r = 0.88$ . Based on these results, it could be claimed that the flipped classroom approach by using videos on an EFL writing course significantly increased the FCG's level of attainment.

**Table 6.6 Changes in the NFG's achievement in the writing test, compared to the baseline and by the end of the study (n=31)**

Post- and Pre-learning Achievement	N	Mean Rank	Z	P-value*	Effect Size
Negative Ranks	4 <sup>a</sup>	9.88	-4.086	<0.001	0.73
Positive Ranks	27 <sup>b</sup>	16.91			
Equal	0 <sup>c</sup>				
Total	31				

\*Based on the Wilcoxon test

On examining the results of Wilcoxon signed rank test presented in Table 6.6 (above), a significant increase may be seen in the marks achieved by the NFG in the final test, compared to their scores at baseline ( $Z = 4.086$ ,  $p < 0.001$ ). However, the magnitude of change was lower than what was observed for the FCG, but in any case presented a large-sized effect of  $r = 0.73$ . This would indicate that although the use of the non-flipped approach appeared to have helped enhance the learners' writing ability, the NFG failed to reach the level of attainment demonstrated by the FCG, who were taught using a flipped classroom approach.

**Table 6.7 Comparing changes in the FCG and NFG's achievements in the writing test by the end of the study (n=55)**

Groups	N	Mean Rank	Mann-Whitney U	Z	P-value*	Effect Size
FCG	24	40.15	80.500	-4.950-	<0.001	0.67
NFG	31	18.60				

\*Based on the Mann-Whitney U test

An examination of the findings may be found above in Table 6.7, together with the findings derived from the Mann-Whitney U test. This was applied to an assessment of the post-test writing scores, in order to detect the difference between the FCG and NFG. Here, it is evident that the FCG achieved significantly higher total scores than the NFG, with  $U = 80.500$  ( $Z = -4.950$ ,  $p < 0.001$ ). This presents a large-sized effect of  $r = 0.67$ , which indicates that the difference between these two groups was sufficiently great. Although the pre-test analysis failed to identify such a significant difference, the results of the mean rank in the post-test indicate a higher level of achievement by the FCG on completion of the teaching period, compared to the NFG. The possible change in learning outcomes for both groups can be related to the change in their IM, in which they started to find the activities more pleasurable to perform. The possible reason for the change will be further tested, first by examining the change in IM for both groups in section 6.3; followed by conducting a correlational tests in section 6.5.2 and 6.5.3.

### **6.3 The Results and their Interpretation Regarding Intrinsic Motivation (IM) for the Non-flipped Group (NFG) and Flipped Classroom Group (FCG)**

The second sub-problem to be examined in the current study concerns whether there was any significant difference between the FCG and NFG in terms of IM before and after the period of teaching. Here, the descriptive test is elaborated on first, followed by the non-parametric tests used to examine changes in IM during this stage. These tests are suitable for use with ordinal data. The Mann-Whitney U test was therefore applied in a comparison of the groups, prior to and following the period of teaching, while the Wilcoxon test was applied to examine any changes occurring within the groups before and after this period. However, although IM is generally broken down into the components, *IM-knowledge*, *IM-stimulation* and *IM-competence* (see section 2.2.3), it

was analysed in this study as a single concept, indicated as *IM*. This facilitated analysis and helped produce more accurate results.

### 6.3.1 Comparing the Responses from Both Groups at Baseline

When the students were asked to indicate their responses to statements that reflected their IM, there was considerable agreement with particular statements. These are presented in Table 6.8 and include the students feeling positive about being able to modify their writing, with a mean score of  $5.3 \pm 0.85$  out of six. This was followed by feeling satisfied about understanding a difficult idea related to essay writing ( $5.1 \pm 1.01$ ) and receiving feedback from the teacher on their writing ( $5.0 \pm .98$ ). Meanwhile, the lowest level of agreement was observed for the statement, ‘...[they] have a lot of fun in the English writing class’, with a mean score of  $3.9 \pm 1.39$ . The comparison between the FCG and NFG students prior to the intervention is illustrated in Table 6.8 (below).

**Table 6.8 Comparison of mean scores for responses to statements reflecting intrinsic motivation (IM) in the FCG and NFG at the start of the study (n=55)**

Statements	FCG Mean $\pm$ SD n=24	NFG Mean $\pm$ SD n=31	Group Total Mean $\pm$ SD n=55
1. For the pleasure I experience when I learn more about how to write a good essay.	4.8 $\pm$ 1.11	4.7 $\pm$ 1.20	4.7 $\pm$ 1.15
2. For the satisfied feeling I get on finding out about different types of essay writing.	4.3 $\pm$ 1.27	4.5 $\pm$ 1.03	4.5 $\pm$ 1.14
3. Because I enjoy the feeling of learning more about the various components of different types of essays.	4.2 $\pm$ 1.02	4.0 $\pm$ 1.33	4.1 $\pm$ 1.20
4. Because I have lots of fun in the English writing class.	3.9 $\pm$ 1.28	3.9 $\pm$ 1.49	3.9 $\pm$ 1.39
5. Because I like to have the teacher’s feedback on my writing.	5.0 $\pm$ 0.81	4.9 $\pm$ 1.11	5.0 $\pm$ 0.98
6. Because I believe that the English writing course is stimulating.	4.8 $\pm$ 0.96	4.6 $\pm$ 0.98	4.7 $\pm$ 0.97
7. Because I feel good when I write properly in English in the class.	5.1 $\pm$ 1.25	4.5 $\pm$ 1.57	4.8 $\pm$ 1.45
8. For the positive feeling I experience when I communicate my ideas to my classmates in the writing class.	4.8 $\pm$ 1.14	4.2 $\pm$ 1.13	4.4 $\pm$ 1.17
9. For the pleasure I experience when I am able to work out difficult writing activities.	4.5 $\pm$ 0.93	4.2 $\pm$ 1.18	4.3 $\pm$ 1.08

10. For the satisfaction I feel when I understand a difficult idea related to essay writing.	5.3±0.79	4.9±1.14	5.1±1.01
11. For the positive feeling I get when I am able to modify my writing.	5.3±0.96	5.2±0.76	5.3±0.85
<b>Overall</b>	<b>4.7±0.55</b>	<b>4.5±0.57</b>	<b>4.6±0.56</b>

The Mann-Whitney U test revealed no statistically significant differences in IM between the two groups before the start of the study with  $U=283.000$  ( $Z=-1.515$ -,  $p=.130>0.05$ ), indicating similar levels of IM between both groups at baseline.

**Table 6.9 Comparing the mean ranks for IM in the FCG and NFG at the start of the study (n=55)**

Group	N	Mean Rank	Mann-Whitney U	Z	P-value*
FCG	24	31.71	283.000	-1.515-	0.130
NFG	31	25.13			

\*Based on the Mann-Whitney U test

### 6.3.2 Comparing Students' Responses at the End of the Study

After the period of teaching and compared to the NFG, the FCG displayed a significant increase in IM, as shown in Table 6.10 (below); whereas the overall score was higher in the FCG ( $5.2\pm0.80$ ) than in the NFG ( $4.4\pm0.88$ ). A higher score was also observed for most of the statements, namely: 'For the satisfied feeling I get on finding out different types of essay writing', where the mean score for the FCG was  $5.2\pm1.01$ , compared to  $4.4\pm1.23$  for the NFG; 'Because I enjoy the feeling of learning more about the various components of different types of essays', with a mean score of  $5.2\pm1.01$  for the FCG and  $3.9\pm1.43$  for the NFG; 'Because I like to have the teacher's feedback on my writing', where the mean score was  $5.4\pm1.18$  for the FCG and  $4.5\pm1.84$  for the NFG; 'Because I feel good when writing properly in English in class', with a mean score of  $5.5\pm0.93$  for the FCG and  $4.9\pm1.09$  for the NFG; 'For the pleasure experienced when I am able to work out difficult writing activities', with a mean score of  $5.3\pm0.95$  for the FCG and  $3.9\pm1.33$  for the NFG, and 'For the satisfaction I feel when I understand a difficult idea related to essay writing', with a mean score of  $5.4\pm1.18$  for the FCG and  $4.4\pm1.31$  for the NFG. To test the significance of the difference, a Mann-Whitney U test was carried out and the results are presented below

**Table 6.10 Comparison of mean scores for responses to statements reflecting IM in the FCG and NFG by the end of the study (n=55)**

Statements	FCG Mean±SD) n=24	NFG Mean±SD n=31	Group total Mean±SD n=55
1. For the pleasure I experience when I learn more about how to write a good essay.	5.3±0.82	4.9±1.23	5.1±1.09
2. For the satisfied feeling I get on finding out about different types of essay writing.	5.2±1.01	4.4±1.23	4.7±1.19
3. Because I enjoy the feeling of learning more about the various components of different types of essays.	5.2±1.01	3.9±1.43	4.4±1.41
4. Because I have lots of fun in the English writing class.	4.5±1.25	3.9±1.38	4.1±1.35
5. Because I like to have the teacher's feedback on my writing.	5.4±1.18	4.5±1.84	4.9±1.64
6. Because I believe that the English writing course is stimulating.	5.1±1.16	4.7±1.10	4.9±1.13
7. Because I feel good when I write properly in English in the class.	5.5±0.93	4.9±1.09	5.2±1.07
8. For the positive feeling I experience when I communicate my ideas to my classmates in the writing class.	5.0±1.44	4.4±1.23	4.7±1.35
9. For the pleasure I experience when I am able to work out difficult writing activities.	5.3±0.95	3.9±1.33	4.5±1.36
10. For the satisfaction I feel when I understand a difficult idea related to essay writing.	5.4±1.18	4.4±1.31	4.7±1.31
11. For the positive feeling I get when I am able to modify my writing.	5.4±0.88	4.8±1.38	5.0±1.22
<b>Overall</b>	<b>5.2±0.80</b>	<b>4.4±0.88</b>	<b>4.9±1.02</b>

### ***6.3.2.1 Comparing Changes to Intrinsic Motivation (IM) Occurring in the Flipped Classroom Group (FCG)***

After completing the period of teaching, as demonstrated in Table 6.8 and 6.10 (above), an overall increase was observed in the agreement scores for statements reflecting the FCG's IM, from an average of 4.7±0.55 to 5.2±0.80. Individual statements demonstrating an increase in agreement included: 'For the pleasure I experience when I learn more about how to write a good essay', which increased from 4.8±1.11 to 5.3±0.82; 'For the satisfied feeling I get on finding out about different types of essay writing', which increased from 4.3±1.27 to 5.2±1.01; 'Because I enjoy the feeling of

learning more about the various components of different types of essays’, which increased from  $4.2 \pm 1.02$  to  $5.2 \pm 1.01$ , and ‘For the pleasure I experience when I am able to work out difficult writing activities’, which increased from  $4.5 \pm 0.93$  to  $5.3 \pm 0.95$ . To verify the significance of these changes, they were further tested and the results are presented in Table 6.11 (below).

Through the use of the Wilcoxon signed rank test, an overall significant increase was revealed in the learners’ IM following the application of a flipped classroom ( $Z = -3.076$ ,  $p < 0.01$ ). This presented a medium-sized effect, namely  $r = 0.63$ . These results indicate the positive effect of the flipped classroom through the use of videos on the participants’ IM.

**Table 6.11 Comparison of the mean rank for the FCG’s IM by the end of the study (n=24)**

Test	N	Mean Rank	Z	P-value*	Effect Size
Negative Ranks	4 <sup>a</sup>	10.63	-3.076	<0.01	0.63
Positive Ranks	20 <sup>b</sup>	12.88			
Ties	0 <sup>c</sup>				
Total	24				

\*Based on the Wilcoxon test

#### ***6.3.2.2 Comparing Changes in Intrinsic Motivation (IM) Occurring in the Non-flipped Group (NFG)***

There were no significant differences noted in the mean scores for students’ IM in the NFG by the end of the study, since a comparison of the mean scores for each statement from the pre- and post-questionnaires revealed very little difference. However, the overall mean score changed slightly from  $4.5 \pm .57$  at the beginning of the study to  $4.4 \pm 0.88$  by the end, thus possibly indicating an insignificant development in the NFG’s IM. This was further tested using the Wilcoxon signed rank test and the results are presented in Table 6.12 below.

No statistically significant differences in IM were evident for the NFG, following the duration of the teaching ( $Z = -.607$ ,  $p = .544 > 0.05$ ), thus indicating that the non-flipped approach failed to enhance the learners’ IM.

**Table 6.12 Comparison of the mean rank for the NFG's IM by the end of the study (n=31)**

Responses to Statements Reflecting Intrinsic Motivation (IM)	N	Mean Rank	Z	P-value*
Negative Ranks	18 <sup>a</sup>	14.56	-.607	0.544
Positive Ranks	12 <sup>b</sup>	16.92		
Equal	1 <sup>c</sup>			
Total	31			

\*Based on the Wilcoxon test

### **6.3.2.3 Comparison between the Intrinsic Motivation (IM) of the Flipped Classroom Group (FCG) and Non-flipped Group (NFG) by the End of the Study**

Compared to the NFG and using the Mann-Whitney U test - as shown in Table 6.13 (below) - the FCG demonstrated a significant increase in IM, with  $U = 153.000$  ( $Z = -3.724$ ,  $p < .001$ ), presenting a large-sized effect of  $r = 0.50$ . This indicates that the flipped classroom had a greater effect than the non-flipped approach on IM.

**Table 6.13 Comparison between mean ranks for IM in the FCG and NFG by the end of the study (n=55)**

Group	N	Mean Rank	Mann-Whitney U	Z	P-value*	Effect Size
FCG	24	37.13	153.000	-3.724	<0.001	0.50
NFG	31	20.94				

\*Based on the Mann-Whitney U test

## **6.4 Comparisons Involving the Satisfaction of Basic Psychological Needs and the Supporting Environment at the End of the Study**

An important aspect of this research was to examine the responses of both groups (the FCG and NFG) in terms of how they perceived the satisfaction of their psychological needs (*perceived competence*, *perceived autonomy* and *perceived relatedness*), as each of these would have an impact on IM. This was investigated in a comparison between the effect of the flipped and non-flipped classrooms. The satisfaction of psychological needs and the supporting environment for the satisfaction of these are major features of SDT, namely the theory adopted as the conceptual framework for this study. These two elements may consequently have an impact on IM and learning outcomes (see section

2.2.4). They were therefore examined at this stage of the present study using the mean, in order to compare the two groups following the end of the period of teaching.

#### 6.4.1 Comparison of the Groups' Responses Regarding the Satisfaction of Basic Psychological Needs

In this part of the study, an examination of the satisfaction of psychological needs is presented, conducted after the teaching period and with the descriptive analysis illustrated in Table 6.14 through the use of the mean. It shows the students' agreement from both groups, the NFG and FCG. Based on the sub-scales of the different domains with regard to 'perceived relatedness', the highest level of agreement was observed in the students' perception of the item, 'My classmates respect my ideas when doing the writing activities', where the average score accounted for  $5.5 \pm 0.66$  out of six. Regarding perceived autonomy, the highest level of agreement was recorded for: 'I have the freedom to improve my writing', with a mean score of  $4.9 \pm 0.98$ . Meanwhile, the lowest score ( $3.4 \pm 1.71$ ) was noted for the perception, 'I force myself to write the essay'. With respect to perceived competence, the highest level of satisfaction indicated by the students was the perception, 'I am developing my knowledge of essay-writing (for example, argumentative essays)', with an average score of  $5.1 \pm 1.03$ . The lowest agreement score ( $3.9 \pm 1.86$ ) was recorded for the statement, 'I feel I am unable to write very well'.

**Table 6.14 Students' agreement with statements reflecting the satisfaction of their psychological needs by the end of the study (n=55)**

Statements	FCG Mean $\pm$ SD n=24	NFG Mean $\pm$ SD n=31	Group total Mean $\pm$ SD n=55
1. My classmates understand me.	5.3 $\pm$ 1.26	4.6 $\pm$ 1.36	4.9 $\pm$ 1.34
2. My classmates respect my ideas when doing the writing activities.	5.7 $\pm$ 0.55	5.3 $\pm$ 0.68	5.5 $\pm$ 0.66
3. My classmates support me.	5.3 $\pm$ 1.22	4.6 $\pm$ 1.52	4.9 $\pm$ 1.42
<i>Perceived relatedness</i>	5.4 $\pm$ 0.91	4.8 $\pm$ 1.06	5.1 $\pm$ 1.03
4. I feel free to choose when and how to learn.	5.0 $\pm$ 0.98	3.3 $\pm$ 1.48	4.0 $\pm$ 1.55
5. I have the freedom to improve my writing.	5.1 $\pm$ 1.08	4.7 $\pm$ 0.86	4.9 $\pm$ 0.98
6. I feel I do the work assigned on the writing course because I want to.	4.9 $\pm$ 1.21	4.4 $\pm$ 1.23	4.6 $\pm$ 1.24
7. I force myself to write the essay.	3.7 $\pm$ 1.76	3.2 $\pm$ 1.67	3.4 $\pm$ 1.71
<i>Perceived autonomy</i>	4.7 $\pm$ 0.98	3.9 $\pm$ 0.74	4.2 $\pm$ 0.93
8. I am developing my knowledge of essay writing (for example, the argumentative essay).	5.5 $\pm$ 1.18	4.8 $\pm$ 1.15	5.1 $\pm$ 1.03



9. I feel I am unable to write very well.	4.1±1.95	3.8±1.81	3.9±1.86
10. When I work out the writing activities, I become better at writing.	5.3±1.22	4.7±1.11	4.9±1.18
11. I am satisfied with my performance in essay writing.	5.1±0.99	4.0±1.60	4.5±1.48
<i>Perceived competence</i>	5.0±0.83	4.3±1.11	4.6±1.05
<i>Satisfaction of psychological needs (combined)</i>	5.0±0.75	4.3±0.81	4.6±0.85

With regard to ‘perceived relatedness’, the mean of the FCG’s responses is  $5.4\pm0.91$ , which is higher than the mean derived for the NFG’s responses, which amounts to  $4.8\pm1.06$ . This result indicates that the FCG learners were more positive than the NFG in their responses to the items reflecting the satisfaction of their need for relatedness. With regard to the need for autonomy, the mean of the FCG’s responses is  $4.7\pm0.98$ , which is higher than the mean of the NFG’s responses in relation to this need, which amounts to  $3.9\pm0.74$ . This is a further indication that the FCG participants’ need for autonomy was satisfied to a much higher degree than was the case in the NFG.

Furthermore, the impact of the flipped classroom environment by using videos appeared to help satisfy the need for competence. The results in Table 6.14 display a difference between both groups. The mean derived for the FCG is  $5.0\pm0.83$ , which is higher than the NFG’s mean of  $4.3\pm1.11$ . In this regard, the FCG participants were more positive than the NFG in their responses to the items reflecting the satisfaction of their need for competence. Regarding the overall satisfaction of the psychological needs, it is clear from the results presented in Table 6.14 that the learners in the FCG perceived a higher satisfaction of their basic psychological needs, with a mean of  $5.0\pm0.75$ , compared to the NFG, which demonstrated a mean of  $4.3\pm0.81$ .

In the sub-theory of cognitive evaluation in SDT, it is indicated that individuals need control over their own actions (autonomy), sufficient skill to achieve their aims (competence), and secure and strong relationships with others (relatedness), through which they can enhance their IM (Jones et al., 2009 ). From the above findings, it is evident that the FCG perceived a high level of satisfaction of their psychological needs, potentially enhancing their IM and learning outcomes. This is compatible with the results of a study conducted by Jones et al. (2009), whereby it was found that the integration of specific activities into undergraduate FL courses helped create a more cheerful classroom, thus fostering learners’ IM. The above researchers recommend

further research to examine the impact of an entire course on IM in the context of undergraduate FL studies, based on SDT; including providing of feedback and corresponding to the type of assignment allocated and type of assessment carried out. In the present study, further correlation analysis was conducted and is described in section 6.5 to determine the relationship between the different variables assigned in SDT, which may relate to IM and learning outcomes.

#### **6.4.2 Comparison of Both Groups' Responses to the Supporting Environment for the Satisfaction of Basic Psychological Needs**

Further to the above, investigation into the supporting environment (*support for competence, support for relatedness and support for autonomy*) and a comparison between the FCG and NFG was conducted, indicating the differences between the groups following the period of teaching. Table 6.15 (below) describes the level of agreement indicated by the students, with statements reflecting the support they had received to satisfy each psychological need during the English writing course. The highest level of agreement in the responses from both groups regarding support for autonomy was observed for the statement: 'I receive timely and helpful feedback from the teacher when I ask questions', with which 61.8% of the participants strongly agreed, thus producing a mean score  $5.5 \pm 0.83$  out of six. This was followed by the notion that: 'The writing teacher makes sure I understand the goals of the lesson and what I need to do', which also produced a mean score of  $5.4 \pm 0.93$ , with 58% of the participants strongly agreeing. Regarding support for competence, it was noted that the highest level of agreement amongst the students was with: 'I feel as if the teacher wants us to do well', with a mean score of  $5.6 \pm 0.56$  and 67.3% of the participants strongly agreeing. With respect to support for relatedness, the highest level of agreement was reported for the statements: 'The writing teacher shows us respect', whereby 65.5% of the participants strongly agreed, thus producing a mean score of  $5.6 \pm 0.56$ , and 'I find the writing teacher to be friendly towards us', with a mean score of  $5.6 \pm 0.63$ , which amounted to 67.3% of the total responses.

**Table 6.15 Agreement of both groups with statements reflecting the support received on the writing course (n=55)**

Statements	FCG Mean±SD n=24	NFG Mean±SD n=31	Group Total Mean±SD n=55
1.The writing teacher shows confidence in my ability to do well.	5.7±0.56	4.8±1.19	5.2±1.04
2.My teacher gives me additional resources to help me work by myself.	5.7±0.56	3.7±1.81	4.6±1.71
3.The writing teacher makes sure I understand the goals of the lesson and what I need to do.	5.8±0.53	5.1±1.09	5.4±0.93
4.I receive timely and helpful feedback from the teacher when I ask questions.	5.8±0.38	5.2±0.97	5.5±0.83
<i>Support for autonomy</i>	5.7±0.42	4.7±1.05	5.2±0.97
5.The teacher makes us feel we are good at writing.	5.6±0.65	4.3±1.45	4.9±1.32
6.I receive clear instructions about how to carry out the activities.	5.6±0.58	4.6±1.11	5.1±1.03
7.I feel as if the teacher wants us to do well.	5.8±0.51	5.5±0.57	5.6±0.56
8.The teacher's feedback helps me improve my drafts.	5.8±0.59	4.7±1.62	5.2±1.38
<i>Support for competence</i>	5.7±0.44	4.8±0.95	5.2±0.89
9.The writing teacher encourages us to work together on the activities.	5.9±0.41	3.5±1.91	4.5±1.90
10.The writing teacher shows us respect.	5.8±0.61	5.5±0.51	5.6±0.56
11.The writing teacher is interested in us.	5.8±0.41	4.8±1.09	5.2±0.99
12.I find the writing teacher to be friendly towards us.	5.8±0.48	5.4±0.67	5.6±0.63
<i>Support for relatedness</i>	5.8±0.39	4.8±0.87	5.2±0.87
<b>Support for meeting psychological needs (overall)</b>	<b>5.8±0.38</b>	<b>4.8±0.88</b>	<b>5.2±0.86</b>

The results presented in Table 6.15 (above) show a difference in perceptions of the different kinds of support between the FCG and the NFG, with a mean of 5.8±0.38 for the FCG and 4.8±0.88 for the NFG. This implies that the FCG learners were more positive about the environment as a supportive factor in the satisfaction of their basic psychological needs.

Considering the support for each type separately and starting with support for relatedness, the analysis revealed a mean of 5.8±0.39 for the FCG, in comparison to 4.8±0.87 for the NFG. This shows that the FCG perceived the environment to be supportive of relatedness more than the NFG. Meanwhile, with regard to support for autonomy, Table 6.15 reveals a higher mean for the FCG with 5.7±0.42, compared to 4.7±1.05 for the NFG. This additional difference in mean demonstrates that the flipped classroom encouraged the learners to perceive the environment as supportive of their

autonomy. In terms of support for competence, the results illustrated in Table 6.15 demonstrated a difference between the two groups. The mean of the FCG's total responses captured in this section amount to  $5.7 \pm 0.44$ , which differs from the NFG's mean of  $4.8 \pm 0.95$ . This further indicates that the FCG perceived the environment as more supportive of their competence than was the case in the NFG.

In conclusion, both groups appeared to have developed their writing skills, although this development was more significant in terms of IM in the FCG. Furthermore, the FCG perceived higher levels of support and the satisfaction of their psychological needs than the NFG as the mean of their responses indicated in sections (6.4.1 and 6.4.2). However, in order to better understand the relationship between the variables based on SDT and the way that each variable could impact the other, correlation tests are required, further illustration of that is in (section 6.5).

## **6.5 The Correlation between the Supporting Environment, the Satisfaction of Psychological Needs, Intrinsic Motivation (IM), and Learning Outcomes**

The final major problem to be resolved in the current study was the need to specify the correlation between different elements of SDT and how they contribute to each other. In this regard, correlation analysis is necessary for determining the strength and type of any relationship that may exist between the supporting environment and the satisfaction of psychological needs (see section 6.5.1), and the satisfaction of psychological needs and IM (see section 6.5.2). In this part of the study, the data from the two groups were merged, as the correlation was applied to both teaching methods, i.e. both the flipped classroom and non-flipped approaches. The use of a non-parametric correlation helped determine the abnormally distributed ordinal data concerning the relationship.

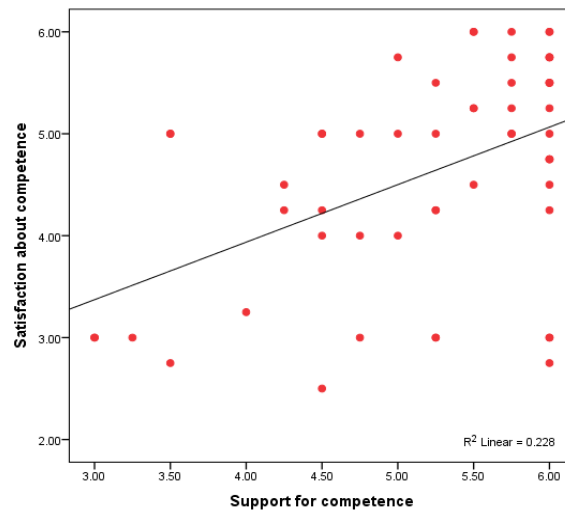
### **6.5.1 The Relationship between the Supporting Environment and the Satisfaction of Psychological Needs**

In this section, correlation analysis was conducted to identify the type of relationship occurring between the supporting environment and the satisfaction of the basic psychological need for competence, relatedness and autonomy (see Table 6.16 below).

**Table 6.16 The relationship between each type of supporting environment and the satisfaction of the basic psychological need of relatedness, autonomy and competence**

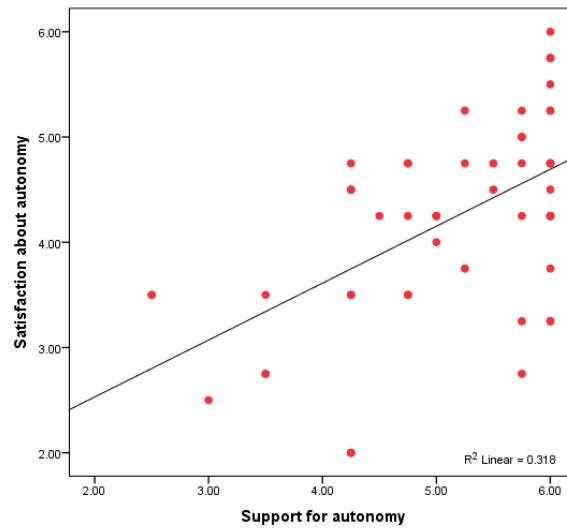
	Support for relatedness			Support for autonomy			Support for competence			Total		
	<i>r</i>	<i>r</i> <sup>2</sup>	<i>P</i>	<i>r</i>	<i>r</i> <sup>2</sup>	<i>P</i>	<i>r</i>	<i>r</i> <sup>2</sup>	<i>P</i>	<i>r</i>	<i>r</i> <sup>2</sup>	<i>P</i>
<i>Perceived relatedness</i>	0.531**	0.28	<0.01									
<i>Perceived autonomy</i>				.434**	0.19	<0.01						
<i>Perceived competence</i>							.536**	0.29	<0.01			
Total										.632*	0.42	<0.01

\*\*p<0.01, based on Spearman's rho



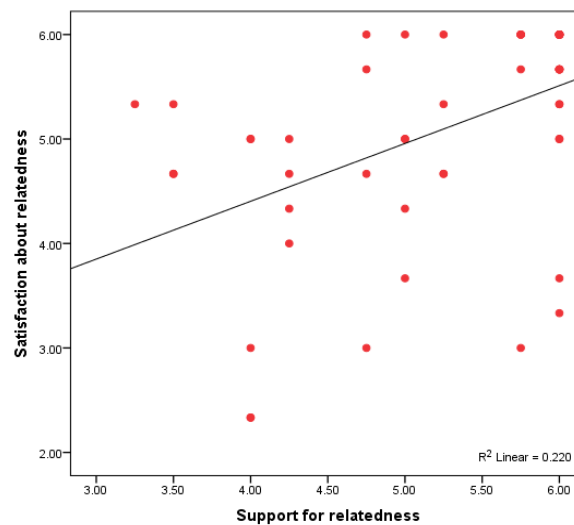
**Figure 6.7 The relationship between support for competence and perceived competence**

Figure 6.7 (above) demonstrates a moderate positive correlation between perceived support for competence and the satisfaction of the psychological need for competence. This resulted in  $r^2=0.29$ ; the Spearman's rank-order correlation coefficient being statistically significant ( $r= .536$ ,  $p<0.01$ ). This means that 29% of the changes in the satisfaction of the need for competence may be attributed to the support provided in the teaching environment.



**Figure 6.8 The relationship between support for autonomy and perceived autonomy**

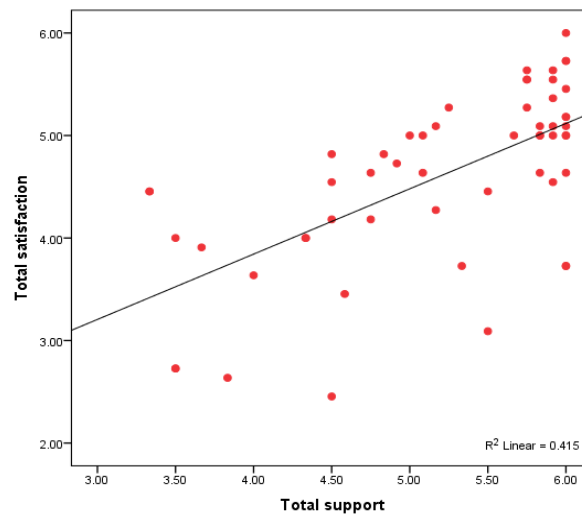
Figure 6.8 (above) demonstrates a positive correlation between support for autonomy and the perceived satisfaction of the need for autonomy, with  $r^2=0.19$ ; the Spearman's rank-order correlation coefficient being statistically significant ( $r= .434$ ,  $p<0.01$ ). This means that 19% of the changes in satisfaction of the need for autonomy may be attributed to support provided in the teaching environment.



**Figure 6.9 The relationship between support for relatedness and perceived relatedness**

Figure 6.9 (above) shows a moderate positive correlation between perceived support for relatedness and the satisfaction of this basic psychological need, resulting in  $r^2=0.28$ ; the Spearman's rank-order correlation coefficient being statistically significant ( $r= .531$ ,

$p < 0.01$ ). This indicates that 28.0% of the changes in the satisfaction of the need for relatedness may be attributed to the available support in the teaching environment.



**Figure 6.10 The relationship between total environmental support and the overall score for satisfaction**

Lastly, Figure 6.10 (above) shows a moderate positive correlation between overall perceived environmental support and the overall satisfaction of basic psychological needs. This amounted to  $r^2 = 0.42$ , with a Spearman's rank-order correlation coefficient being statistically significant ( $r = .632$ ,  $p < 0.01$ ), thus indicating that 42% of the changes in overall satisfaction may be attributed to the overall supporting environment.

From the above analysis and from Table 6.16 and Figure 6.10, it is clear that any support for meeting one of the above-mentioned psychological needs will have a positive impact on satisfying the need. Therefore, if the support appears to be available, the satisfaction of the corresponding psychological need is likely to be enhanced. This result is in line with SDT, whereby the main supporting environment is held to have a major impact on the satisfaction of psychological needs. This in turn relates to changes in IM. Such a finding is supported by Ryan and Deci (2000), who state that social-contextual conditions can enhance self-motivation and stimulate healthy psychological development. It explains that learners are not born naturally liking or disliking specific activities, but the environment can be intentionally constructed to increase or decrease their enjoyment when performing an activity, according to the satisfaction of their basic needs (Jones et al., 2009). In terms of SDT, support for the satisfaction of the need for

competence, relatedness and autonomy is associated with enhanced learning engagement and better learning outcomes (Black and Deci, 2000). This is further examined in section 6.5.2 below.

### 6.5.2 The Satisfaction of basic Psychological Needs, Correlated with Intrinsic Motivation (IM) on an EFL Writing Course

This section describes a further correlation analysis, conducted to determine the type of relationship occurring between the satisfaction of basic needs and IM.

**Table 6.17 The relationship between students' intrinsic motivation (IM) and the satisfaction of psychological needs**

	Intrinsic Motivation (IM)	
	<i>r</i>	<i>r</i> <sup>2</sup>
<i>Perceived autonomy</i>	0.705**	0.50
<i>Perceived competence</i>	0.680**	0.46
<i>Perceived relatedness</i>	0.523**	0.27
Total (satisfaction)	0.783**	0.61

\*\*Significant at  $p < 0.01$ , based on Spearman's rho

Table 6.17, above, shows a strong positive correlation between IM and the satisfaction of psychological needs, with  $r^2 = 0.61$ ; the Spearman's rank-order correlation coefficient being statistically significant ( $r = 0.783$ ,  $p < 0.01$ ) This demonstrates that 61% of the changes in IM may be attributed to the satisfaction of these basic needs; indicating that the satisfaction of certain psychological needs can increase IM.

Further to the above, it is clear that each of the variables had an impact on IM. For instance, perceived competence had a moderate positive correlation with IM at  $r^2 = 0.46$ . The Spearman's rank-order correlation coefficient for this is statistically significant represented as ( $r = .680$ ,  $p < 0.01$ ), demonstrating that 46% of the changes in IM may be attributed to the satisfaction of the need for perceived competence. For perceived autonomy, there appeared to be a strong positive correlation with IM at  $r^2 = 0.50$ ; the Spearman's rank-order correlation coefficient being statistically significant ( $r = .705$ ,  $p < 0.01$ ). This indicates that 50% of the changes in IM may be attributed to perceived autonomy. Regarding perceived relatedness, it would appear that there is a moderate positive correlation, with  $r^2 = 0.27$  and a Spearman's rank-order correlation coefficient



statistically significant ( $r = .523$ ,  $p < 0.05$ ), which indicates that 27% of the changes in IM were linked with the satisfaction of the need for relatedness.

In conclusion, the results displayed in this part of the study support the relationships presented in SDT, whereby instilling a sense of autonomy and competence is likely to increase internalised types of motivation (Ryan and Deci, 2000). In the following section (6.5.3), further analysis is carried out to determine the relationship between the learning outcomes, IM and the supporting environment for each psychological need.

### 6.5.3 Correlations with Learning Outcomes by the End of the Study

Another major question to be explored in the current study, which is also reflected in the conceptual framework (see section 2.2.4), was the need to examine the relationship between the learning outcomes, IM and the supporting environment for each psychological need. These were measured to indicate the impact of each variable on the learners' scores. To identify the relationship with other variables, a provisional correlation was carried out; the non-parametric Spearman's rho in the form of variables being presented as ordinal data with ratios (see Table 6.18 below).

**Table 6.18 The relationship between learning outcomes, intrinsic motivation (IM) and the supporting environment**

	IM			Supporting Environment (Combined)		
	$r$	$r^2$	$P$ -value	$r$	$r^2$	$P$ -value
<i>Learning outcomes</i>	.397**	.16	<0.01	.428**	.18	<0.01

\*\*Significant at  $p < 0.01$ , based on Spearman's rho

As shown above in Table 6.18, the results of Spearman's rank-order indicated that the learning outcomes were significantly correlated with IM ( $r = .397$ ,  $p < 0.01$ ), and the supporting environment ( $r = .428$ ,  $p < 0.01$ ). This would indicate that each of these variables had a positive impact on the learning outcomes, whereby whenever one increases, so does the other and vice versa.

A moderate positive correlation was found to exist between IM and learning outcomes, at  $r^2 = 0.16$ ; the Spearman's rank-order correlation coefficient being  $r = .397$ . This

indicates that 16% of the changes in the test scores may be attributed to IM. Thus, a moderate positive correlation is evident between the final test scores and the supporting environment, with  $r^2=0.18$  and a Spearman's rank-order correlation coefficient of  $r=.428$ . In this regard, 18% of the changes in the test results may be attributed to the supporting environment. Thus, a Spearman's rank-order correlation analysis was conducted to verify the level of attribution of each construct of the perceived supporting environment in the test scores (see Table 6.19 below).

**Table 6.19 The relationship between the learning outcomes and the supporting environment for each psychological need**

	<i>r</i>	<i>r</i> <sup>2</sup>	<i>P-value</i>
<i>Support for relatedness</i>	0.485**	0.24	<0.01
<i>Support for autonomy</i>	0.323**	0.10	<0.01
<i>Support for competence</i>	0.362**	0.13	<0.01
Total (supporting environment)	0.428**	0.18	<0.01

\*\*Significant at  $p<0.01$ , based on Spearman's rho

From Table 6.19 (above), it is clear that each of the constructs in the supporting environment scale relates to the learning outcomes. They are all positive, in that if one develops, the final mark is enhanced. More precisely, a moderate positive correlation exists between support for autonomy and learning outcomes at  $r^2=0.10$ , with a Spearman's rank-order correlation coefficient being statistically significant ( $r= .323$ ,  $p<0.01$ ). This illustrates that 10% of the changes in the test scores may be attributed to support for autonomy. Thus, in support for competence, there appears to be a moderate positive correlation with learning outcomes at  $r^2=0.13$ ; the Spearman's rank-order correlation coefficient being statistically significant ( $r= .362$ ,  $p<0.01$ ). From this, it may be deduced that 13% of the changes in the test scores may be attributed to support for competence. Meanwhile, support for relatedness reveals a moderate positive correlation at  $r^2=0.24$ , with a Spearman's rank-order correlation coefficient being statistically significant ( $r= .485$ ,  $p<0.01$ ). This indicates that 24% of the changes in test scores may be attributed to support for relatedness. Even though the different types of support related to the learning outcomes, support for relatedness appeared to have the closest

relationship. This particular issue will further explain the enhancement of the FCG over the NFG. Further explanation of this finding may be found in Chapter Eight.

## **6.6 Conclusions**

This chapter includes an analysis of quantitative data to determine changes in IM, as well as the respective learning outcomes and a correlation analysis between the identified variables, based on SDT (see Chapter Two). The results indicate an overall development in IM and learning outcomes within the FCG. Further to this, more positive responses were provided by the FCG than the NFG in relation to the satisfaction of basic psychological needs and the supporting environment for satisfying these needs. The correlation test revealed a strong positive correlation between IM and the satisfaction of psychological needs. Another relationship also appeared between the learning outcomes, IM and the supporting environment. In this way, the highest correlational coefficient was found between learning outcomes and the supporting environment on the writing course, followed by IM. A discussion of these findings follows in Chapter Eight.

## **Chapter Seven: Findings for Perceived Support in the Flipped Classroom, as Compared to the Non-Flipped Process Approach from the Learners' Perspective**

The previous chapter included quantitative findings, indicating the level of change in EFL learners' IM and learning outcomes, their relationship with the supporting environment, and the satisfaction of their basic psychological need for competence, autonomy and relatedness. The current chapter contains the second set of findings, derived from the participants' attitudes to the type of support they received in the flipped classroom and to the non-flipped process approach. This relates to the satisfaction of their basic psychological needs, IM for learning, and learning outcomes.

Therefore, this chapter presents the findings from the qualitative data (interviews, diary entries and online activities). It therefore addresses the final research question by comparing the responses from both groups to the use of the two teaching approaches (the flipped classroom and the process approach). These findings were used as an attempt to answer the following research question: 'How do the learners perceive the supporting environment provided by the flipped classroom, in comparison with the non-flipped approach?' The first part of this chapter includes the findings from the F2F interviews, conducted with 12 participants: six from the NFG and six from the FCG. The data were triangulated by analysing the diary entries, which amounted to 26 entries from eight diary participants: four participants from each group (the FCG and NFG). These also participated in the interview (for further details see section 5.3.2). The final part of this chapter includes the content analysis of the FCG's online interactive tasks, in order to further identify the type of peer-interaction occurring via the VLE wiki.

### **7.1 The Interviews and Diary Findings**

In this section, comprehensive findings are presented for the interview and diary data. The interview data were used to develop codes (for further details, see section 5.5.2), in order to explore the supporting environment offered by the flipped classroom in more depth and to compare it with that of the non-flipped approach. In this respect, the following main themes and sub-themes were developed (see Table 7.1 below).

**Table 7.1 The codes and sub-codes derived from the current study**

<b>Codes</b>	<b>Description</b>	<b>Sub-codes</b>	<b>Description</b>
<b>7.1.1 The Learners' Attitudes towards the Teaching Approach</b>	This specific code describes the learners' attitudes to the learning opportunities offered by multiple teaching components.	<b>7.1.1.1 Exposure to and Practicing New Elements</b>	This sub-code concerns the time spent practicing new and complex elements of the writing course.
		<b>7.1.1.2 Developing Drafts</b>	In this sub-code, the learners emphasised how practice in the form of writing multiple drafts had helped them develop their skills on the current course.
		<b>7.1.1.3 The Online Discussion</b>	This sub-code relates to one of the main features of the flipped classroom, whereby the FCG learners participated in a group activity using an asynchronous VLE wiki.
<b>7.1.2 The Learners' Attitudes to Teacher Support</b>	This code presents a description from the learners in both groups, about how their teacher provided them with the support that they felt they needed. It is concerned with the way in which the teacher supported collaboration, as well as how she provided individual support for the learners in overcoming any difficulties that they faced in their learning.	<b>7.1.2.1 Enriching Understanding</b>	This sub-code considers the participants' reflections on how their teacher had helped them to understand the new elements being explained, either by describing them or revising the pre-explained content during classroom time.
		<b>7.1.2.2 Positive Relationships</b>	In this sub-code, the learners from both groups showed their opinions on the level of approachability demonstrated by their teachers and the way in which they provided feedback. They also demonstrated how these teachers reacted to their questions.
		<b>7.1.2.3 Supporting Group Work</b>	In this sub-code, the teacher's support for collaboration is considered, whereby she provided further opportunities for students to work in groups to complete an activity, or else encouraged them to do so.

<b>7.1.3 The Learners' Attitudes to Peer-support</b>	In this code, the focus was on the way in which the learners perceived the support received from their peers. It includes the kind of assistance provided by the learners, when they sought help from one another, as well as the types of relationship forming between them as they worked together.	<b>7.1.3.1 Assistance and Encouragement to Learn</b>	This sub-code includes the different methods used by learners to help and encourage each other in continuing or finishing an activity.
		<b>7.1.3.2 A Friendly Relationship</b>	This sub-code involves a description of the kind of personal relationships occurring between the learners from both groups and how the teaching environment supported them.
<b>7.1.4 The Learners' Personal Feelings</b>	This code relates to the students' perceptions of the learning opportunities that they were provided with. The students also described how they had changed, if at all, in terms of their commitment to learning.	<b>7.1.4.1 New Ways of Learning</b>	The learners in this sub-code either expressed a desire for new teaching approaches that would help them learn more effectively, or else found that the teaching method adopted was suitable for helping them learn and develop skills.
		<b>7.1.4.2 Commitment and Independence in Learning</b>	The participants in this sub-code revealed how their learning styles had either changed or remained the same as before the application of the intervention.

### **7.1.1 The Learners' Attitudes to the Teaching Approach**

This specific code describes the learners' attitudes to the learning opportunities offered by multiple teaching components. Exploring the participants' perspectives thus helped promote a deeper understanding of the kind of support offered by the resources in the FCG and NFG, and the way in which they helped enhance IM and learning outcomes in relation to the specified writing course. From within the category, 'Learners attitudes towards the teaching approach', further sub-categories emerged: 'Practicing new elements', 'Developing drafts', 'Involvement in learning activities', and 'Online discussion'.

### ***7.1.1.1 Exposure to and Practicing New Elements***

The sub-code, 'Exposure to and practicing new elements' concerns the time spent learning and practicing new elements on the writing course. From the findings, it is evident that the views expressed by each group contradict those of the other group. As an example, most of the NFG participants expressed a desire for additional learning time in their interview responses, as normal classroom hours appeared to be insufficient for them to assimilate and practice new elements. However, this was not the case for the FCG. At this point in the interviews, the students were asked the question: 'How would you describe your experience on this writing course? Please give reasons for your answer.' In the NFG, Students 2 and 4 explained their experience in terms of how far they had developed their understanding of the main ideas behind the argumentative essay:

It was a helpful experience. Everything was clear and easy... I got the idea of it. I learned how to state an opinion, [to express] opposing opinions, and how to prove what I believe. (S2 NFG, I)

Talking about my experience, I got much deeper in understanding the argumentative essay. I understood what it was about. I found that following the required steps to write an argumentative essay became something easy for me... Also, I am [now] able to determine whether an essay is argumentative or not. (S4 NFG, I)

Looking at the specified time allocated for practicing new elements related to essay writing, Student 1 in the NFG found that the essay task needed more practice and time, as she found herself unable to produce a suitable text within the designated period. As a result, she replied:

I think it needs time and the exam time is limited. I need days to write it. (S1 NFG, I)

This was similarly indicated by Student 5 in the same group, who also expressed a desire for more learning opportunities:

The unit needed to be explained further. We needed to know more about how to write each paragraph in the essay. The class time was limited. I wish I could find other resources. (S5 NFG, I)

It would appear from the above participants' responses in this group that even though the use of a non-flipped process approach was helpful for their learning, they still wished for more exposure to the new elements being taught, as this type of essay was unfamiliar and complex for them. They therefore expressed a desire for additional classes to increase their study time and help them better understand the material. Essay writing requires extensive practice and the time-consuming refinement of drafts. Limiting class time to pure explanation would thus mean that the learners had sufficient time to practice new elements in their writing, as pointed out by the NFG students. This is because writing skills require adequate drill, maintained by extended practice.

On the other hand, the FCG interview participants took a different stance on this particular issue, i.e. Student 3 was positive about her experience, as it offered additional ways of learning and allowed time to practice new elements. The latter was achieved while preparing for each F2F encounter through the use of videos, as she clearly expressed in her interview response:

It was difficult at the beginning. Later on, with more practice, I was able to handle it and it became easy. It was an interesting experience. I've learned new things. It was the video that made the learning process easy and interesting.  
(S3 FCG, I)

It is evident from Student 3's contribution that the flipped approach provided additional learning resources, such as videos that helped the learners catch up on anything they might have missed in class. In that sense, the use of videos was an advantage, as it helped the learners to develop an understanding of the criteria for writing an argumentative essay and saved classroom time for more practice.

In the same vein, Student 4 stressed that pre-exposure to new content was most helpful, as it helped prepare for deeper engagement with additional materials on the course:



So, we got exactly what we needed. Also, I think it was easy for us because we had studied it before we got deeper into other elements. [It] helped a lot. (S4 FCG, I)

Regarding the complexity of using the VLE, Students 1 and 6 described it as difficult to use, especially for those who were unfamiliar with online tools. They therefore required some time to become accustomed to using the system:

In the beginning, we faced some difficulty in accessing the website, as it was our first experience of using the system. However, by the end, I felt that I had really benefitted. (S1 FCG, I)

I was confused in the beginning, but after watching the video, and practicing and learning how to access the wiki, I started to understand. Because I know how to access the Internet, it was easy to access the wiki. However, it could be hard for those who do not usually access the Internet. (S6 FCG, I)

From the above FCG responses, it would therefore appear that the participants had sufficient time to practice new elements after being taught new content through videos. However, some of the FCG participants described the use of the VLE as complicated at the beginning, but over time, they became familiar with it. Both the FCG and NFG groups received similar teaching materials and activities, but the way of teaching new elements in writing differed. The posting of videos in the VLE system prior to classes helped such learners understand new content. This gave them the choice of how and when to use these various resources outside the classroom. They consequently experienced a less stressful environment, which they appreciated and were more autonomous in their performance of the tasks assigned to them. As a result, their learning became more self-determined, because they had the option of learning and practicing in their own time and at their own pace, which in turn contributed greater IM. This approach adopted in a writing class can offer enhanced practice opportunities by providing additional learning resources, thus enabling learners to acquire new knowledge before attending class. The acquired knowledge may then be applied in practice sessions.

### ***7.1.1.2 Developing Drafts***

In this sub-code, the learners emphasised how practice in the form of writing multiple drafts had helped them develop their skills on the current course. These responses were drawn from answers to the question, ‘Did you find completing some of the coursework, like improving drafts outside the classroom, supported your learning? Why or why not?’ Writing drafts is part of the process approach to teaching and learning and it constituted a major element of the teaching approach in both the FCG and NFG. The learners were consequently asked to practice their writing by developing several drafts on a given topic. They were then provided with one-off feedback by their teacher.

Both groups were asked to produce two drafts per week on a topic specified by the teacher. The only difference between the groups was that in the FCG, the learners wrote their drafts in class, while in the NFG, they completed their drafts as homework. The FCG learners then received immediate feedback from their teacher on their first drafts during the same class, while the NFG received feedback during their second class, once the teacher had collected the assignments. The NFG participants received their feedback after submitting their assignment in the next class; this related to the constraints on teaching time in regular classroom instruction, as the teacher did not have enough time to explain new material as well as providing feedback. Therefore, for Week 1, the students generally wrote in their diary that they had not yet received any feedback. Meanwhile, once they had started to receive feedback the following week, the NFG participants expressed positive attitudes to the use of drafts and this was consistent throughout their diaries; for example, Student 5 wrote:

It did help me to get the week’s point (S5 NFG, D)

Student 4 explained her attitude to feedback as being related to the teacher’s method of providing it and made comments such as:

She is very nice (S4 NFG, D)

Student 4 then added in her interview:

Yes of course. New and many ideas came to my mind every time the instructor showed me what is right and what is not in my writing. (S4 NFG, I)

Student 2 further added:

Yes, it has helped me to prepare myself very well for writing. I practice writing faster than before; I can see my mistakes. So, the purpose of it was to help me write a good essay smoothly. (S2 CCC, I)

Student 1 adopted a similar stance, describing her overall satisfaction with the inclusion of feedback:

...it helps and that satisfied me. (S1 NFG, D)

However, she was somewhat critical of the teacher's attention to detail when correcting writing errors, even though she found herself to be developing a great deal:

Although the feedback helped me, the teacher was very precise. Therefore I was shocked. I thought that I had written a good piece, but she is so precise in everything, even more than the other teachers. Although I am developing now, this makes a difference, but the topic is very hard and she is not supposed to be that detailed. Still, I feel myself developing in my writing. When I went back home and corrected my work, I found I benefited from the teacher's notes. (S1 NFG, I)

From the above interview responses, it could be claimed that the NFG benefited from feedback on their drafts. This feedback helped the learners to detect deficiencies in their own writing and subsequently to address them, based on the teacher's feedback.

However, Student 6 expressed a desire to choose her own topics, as she thought that it would be more motivating and would help her generate more ideas. She explained in the interview:

Every week, she [the teacher] gives us a topic to write about and we discuss it. This does not help me a lot because she selects the topics. If we had to select them, we would be able to express ourselves further. (S6 NFG, I)

The participants in the FCG adopted a similar stance to that of the NFG, stating that the use of drafts had helped them improve their writing. This became a weekly routine for them in class. Students 1 and 3 therefore mentioned in their interview:

When I studied writing in the past, we did not have to write drafts. We only used to submit our assignments and then these were checked for mistakes. However, with a draft, I can recognise my own mistakes and correct them. (S1 FCG, I)

In the beginning, the drafts were not helpful to me. Later on, I realised that they helped me, along with practice and weekly feedback from the instructor. (S3 FCG, I)

Similarly, Student 2 noted in her diary that the use of feedback had helped her understand the basics and develop ways of correcting her mistakes:

They improve me so much in my basic [skills]. (S2 FCG, D)

Moreover, Student 3 was aware of the difference in her writing abilities, as she had applied her teacher's feedback on a weekly basis. On this point she commented:

I wasn't sure if I would be able to write it or not. However, I realise that the drafts I wrote as practice helped me a lot. (S3 FCG, I)

Moreover, Student 4 described in her diary how the feedback had helped her:

It helped me with a lot of things that I could learn from. (S4 FCG, D)

Further to the above, Student 4 added more clarification on how practicing drafts and receiving feedback had helped her improve her writing, as she had learned from her mistakes:

It was good to get the feedback and learn from my mistakes. Although the feedback experience was difficult, it was still helpful. (S4 FCG, I)

Students 5 and 6 were also pleased with the experience of receiving feedback. This was reflected in their interview responses:

I did enjoy improving my drafts, although I never thought I would. After my experience last semester, where I was disappointed, I [decided to] attend the extra class. I still make mistakes, but not like the first draft. (S5 FCG, I)

Yes, it is very helpful, as I am fully aware of my strong points and mistakes. In the end, I can write a good and professional [sic] essay. (S6 FCG, I)

From the above, it is clear that the participants in both the NFG and FCG valued the use of drafts with feedback, as it helped them identify their mistakes and encouraged them to write much more. Writing drafts and providing feedback are the main elements of the process approach. In this study, written indirect feedback from the teacher appeared to make the learners rather anxious, as it was unfamiliar to them. However, they grew accustomed to it over time and developed the ability to detect and correct their own mistakes. It is clear that the FCG learners had more opportunities than their NFG peers to receive and benefit from feedback, because the NFG were obliged to wait for their teacher to correct their essays and return them. However, the learners in both groups received weekly feedback on their drafts, with the FCG learners being able to consult their teacher about her feedback during classroom time. This was in contrast with the NFG learners, whose schedule hindered them from consulting their teacher during office hours. This two-fold struggle may have affected the teaching process. Moreover, as described by one of the participants regarding the set topics, the students sought more freedom to write about what they wanted.

#### ***7.1.1.3 The Online Discussion***

This sub-code relates to one of the main features of the flipped classroom, whereby the FCG learners participated in a group activity using a VLE wiki. In the NFG, one of the participants expressed a wish to access such material, while the majority of the FCG participants showed their appreciation of it. The main interview question pertaining to this for the FCG participants was: ‘Did you find that completing some of the coursework outside the classroom supported your learning? Please give reasons for your answer.’ The probe was: ‘...performing the assigned work on Blackboard.’ Even though this question was not put to the NFG participants, the latter expressed an interest in receiving the online material in their responses to other important questions in the interview, such as: ‘How would you describe your experience on this writing course? Please give reasons for your answer.’ In the NFG, one of the participants stated that having additional online material could have distinguished the course from other writing programmes. She merely wished to receive this material, so that she could be sure of

understanding the topic, as well as using it to assist her in developing her writing ideas. Student 6 consequently added:

The teacher could suggest a website or something to provide us with ideas. (S6 NFG, I)

Meanwhile, in the FCG, the majority of the participants showed that they had benefited in various ways from using the VLE wikis, especially when developing their ideas to build up the essay outline. Student 1 stated:

Because sometimes I hold an opinion on a topic, while my other friends hold another point of view... through the system, we can share our perspectives. (S1 FCG, I)

Moreover, Student 3 found that sharing ideas with others via wikis helped reveal diverse opinions, which in turn led to new perceptions. In addition, the process of sharing thoughts was found to facilitate learning. Student 3 therefore added:

We share discussions. I hear from them and they do the same. This helps to open up new aspects to learn about. (S3 FCG, I)

Meanwhile, Student 2 was of a similar opinion, claiming that discussion had helped her identify her mistakes, so that she could then work on those areas. She thus recalled:

Also, I was better able to see how others think and to learn more. I was able to identify my mistakes and I was able to correct them. (S2 FCG, I)

It appears from the above excerpts taken from statements made by the FCG participants that the online discussion logs had helped them in their learning and eventual writing; it had opened a window for them onto other people's points of view on specific topics and they were subsequently able to construct their thinking on that basis. Since the type of task selected was an argumentative essay, the learners needed to be able to accommodate ideas that contradicted their own opinions and then to refute them. It also became clear that the FCG learners demonstrated more engagement with the task by using English as a means of completing the required exercise. Moreover, these participants did not use Arabic in any of their posts and were encouraged to use English without being anxious about making mistakes.

### **7.1.2 The Learners' Attitudes to Teacher Support**

This code presents a description from the learners in both groups about how their teacher provided them with the support that they felt they needed. It is concerned with the way in which the teacher supported collaboration, as well as how she provided individual support for the learners in overcoming any difficulties faced in their learning. This section therefore relates to the main interview questions: 'How would you describe your relationship with your peers when taking this unit? What was your teacher's role in that? Please give reasons for your answers'; 'How would you describe your experience on this writing course? Why?', and 'Were you able to understand the new content explained through attending classroom instruction? Can you explain?'

#### ***7.1.2.1 Enriching Understanding***

This sub-code considers the participants' reflections on how their teacher had helped them understand the new elements being explained, either by describing them or revising the pre-explained content during classroom time. The flipped approach differed from the non-flipped approach in that the learners were exposed to new material before attending class. As a result, the teacher's role involved revising what the learners had understood from the videos and trying to clarify any ambiguous items. In the NFG, most of the participants found that their teacher's explanations were helpful and they attributed this to different reasons. Students 3 and 5 explained that their teacher had very clearly and explicitly described the various components of the essay by showing, explaining and giving examples:

She showed us what each paragraph should contain. She gave us examples and did the exercises with us. I understood more with her... She explained to us in detail what we should do. She listened to us and to what we thought. She accepted more than one answer. (S3 NFG, I)

She explained the requirements and we fulfilled them. (S5 NFG, I)

Some of the participants reported that their teacher's help had taken the form of repetition, in order to better clarify the unfamiliar content:

Honestly, the teacher was really good, as she tried her best to explain, repeat and write the difficult parts and explain them again. (S1 NFG, I)

Of course the instructor helped us a lot. She kept repeating the information until we got it. (S4 NFG, I)

The FCG participants demonstrated different attitudes to their teacher's help. From their own perspective, this help had mainly been concentrated on checking their understanding and clarifying difficult items after exposure to the new content at home, if required. The participants consequently described their teacher as supervising, guiding, helping, showing and discussing, which the following extracts indicate:

...because she only gave us a summary, depending instead on our understanding of the video (S1 FCG, I)

She was supervising and guiding me... She was helping and showing me how to work. (S3 FCG, I)

At the beginning of every class, she was asking us: 'what did you learn?', 'Give me ideas', 'What did you watch on the video?' (S4 FCG, I)

We definitely need someone to supervise; the teacher discussed our mistakes and we did not repeat them. (S6 FCG, I)

Meanwhile, in both groups, Student 1 from the NFG and Student 4 from the FCG declared that the teacher had helped them understand new items by providing them with examples, thus making it easier for them to grasp the information:

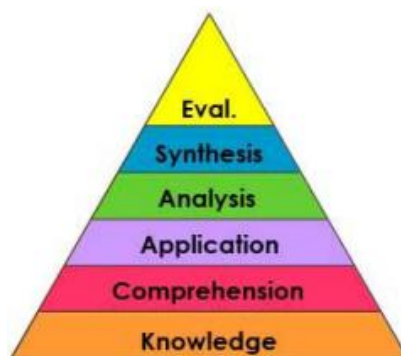
She gave us examples and asked us to write and write. (S1 NFG, I)

The instructor explained many things, especially when it came to the thesis statement. She gave us real life examples. For example, I remember the sandwich with cheese and the one that is without. (S4 FCG, I)

The above participants showed that the teachers in both groups had played a major role in developing the learners' knowledge. This had taken place in different ways, all of which had helped the learners develop their writing skills. For example, the teacher had provided additional examples. This variation in the teacher's role in the two different



approaches refers to Bloom's Taxonomy; further clarifying the distinguishing features of the flipped classroom as being more self-oriented than traditional approaches, where the teacher is considered as the primary source of knowledge (Anderson and Sosniak, 1994). The teacher in the flipped classroom consequently works towards supervising by applying new knowledge and synthesising, which represent a higher level of Bloom's Taxonomy. As a result, the learners become more self-determined in their learning, because they are obliged to prepare for each class by themselves, thus enhancing their sense of autonomy. However, with a more non-flipped approach, the teacher is merely a knowledge provider, on whom learners rely for providing new content. This represents a lower level of Bloom's Taxonomy (see Figure 7.1 below).



**Figure 7.1 Bloom's Taxonomy (Anderson and Sosniak, 1994)**

#### ***7.1.2.2 Positive Relationships***

In this sub-code, the learners from both groups expressed their opinions on the level of approachability demonstrated by their teachers and the way in which feedback was provided. They also described how these teachers reacted to their questions. What mainly became apparent was that the learners from both groups believed their teachers to be very positive in their responses to them and this made the learners feel much more comfortable about asking questions concerning anything they needed to know. Gardner and colleagues (cited in Dörnyei, 2003) found that students' positive attitudes to their language teacher were associated with motivation and achievement in the language classroom. For example, one of the NFG participants described their teacher as 'understanding', with Student 1 stating:

I had an understanding instructor... Having an understanding instructor laughing with you, talking and listening to you helps you to enjoy the course. However, if the instructor is not smiling with you, the result will be the opposite. (S1 NFG, I)

Meanwhile, Student 3 explained that the way in which the teacher reacted to the learners' mistakes was helpful and encouraged her to ask questions, as she asserted in her interview response:

Even if the answer is not right, we do not feel afraid of giving it. She didn't wrong us [sic], but talked to us and showed us the right answers in a good way. (S3 NFG, I)

Meanwhile, Student 4 found that her teacher had helped her to develop by showing a great deal of trust in her abilities and the belief that she could achieve:

The teacher told us that we could do it and achieve. This encouraged me to work hard to impress her. For example, after she read my essay, she told me: 'you did well'. (S4 NFG, I)

In the FCG, most of the participants also described their teacher's positive attitude towards their writing and how she provided them with positive feedback to help them build more self-assurance concerning their writing abilities. For example, Student 5 stated:

Yes, I really like it that Ms. ... never wrote negative comments. The previous teacher used to tell us to improve our writing. (S5 FCG, I)

Student 1 supported this, as the following interview response indicates:

We found very nice comments from the teacher in the header, such as 'She did it!', 'She will do it!' and 'She can do it!' Although these words are so simple, you cannot imagine how encouraging they are.

In addition, Student 2 did not perceive any barrier between the teacher and herself, as the teacher had always considered their problems as students and encouraged them to ask questions:

She didn't want us to encounter any problems. If we had a problem, she would ask us about it. She was supporting us all the time. (S2 FCG, I)

This was also confirmed by Student 5, who found that the teacher was always happy to answer questions and this had helped her face any difficulties she encountered in her writing:

If I did not understand anything, I would write it in a note and ask Ms. ... (S5 FCG, I)

However, one of the main issues confronted by the NFG learners was that they could only approach their teacher during her office hours, which made it difficult for them at times, as explained by Student 6:

We always have class during her office hours. Therefore, it is hard to contact her. (S6 NFG, I)

Meanwhile, in the FCG, Student 5 found that asking the teacher questions was much easier in the online environment:

Students can easily communicate with their teachers online. I really like this system. (S5 FCG, I)

Therefore, most of the participants from both groups agreed that their teacher had a friendly attitude, which encouraged them to learn and ask questions; whenever they felt they needed to.

In fact, one of the most important aspects mentioned by the participants from both groups was their teacher's positive feedback. This appeared to have significantly enhanced their feelings of self-determination and perceived competence, thus potentially playing a role in improving IM and encouraging greater effort in learning and task achievement (Dörnyei, 2003). This is further indicated in the learners' questionnaire responses and achievement scores. Furthermore, none of the participants in either of the groups found their teacher to be controlling in her language or in the way she structured activities. The positive impact of this was possibly the

reinforcement of a sense of autonomy in carrying out tasks, which in turn contributed to IM (Noels et al., 1999; Noels, 2001).

### ***7.1.2.3 Supporting Group Work***

In this sub-code, the teacher's support for collaboration was considered, whereby she provided further opportunities or encouragement for students to work in groups when endeavouring to complete an activity. A teacher can enhance the classroom environment by providing additional opportunities for interaction and collaboration among students (Akbari et al., 2015). Working in groups helps learners become more active in their learning communities, especially through the use of an online mode (Axelson and Flick, 2010). Regarding the activities involved, the learners from both groups generally perceived them to be helpful in themselves and easy to follow, but the main distinguishing factor was how they were conducted. For example, the NFG learners were assigned to working in isolation, rather than in groups, in contrast to the FCG. Ease of execution was due to several factors, such as clear instructions and the way in which the activities were organised, with some of the participants from both groups commenting in their interviews:

...it was very clear and she even gave us examples and that helped me write accordingly. I did not have any difficulties. (S1 NFG, I)

The instructions were clear. We had a schedule for what we were going to do in every class, in order to finish everything by Saturday. (S2FCG, I)

Although the participants had agreed in their previous responses that they were benefiting from the activities, with the tasks fostering their understanding, the NFG participants seemed to have found limited opportunities for performing these activities in group work with their peers, which restricted their learning potential. In this area, Student 1 from NFG found the writing class to be more or less like any other, with group work not being greatly emphasised. However, the above student added that the teacher could not be blamed for this, elaborating:

I only knew my friend and the [student] who sat beside me. The teacher had nothing to do with that. (S1 NFG, I)

Meanwhile, Student 2 expressed different sentiments, being of the opinion that teachers could play a helpful role in mentoring group work, as a means of developing learners' skills:

I wanted to experience working as a group under our instructor's supervision. I think it would be a helpful way to improve. (S2 NFG, I)

Student 6 also claimed that the limited relationships with her peers were due to her teacher's failure to encourage them:

I do not have any relationship with the other students, because we did not work as a group and nothing encouraged us to work together. The teacher contributed to that, because she did not ask us to work as a group. (S6 NFG, I)

The learners from the above group had no chance to work with their peers in class and this was considered as a limitation; they merely received limited support from the teacher in class. As a result, the students did not feel that they had got to know each other very well and did not assist each other when necessary.

Meanwhile, again in the FCG, the learners had a chance to work with their peers, as they were asked to form an online group and work together on the week's activity, writing essay outlines for the various topics as a practice activity. This constituted one of the main aspects of the flipped classroom. Here, many of the students found their teacher to be supportive, as she encouraged them to work together. In this regard, Student 1 stated:

The teacher did care about the unity of the group and that we submitted our work together... When we did a good job, she complimented us and our collaboration and this was so encouraging. (S1 FCG, I)

Student 3 had similar opinions, explaining that her teacher had supported the group work in other ways, such as by dividing the students into groups:

She did; she is the one that divided us into groups and asked us to work and help each other. (S3 FCG, I)

Student 6 agreed, explaining:

The teacher helped, as it was her idea to form groups. She was interested in us working in a group. She always asked us to sit together on the same side and answer together and help each other. (S6 FCG, I)

Group work can have a positive impact on FL learning, as it increases opportunities for language practice, enhances the quality of communication amongst students using an L2 or FL and helps improve the learning environment for greater effectiveness (Long and Porter, 1985). In terms of language practice, the FCG learners limited their discussion to the use of English and this gave them another opportunity to improve their language skills. Moreover, communication amongst the learners took place according to the activities included, whereby English was exclusively used to finish the task, not just for normal everyday chatting. The use of clear instructions for the activities and good classroom management were also important, combined with an appropriate means of implementation for these activities.

The previous section was purely concerned with the teacher's support for the learners and this appeared to be perceived differently in each group. The NFG learners found their teacher to be supportive, because she established a positive relationship with them and ensured that they understood, although she did not support group work. Meanwhile, in the FCG, the learners found their teacher to be supportive in a different way, such as in her relationship with them, the way in which she enhanced their attainment, and her support for group work. Aside from the above, however, further understanding of peer-assistance needs to be explored in both environments, as this could play a crucial role in learning. An attempt to explore this is presented in section 7.1.3 below.

### **7.1.3 The Learners' Attitudes to Peer-support**

This code focuses on how the learners perceived the support they received from their peers. It includes the kind of assistance provided by the learners when seeking help from one another, as well as the types of relationship occurring between them when working together. An investigation was also carried out to evaluate the way in which the learners developed peer-relationships on the course and how this impacted their learning. The main interview question relating to this was: 'How would you describe

your relationship with your peers when taking this unit? Please give reasons for your answer,’ and ‘Did you find any part of this unit encouraged you to keep going in your learning? Why?’

#### ***7.1.3.1 Assistance and Encouragement to Learn***

This sub-code includes the different methods used by the learners to help and encourage each other when continuing or finishing an activity. The NFG participants did not have much to say about this; instead, most of the participants expressed a desire to be involved in practice that would help them develop a relationship with their peers, whereby they could give each other ideas and develop their perspectives. Student 2 acknowledged this in her interview response:

I think when we work together; we are introduced to different ideas. We get to know how each one of us thinks. We can benefit each other. (S2 NFG, I)

Student 3 expressed similar attitudes to group work, including:

For example... group work can help if we are asked to do certain exercises; I may write my own outline. Then, I will find out that some of my colleagues have written another outline from a different point of view. (S3 NFG, I)

One of the most significant comments made by a participant from this group was that working in a group could help her to help herself, even if her fellow group members refused to cooperate. Student 5 therefore added:

[Sharing] information and other people’s writing style could help. Maybe my writing style is wrong. It is not necessary for someone to help me; I can see and help myself. Then I can become more interactive and excited to write. (S5 NFG, I)

Student 4 even expressed her desire to be involved in group work, stating in her diary:

It is so helpful for sharing ideas, but we have not done it yet. (S4 NFG, D)

Student 1 took a similar stance, writing in her diary:

I think it is better to cooperate with friends (S1 NFG, D)

Students 5 and 6 adopted a similar position in terms of sharing their ideas through group work, as they included in their interview responses:

Working together will help us find ideas... (S5 NFG, I)

If I had worked in a group I would have had more ideas, as we would have shared our opinions. I would also have written a complete essay, because we would have had different ideas, since some of us would have been for [the issue] and others against. We would have also helped each other in our writing.  
(C6 NFG, I)

Meanwhile, the FCG learners were offered an opportunity to work in a group as part of the intervention, whereby they discussed their weekly activities and completed them collectively. Student 3 found that this encouraged her to learn and participate. She cited several reasons for this, such as learning to accept other people's ideas:

The idea of group assignments encouraged me. It helped me to express my thoughts and be more aware of how others think - no longer thinking from only one perspective - so, it encouraged me a lot. (S3 FCG, I)

The experience also gave the learners an opportunity to practice their English much more often and to use English outside the classroom setting, without being afraid of making mistakes. In fact, it had given them a chance to further develop their skills and help one another, while at the same time limiting themselves to using the FL and excluding their L1, as Student 4 reflected:

It helped me in writing, discussing with my group, expressing my feelings and explaining my answers in English. (S4 FCG, I)

Aside from the above, Student 4 wrote in her diary that the experience had helped her become much more open and accepting of other people's ideas:

...it made me more open to accepting other peoples' ideas. (S4 FCG, D)

Meanwhile, Student 1 stated in her interview that the learners had started to support each other (indicating collaborative skills):



However, with time, we were forced to help each other and now if someone faces any problems, we help her. (S1 FCG, I)

Student 1 further explained that as a group, they had encouraged each other to continue working and trying. This had helped them a great deal, as it had increased their will to work and learn. Student 1 thus explained:

The group is very important and it helped me a lot. For example, if a student in the group got fed up, another one helped her... Even though I was under pressure, I encouraged the group to write and answer. (S1 FCG, I)

It was also apparent in the diary entries that the learners had become a small, mutually supportive educational community, as Student 1 also commented:

I think it is helpful for me and my group. (S1 FCG, D)

She further explained this in her diary entry for Week 4, adding:

It is easy to share my knowledge. (S1 FCG, D)

Student 5 had a similar attitude, but she talked much more about how the learners had behaved with each other and how their approach had facilitated their collaboration:

We started to save all the outlines in one file and when we wrote, we checked our ideas from our phones. This was really good and enhanced the team work. (S5 FCG, I)

The group work also encouraged the students to come to class and participate, as they had more opportunities to discuss with each other the difficulties they encountered while undertaking the activity. This helped change their attitude to the writing class, making it much more interactive. Student 4 further explained:

I felt I enjoyed coming to every class, I was so interested in meeting my colleagues [sic] and discussing our assignments. I didn't feel bored with the writing class anymore. As long as we form groups to discuss what we write, I never feel bored. (S4 FCG, I)

The above FCG participants found that their peers assisted them by exposing them to a wider range of ideas and perspectives. This was very helpful for developing their

writing ability. The experience also helped the FCG learners to identify their mistakes and work on them, as they were exposed to much deeper discussions and were encouraged to be open to each other's ideas. The NFG participants, who had not experienced this, expressed a desire to be involved in group work. Even though they were able to discuss the week's topic with their teacher to develop an outline for the task, the FCG learners accomplished this online and then brought the drafts to class to discuss them with their teacher. Furthermore, the NFG learners worked on their activities during whole class discussion, while the FCG learners worked on their activities during online discussion and only checked their answers in the classroom. Thus, working collaboratively through online discussion helped the learners build a better relationship with each other, as they were able to discuss different points of view and synthesise various options, before finally arriving at a conclusive answer.

#### ***7.1.3.2 A Friendly Relationship***

This sub-code involves a description of the kind of personal relationships formed between the learners from both groups and how the teaching environment supported them. In the NFG, most of the participants demonstrated that their relationships were very limited, thus failing to achieve what they were looking for, as Students 1, 2 and 5 described:

Our relationship is limited. We only met during the class time. I do not even know their names. I wish we had a better relationship. (S1 NFG, I)

There is no strong relationship. We are just colleagues [sic]. (S2 NFG, I)

...no relationship; we did not have anything to do with each other. (S5 NFG, I)

Moreover, Student 4 described her peers as friendly, but relationships were minimal. She therefore wrote in her diary:

They are friendly, but I do not know them very well. (S4 NFG, D)

Meanwhile, in her interview, she added:

It is good. I have good relations with my colleagues [sic] and my friends who have been with me in the same class. (S4 NFG, I)

However, most of the FCG participants' responses showed that they had developed friendships with their peers, which had encouraged their engagement with the learning activities. They reflected that the use of group work had increased their sense of unity and generated the feeling that learning is a cooperative experience, rather than an isolated one. Furthermore, this sense of friendship had helped eliminate their fear of making mistakes, as they realised that they were with friends, who would assist them with their learning. In relation to this friendship, Student 6 stated in her diary:

I felt great working with my friends. (S6 FCG, D)

She further supported this in her interview, stating:

We have become friends. (S6 FCG, I)

Aside from the above, Student 2 claimed that the flipped classroom experience had changed her personality; she had previously been unsociable and unable to work with others. As a result, during the flipped classroom period, she had suffered, because her group did not initially cope well, but by the time they had started to collaborate, she was impressed. In this regard, she declared:

This was actually difficult for me. I am not a social person. I like to do things on my own. I cannot work within a group. I had a problem with my group, but now we are much better, after getting to understand each other. I found that they were outstanding students. I didn't know that before, because they were quiet. (S2 FCG, I)

The participants from the above-mentioned group (Students 1, 3 and 4) found their relationships to be helpful, cooperative and friendly in nature, as they met up with each other in the classroom and this helped them build a sense of belonging and friendship:

We are friends now. Actually, it is not merely friendship; we help each other. (S1 FCG, I)

Our relationship stands on cooperation. (S3 FCG, I)

We were a cooperative group. In writing the argumentative essay, we were trying to convince each other, discuss our opinions together, writing ideas in detail. (S4 FCG, I)

From the above, it may be deduced that the FCG participants mentioned had changed their attitude to the writing course, becoming more positive as a result of group work. In turn, their learning was facilitated and had become a much more collaborative and friendly activity. Meanwhile, in the NFG, relationships between peers were limited solely to seeing each other in class.

#### **7.1.4 The Learners' Personal Feelings towards the Teaching Approaches**

This code pertains to the students' perceptions of the learning opportunities provided for them. The learners also described how they had changed, if at all, in terms of their commitment to learning.

##### ***7.1.4.1 New Ways of Learning***

In this sub-code, the learners either expressed a desire for new teaching approaches that would help them learn more effectively, or else found that the teaching method adopted was suitable for helping them learn and develop their skills. These two opposing views were presented by the FCG and NFG alike. Consequently, most of the NFG participants found traditional teaching methods to be unsatisfactory, as they had not benefited from them much in terms of improving their writing. Even though they initially described their teacher as helpful in her explanations and repetition, they still felt that this traditional approach left room for improvement, as they were not very confident about their skills. They consequently made several suggestions to remedy this situation, such as 'more explanation and clarification', 'more materials to practice from' and 'working in groups to help encounter different points of views', in their descriptions of the non-flipped approach, Student 6 found the classes to be boring, asserting:

It was similar to the teaching style of any other teacher. It was the same teaching method... because the method is traditional, boring and does not develop the students. (S6 NFG, I)

Student 3 further added that writing an essay, especially an argumentative essay, required more than just specific steps to follow; it was rather about listening to other people's points of view.

Some courses require more materials to practice from. Sometimes you need to listen to different points of view. This will enable you to understand the argumentative essay. It is not just about following certain steps. (S3 NFG, I)

Although Student 2 previously mentioned that she had developed her understanding of the argumentative essay on the current course, she asserted that the traditional approach needed to be modified by adding explanation and clarification:

This method needs to be improved. There must be more explanation and clarification from the beginning (S2 NFG, I)

In relation to the availability of different learning resources, some of the NFG participants found them to be limited, or even totally lacking. They were mainly restricted to using the textbook, as Students 4 and 5 indicated in their diaries:

We have worked on the book until now. (S4 NFG, D)

There is no availability. (S5 NFG, D)

Together with the limited availability of learning resources and the fact that the approach was traditional, two of the NFG participants (Students 1 and 6) attributed their inability to learn to the level of difficulty of the task, namely writing an argumentative essay. They described it as “difficult and confusing”, mainly stating that:

The argumentative essay is hard. When I write an argumentative piece, I cannot find words. I think that even if we wrote in Arabic, we wouldn't be able to master it. (S1 NFG, I)

The argumentative essay is the hardest essay I have studied. I cannot differentiate between ‘argumentative’ and ‘cause and effect’ essays, because both of them depend on reasons and this is confusing. (S6 NFG, I)

On the other hand, such sentiments were not expressed by the FCG. The only issue they commented on was the choice of topics, as mentioned earlier by the NFG. Instead, the FCG's participants declared that they had been exposed to new ways of learning, mainly in the form of various learning resources to be used in combination, which had

helped develop their understanding. In this regard, Student 2 mentioned in her interview:

Videos, questions and assignments helped me a lot. I was not good in writing at the beginning. Now, my writing has improved. It was a helpful experience. This experience improved my grammar and spelling. It taught me how to write sentences correctly. Now, I am able to write. (S2 FCG, I)

Student 1 from the FCG expanded on this, as she found this new experience to be helpful, since the videos had played a major role in her learning. There was consequently a shift in focus from the more traditional classroom approach, where concepts are merely described in an F2F environment, to one where learners are more self-reliant in their learning and F2F time is invested in checking understanding. Student 1 consequently stated in her diary:

It is a new way and we need more time to improve. (S1 FCG, D)

She explained this in her interview, stating:

I would not be able to understand Ms. ...’s explanation without watching [the video]. (S1 FCG, I)

She further added:

The classroom lessons complemented the videos. I think Ms. ... believed that we should watch the videos before the lessons and this was good... This method is helpful regardless of the type of essay... it is good to depend on yourself and accept help from your friends.

Student 3 added in her interview response that the teaching approach required self-reliance, adding:

Probably, it depends on the ability to rely on oneself and to gain understanding from other resources. I can recommend the use of videos as an extra way of learning other than classes. This is to assist in understanding what I may miss in the class. So I can go back to the videos. (S3 FCG, I)

In describing the flipped approach, Student 4 found it to be ‘new’, as she entered in her diary:

A new way of learning, but I think it is much better than the old way. (S4 FCG, D)

Student 4 also found that the use of videos had facilitated her learning, in that she was able to study during her free time, as she described in her interview response:

You know, it is normal to feel from time to time that you get bored of studying [sic]. However, it is convenient to have the freedom to get into those videos at any time you want while at home or even in bed. In fact, the information gets into your memory easily. (S4 FCG, I)

Furthermore, she explained that the images had helped her understand major components of the argumentative essay, such as the thesis statement. She therefore added:

...I can remember the image that reminds me of getting a balance between the information in the thesis statement and the body. (S4 FCG, I)

Student 6 had a similar attitude, as indicated below:

In the videos, every sentence is accompanied by an image. Moreover, if I do not understand any part, I can repeat it frequently without feeling shy. Also, the examples in the videos are really helpful. (S6 FCG, I)

Meanwhile, Student 5 found the videos to be helpful for other reasons; for example, they offered flexibility, with an opportunity for learning, whatever the time or place:

I could repeat the videos several times and whenever I needed. It is usually hard to ask the teachers to repeat things in class, but the videos are always available to watch at home. (S5 FCG, I)

Most of the FCG participants found the inclusion of videos and the flipped classroom to be helpful, rendering it a ‘joy’ to learn:

The first week was tiring, but if the same method had been implemented in elementary and secondary school, we would not have suffered and it would have left a positive impact. (S5 FCG, I)

It was very helpful and not boring or traditional. We worked joyfully. (S6 FCG, I)

This experience is nice. It is the first time in my life to have the experience of watching the lesson at home and then coming to class to build up on our understanding of the videos. (S3 FCG, I)

Student 2 described her experience of the flipped classroom as a novelty, stating:

Learning at college and at home is a new way of learning. (S2 FCG, I)

It is clear from the above extracts that while the NFG participants found the teaching approach to be very traditional, with limited availability of learning resources and in clear need of improvement, the FCG students found the flipped classroom to be a novel approach, which provided them with further access to learning materials.

#### ***7.1.4.2 Commitment and Independence in Learning***

The participants in this sub-code revealed how their learning styles had either changed or remained the same as before the teaching period. For example, this related to the use of feedback in the non-flipped approach. Consequently, Student 2 in the NFG commented on her reaction to the feedback she received, as she would correct her mistakes based on it as a means of improving her writing skills, declaring:

I used to do it because it helped me improve my writing. (S2 NFG, I)

Regarding the FCG participants' reflections on the teaching approach, Students 1, 2, 5 and 6 were very enthusiastic in their explanation of how the flipped classroom had helped them change how they learned. They declared that they had become more autonomous in terms of their initial approach to the activities, which helped enhance their learning. This can be seen in the following interview responses:



I was also eager to see my mistakes and how far I had improved from my first writing [draft] to the second. I wanted to see the difference. (S1 FCG, I)

Student 2's response showed that the teacher's feedback motivated her to make more effort, as she had someone to look at her work and read after her. She subsequently added:

I used to achieve learning only in school and college, but not at home. Now I exert more effort and I work hard because there is someone reading after me. I cannot leave all these behind. Now I can depend on myself, because I trust myself. (S2 FCG, I)

Student 5 also explained that she was working for her own sake, as she asserted:

I did not work for marks; it was because of me [sic]. (S5 FCG, I)

Students 2 and 6 consequently found themselves to be better equipped to identify their mistakes and correct them, as the following extracts indicate:

All I had to do was repeat and focus. I wish we had been exposed to this method throughout the whole course. (S6 FCG, I)

In the first piece, I made many mistakes, but because of the videos, the wiki, the teacher's explanation and hard work, we improved. (S2 FCG, I)

From the above, it could be claimed that most of FCG participants had become more self-determined about acquiring new knowledge. The availability of several types of learning resource had helped in this way. For instance, the FCG learners were able to watch the corresponding videos whenever they wanted and in a flexible way. They therefore took responsibility for improving their own knowledge, based on their freedom to carry out this task. In addition, the use of videos offered them a means of repeating unclear items and developing their understanding, before engaging in the assigned task. As a result, the videos helped prepare them for the task. Giving learners a choice of activity and the freedom to undertake learning tasks in any way they wished was an important component in support of their autonomy, whereby they were encouraged to sustain their sense of self-determination and IM (Dörnyei, 2003).

### **7.1.5 Summary of the Interview and Diary Findings**























The above interview findings are mainly concerned with the different types of support provided in each type of instruction: the non-flipped process approach and the flipped classroom. These primarily relate to the various ways in which the psychological need for perceived competence, relatedness and autonomy were satisfied, which in turn had an impact on IM and learning outcomes. Different types of support were included in the analysis, such as teacher- and peer-support. In addition, the learners' attitudes to the experience are explained here, with the learners from both groups adopting a different stance on certain issues, such as the types of relationship formed between them during the course.

Regarding the non-flipped process approach, the participants described their capacity to understand the structure of the essay, but stated that they found the approach to be traditional and in need of improvement. They also expressed a need for additional resources to study from. Meanwhile, for the flipped classroom approach, the findings indicate that this could provide the sense of autonomy required. The participants were pleased with the multiple resources available to them, as it gave them choices over time and place. Moreover, the FCG learners were able to use English to work out their tasks, with no concerns over difficulties in communication. In other words, the use of online interactive tasks helped to enhance relationships in the FCG and their engagement with the language. For this reason, the FCG learners were able to build better relationships with each other and this may have contributed to their unity as a group and to the development of their small learning community. In both groups, however, the participants demonstrated positive attitudes towards their teacher, especially in giving them feedback and answering their questions. They further explained how this helped them develop their understanding. Moreover, they were able to build a satisfying relationship with their teacher.

To sum up, the nature of the flipped classroom implemented in the current study may have had an effect on the satisfaction of the participants' psychological needs and in turn, their IM. The flipped classroom consisted of using the videos to teach new elements, undertake an online activity and work with drafts. Even though the use of a VLE to teach the new content through video material was initially described by the

learners as ‘complicated’, given sufficient time and after deeper involvement in the experience, the process became much easier. In order to further examine the interaction between the FCG learners through online discussion, the following section includes the findings from the online interaction logs using the VLE wiki. This analysis was limited exclusively to peer-interaction.

### Available support

FCG		NFG
	Multiple learning resources	
	Positive feedback from the teacher	
	Clear instruction on performing the activity	
	Describing the aim behind the learning task	
	Informative feedback throughout the activities and while writing drafts	
	Challenging tasks	
	Collaborative work	
	Friendship with peers	
	Positive relationship with the teacher	
	Teacher's support through synthesis and application	
	Teacher's support through explanation and provision of examples	

**Figure 7.2 Comparison of NFG and FCG responses to the supporting environment, as presented in the interview-diary data set**

## 7.2 The Learner-Peer Online Interactive Tasks

Data from the learners’ online interaction logs were analysed, with the analysis being limited to Week 2. Here, the number of contributions from the learners was calculated and analysed. The students were divided into five groups, consisting of five learners each to facilitate communication between them through the online environment. Each student was meant to contribute to the log by discussing possible answers for the intended activity. In Week 2, the focus was on developing a thesis statement for an argumentative essay and the essay topic was about whether violent video games change young people’s behaviour.

In the following sections, categories of participant were identified, as well as the various kinds of contribution made. These were analysed according to Zhu's description of participants, identifying learners based on the types of contribution they posted. Here, there were four categories: 'Contributors', 'Mentors', 'Wanderers' and 'Seekers' (see Table 5.6). However, some of the participants took on different roles in different posts during the week, with each entry being treated as a contribution. In this way, all the participants were considered as contributors. Additionally, there were different types of participation analysed, based on Zhu's description. These included the following: reflections, comments, discussion, answers, information-sharing and scaffolding notes, information-seeking questions and discussion questions (see Table 5.7). Moreover, a single log could comprise different types of these participations.

From the data it was noted that the second most frequently adopted role amongst the learners after that of 'Contributor' was the role of 'Mentor', with 49 logs of the total participation. Here, some of the learners tried to encourage each other to work on the assigned homework, once they had discovered that their fellow group members were struggling with it, as can be seen in this excerpt from Participant 11's contributions in Group 3:

girls are you ready for the next topic?  
lets start :) (P11 G3 L)

The Mentor has an important role to play in increasing a group's chances of successfully completing an activity, or in specific learning situations. Moreover, the Mentors had mostly taken responsibility for writing the final answers after discussing them with other group members and before sending them to the teacher, this role involves decision-making, as can be seen in this excerpt from Participant 8's contributions in Group 2:

From my point of view topic 1 pro: 19's thesis is better. (P8 G2 L)

Meanwhile, in five logs, the participants were 'Wanderers'. These are learners who are generally unsure about undertaking or completing an activity, rather than being unsure about the weekly readings. The above-mentioned week was the second week from the start of the flipped classroom and so the learners were still practicing how to use the

VLE system properly. In this respect, the Wanderers were the participants who asked questions, such as the example given by Participant 15 in Group 3 below:

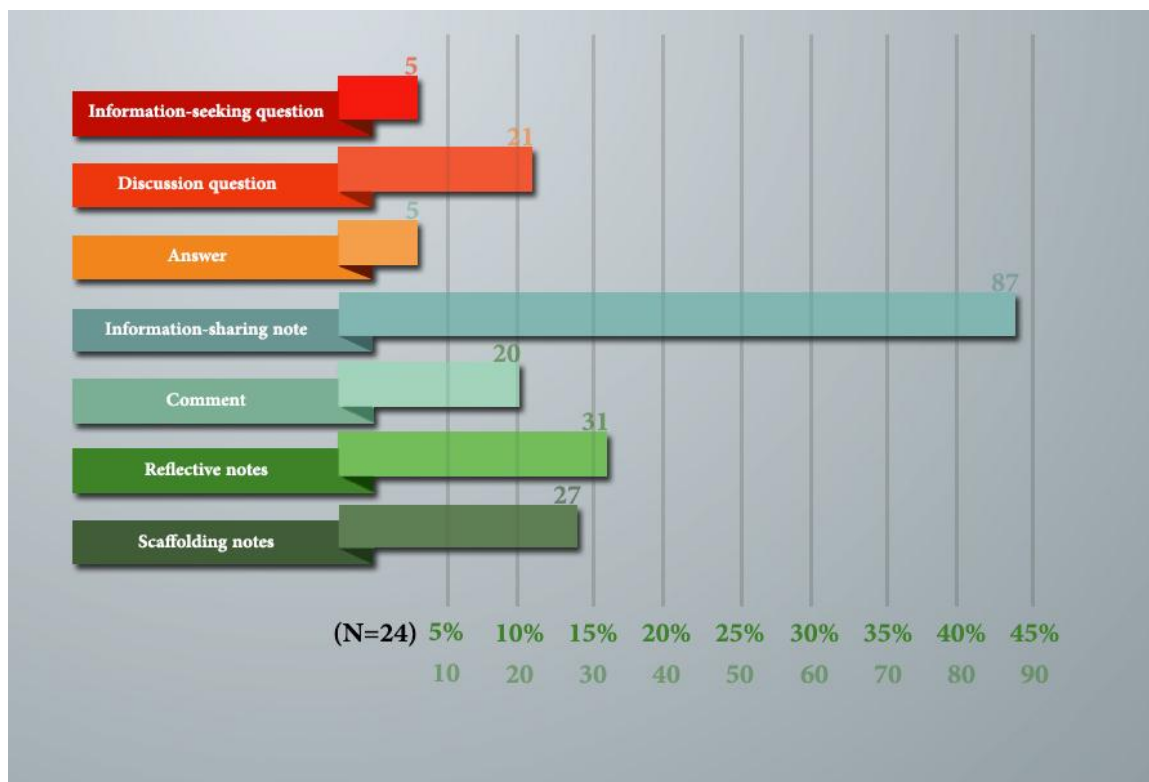
I sent it like the (thesis statement) homework 2.5 in attach file and submit  
do you want me to send it to your email? (P15 G3 L)

In the previous example, the participant was asking her teacher about receiving the homework after sending it via the VLE.

Following this, the role of ‘Seeker’ had the lowest occurrence, with 4 logs of the overall participation. Learners of this type asked about issues they did not understand relating to the content itself, rather than to the procedures for undertaking an activity; or else they sometimes asked their peers for opinions on answers or participation, as can be seen in the following excerpt from Participant 14’s contributions in Group 3:

So, I will write the outline of violent video games and please tell me if there is any mistake... (P14 G3 L)

In the following section, the categories of contribution made by the learners in relation to the above-mentioned roles are considered, comprising the information-sharing note, information-seeking question, discussion question, answer, reflective notes scaffolding notes and comment. An indicator of these types was presented in section 5.5.2.



**Figure 7.3 Frequency of occurrence for different types of logs in online interactive tasks**

It is clear from Figure 7.3 (above) that the ‘information-sharing note’ was the most frequent type of contribution made, with 87 logs of the total participation. The learners mainly posted their different answers, but then started a discussion about the options available for formulating the final answer. They worked in collaboration with each other to formulate the best responses before deciding on a final version to submit to the teacher or to use for their writing. An example of this type is evident from the following excerpt, showing contributions from the different groups:

here is what I wrote

**\*\* Driver’s license age restrictions \*\***

Pro / I think it is better to put an age restrictions, because it will help limit the cars accidents and there will not rash boys driving.

Con / even though age restrictions might limit the rash boys who driving crazy, but some families do not have a grown man to drive a car so they need their boy to drive them to what they want to go

**\*\*Space exploration\*\***

Pro / exploring the space will help the humanity in science and in finding another planets that able to live in.

Con / I think that exploring the space is just waste of time and money instead

of spending thousand on an abandoned space they should focus on the planet they are living in, and for the internet privacy what you wrote and what I wrote are the same ideas. (P4 G1 L)

Hello everyone!!

That's my outline for the first draft tomorrow inshallah : ))

Thesis statement \*\* I believe that it's a must to prevent kids from playing violent video games for two main reasons. (P8 G2 L)

The learners then began making 'comments' for the benefit of their peers, with this form of contribution making up 20 logs of the total participation. Appearing in the posts were comments about judgments on specific issues related to participation in the activities. An example of these is reproduced below, with one group member responding to her friend's answers in the discussion thread:

....you are right. (P10 G3 L)

Yes it is appropriate. (P24 G5 L)

I'm not against. (P20 G4 L)

The next most frequent type of contribution was the 'reflective note', with 31 logs of the total participation. A way from personal reflection, this type of participation helped build better relationships between group members. Even though the learners could either criticise or praise each other with this type of contribution, the participants in this study were generally positive and tended to praise each other, rather than criticising or falsely accusing one another:

Thank you very much! (P23 G5 L)

I liked what... wrote about \*\* Driver's license age restrictions \*\* (P4 G1 L)

And the second topic, there is a good thesis and I think we do not have to develop it. Which is: at least 15 percent of the budget should be spent on space exploration. (P10 G2 L)

I am not that good, but I think you did great.... (P3 G1 L)

I think mine is good.... (P15 G3 L)

'Scaffolding notes' made up 27 logs of the participation; the learners providing each other with assistance in order to improve their answers or providing a guidance for the discussion about the activity. For example:

So add the word ‘government’ to the thesis statement. (P20 G4 L)

I will do the first one and you can continue with the other (P19 G4 L)

For this week group activity we have to write the thesis statement (P22 G5 L)

Regarding the other types of contribution made, these ranged from responses to an ‘information-seeking question’ (five logs) and ‘answers’ (five logs), to a ‘discussion question’ (21 logs). As an example of an ‘information-seeking question’, Participant 1 (Group 1) asked her fellow group members about what they thought concerning Participant 3’s answer corresponding to the task, posing the question:

What did (...) write about space exploration? (P1 G1 L)

Meanwhile, an answer was provided by Participant 3, in response to her friend’s ‘information seeking question’:

Here is mine; I believe that discovering space will help us explore new things. (P3 G1 L)

Regarding the discussion questions, Participant 24 (Group 5), for example, sought the opinion of the rest of the group, asking:

Internet privacy can affect us for many reasons,  
what do you think? (P24 G5 L)

Participant 23 (Group 5) responded to this as follows:

Yes this is the best; let’s finish the last one [sic]. (P23 G5 L)

As shown above, the learners tended to employ ‘information-sharing notes’ as a means of building up their discussion and formulating their answers for the week’s activity. They also tended to express their positive feelings towards their peers’ work whenever possible. In most of the discussion threads, the learners posted their notes to share with their peers, before starting a discussion with them about the available options. By adopting this approach, the learners are likely to have built up their critical thinking skills through an opportunity to choose from a range of options and tended to work more collaboratively.



It also appeared that the learners helped each other as friends. This log is representative of the other weeks, in that it provided the learners with further opportunities to learn and discuss difficult issues at times and locations that suited them, thus building up friendly relationships with their peers through the online interaction logs.

### **7.3 Conclusions**

This chapter includes an in-depth investigation of the supporting environment created by a flipped and non-flipped approaches. A comparison was made between these two teaching approaches adopted on a writing course, drawing upon the participants' responses in interviews and diaries. Building up a flipped classroom design oriented towards the course objectives through the use of videos and selecting the teaching method that would work effectively with this in an F2F environment was anticipated to help develop the learners' abilities and IM. A discussion of these and the previous chapter's findings will be presented in the following chapter, in order to reveal the current study's contribution to research.

## **Chapter Eight: Discussion**

This chapter comprises a discussion of the findings presented in Chapters Six and Seven, in relation to the research questions. The findings in Chapter Six were derived from quantitative data collected through questionnaires and writing test scores. These were used to answer the first research question regarding changes in learning outcomes and IM in terms of SDT. Their relationship with a supporting environment and the satisfaction of psychological needs was also examined in relation to the second research question. As regards the third research question, a correlation test was used to examine the possible relationship between IM and learning outcomes. The findings indicated greater development in the FCG than in the NFG in all areas. Further interpretation of the findings from Chapter Six are incorporated based on the above theory, adapted to examine the possible change in NFG and FCG's IM and learning outcomes with the impact of the supporting environment on learning outcomes, as well as the satisfaction of basic psychological needs – this being considered the most important element determining changes in IM.

Chapter Seven presented qualitative findings obtained from interviews and diaries, together with an analysis of the online discussion. These addressed Research Question 4. These data also help to cross-validate the questionnaire data and offer a further description of the supporting environment provided for the participants in both groups. Further to the above, each element included is connected to the existing literature, the review of the studies in the current thesis, and the theoretical framework described in Chapter Two.

### **8.1 The Impact of the Teaching Approach on Intrinsic Motivation (IM) and Learning Outcomes**

This section discusses the results related to the change in IM and learning outcomes in both groups. Quantitative data obtained from the writing assessment and questionnaire responses were used to determine the level of change within the same group, before and after the teaching period, as well as comparing the groups in terms of any changes that may have occurred. This relates to the following research question: *‘What is the impact*

*in terms of learning outcomes and intrinsic motivation (IM) of implementing the flipped classroom approach, in comparison with the non-flipped approach, on the English writing skills of EFL learners?’*

With regard to writing abilities, and in order to address the first research question, the data revealed that the learners from both groups had improved their essay writing in comparison to the baseline test. However, the learners in the FCG had improved much more than the NFG in terms of their learning outcomes, based on a Mann-Whitney U test, with a large effect size of  $r=0.67$ . This result was compatible with other studies showing the positive impact of the flipped classroom on language learning (Engin, 2014; Hung, 2015; Huang and Hong, 2016). The FCG had also improved much more in terms of their IM, as indicated by the Mann-Whitney U test, with a large effect size of  $r=0.50$ . Meanwhile, the NFG did not exhibit any change in their IM at the end of the study.

The development of the FCG’s IM and learning outcomes may be attributed to the nature of the flipped classroom. Here, learners are introduced to new content outside the classroom, before this content is intensively practiced in the classroom (Strayer, 2012). In other words, the flipped classroom shifts the emphasis in class to discussing material (Touchton, 2015). As a result, learning in the flipped classroom becoming an active process (Moffett, 2015). The FCG in this study were given the choice of viewing videos and practicing activities at their own pace. Based on this, their learning turned out to be a more self-centred process. According to Uzunboyly and Karagozlu (2015), through the use of a flipped classroom learners can apply different learning strategies that will help accommodate the various learning styles found among students, whereby learners will choose the strategy that best fits their learning needs.

The results of this study revealed that the use of a process approach, together with the flipped classroom, helped produce better learning outcomes in the FCG. However, this positive impact of the process approach was also evident in the NFG’s learning outcomes. The main aim of the process approach is to develop learners’ ability to express themselves clearly and effectively (Khansir, 2012). Revision is a major step in this approach and so learners must be provided with feedback, either from their teacher or peers, in order to improve their drafts (Shih, 1986). This technique renders

collaboration and interaction between teachers and learners, as well as between peers, a significant element. Learners can work in groups to refine their thoughts and hence become better prepared for writing (Horowitz, 1986; Tribble, 1996; Cumming 2006). The type of feedback used in this study was indirect feedback. Chandler (2003) found in his study that FL learners were able to enhance their writing ability more through indirect, as opposed to than direct feedback. With indirect feedback, learners are led to correct their own errors. In so doing, they encounter problem-solving situations, which can help develop long-term language acquisition (Bitchener and Knoch, 2008). Through the process approach, there is a shift in the teacher's role towards that of facilitator and supporter, rather than them merely passing on new knowledge (Badger and White 2000; Cope and Kalantzis, 2014). The shift in the teacher's role can be further fostered by the use of a flipped classroom, as the results of this study indicate (section 8.2.1.2).

By using SDT as an analytical framework, it is suggested that feedback plays a significant role in developing a sense of autonomy and competence. In addition, the use of collaborative environments to work with the teacher or peer is important for learners' sense of relatedness. According to SDT, an environment that is supportive of autonomy, competence and relatedness is essential for satisfying these basic psychological needs and IM. It is arguably these which will contribute to success in learning. In this regard, further correlations between these variables are discussed in subsequent sections (8.2 and 8.3).

## **8.2 Learning Outcomes and their Relationship with Intrinsic Motivation (IM), the Supporting Environment, and the Satisfaction of Psychological Needs**

This section considers learning outcomes and their relationship with IM, the supporting environment for the satisfaction of basic psychological needs, namely autonomy, competence and relatedness and ultimately, the satisfaction of these needs. According to SDT, the teaching environment must provide the necessary support to satisfy each of these basic psychological needs. The relationship between the learning outcomes, supporting environment and IM were examined in depth and the relationship between the supporting environment and the satisfaction of psychological needs was considered, as the satisfaction of psychological needs is also correlated with IM. These data were

collected to compare the groups, as the learners were exposed to a similar process in each group on the respective writing course. However, in the FCG, the online environment was used to teach new content and offer additional means of group discussion. The following sections present a discussion of the research question: *‘In both approaches, what is the relationship between on the one hand, the supporting environment offered and on the other, the satisfaction of basic psychological needs, IM and learning outcomes?’*

### **8.2.1 The Relationship between the Learning Outcomes and the Supporting Environment**

A correlation analysis was conducted to try and understand the possible reasons for the development in learning outcomes, either correlated with IM or with the supporting environment in both teaching approaches. This addressed the second research question. This study is one of the few to have tested such a relationship. The results revealed a moderate positive relationship with both variables. Thus, the supporting environment was found to have a higher correlation with the learning outcomes than was the case for IM. This contradicts the results of Chen and Jang’s (2010) study, where results obtained through structural equation modelling revealed that learning achievement is not directly predicted by contextual support, but rather by the mediation of needs. However, the findings of the present study support the vast majority of those indicated in the relevant literature in fields other than EFL, as explained below.

Regarding support for autonomy, this was found to have a moderate positive correlation with learning outcomes at  $r = .323$ . In studies on support for autonomy, this basic psychological need was found to have a direct impact on learning. One example of this can be seen in a study conducted by Black and Deci (2000), where the researchers found through multiple regression that the instructors’ support for autonomy directly predicted actual exam performance for the final course grade of an Organic Chemistry course. The above study expands on previous research, which indicate that support for autonomy is mainly related to autonomous motivation and the experience and advantages of the student. The results of Black and Deci’s (2000) study are correspondingly important, as these authors were the first to focus on a college-level

natural sciences course. They were also the first to link support for autonomy with actual exam performance in an ongoing educational setting.

In a more recent study pertaining to FL learning, O'Reilly (2014) investigated the relationship between support for autonomy, IM and learning outcomes in an intensive language program, where a relationship was found between support for autonomy, IM and GPA. Some justification for this exists in Noels (2001) study (see section 2.2.4.2), from which it may be deduced that learners taught in an environment that supports autonomy will experience better outcomes in their learning tasks and engage in learning because it is enjoyable, or because it appeals to their self-concept.

Providing learners with an environment to support their sense of autonomy helps develop their learning by giving them a chance to be in control and independent when performing tasks (Chen and Jang, 2010). An environment supportive of autonomy will involve strategies such as explaining the rationale for any activities assigned; presenting choices; giving learners responsibility for determining the organisation of their learning process; encouraging peer-teaching, and allowing learners to contribute by paying attention to their feelings about a topic (Niemic and Ryan, 2009). These strategies can help learners become more self-determined, so that they work towards developing their attainment. The results from the current study are important, as they expand on the findings in the literature, particularly when support for autonomy is found to be linked to learning achievement. The positive contribution of support for autonomy to learning outcomes could be explained as learners being provided with positive feedback, as well as defining the aims of the writing course.

Considering that the learning outcomes were also found to be positively related to support for relatedness ( $r = .485$ ) and support for competence ( $r = .362$ ) in the current study, these are results that should be further tested in future studies. Support for relatedness, however, was found to have the strongest relationship with learning outcomes. This category concerns the relationship with both the teacher and peers. As explained by SCT, learning is a collaborative rather than an isolated effort (Vygotsky and Cole, 1978).

Collaboration with peers can have a positive effect on the sense of relatedness, as the present study findings indicate. In fact, several studies have demonstrated the positive impact of providing an environment that supports collaboration between peers (Cox et al., 2009; Bradley et al., 2010; Akbari et al., 2015). Hence, collaborative learning can be facilitated by different forms of asynchronous tool, through which learners with different abilities and interests can work together to resolve problems or complete projects (Hoic-Bozic et al., 2009). The results of Bradley et al.'s study (2010) show that collaboration can be beneficial from a language learning perspective, especially via wiki pages. The learners in the above study were able to revise a co-constructed text that helped them evaluate existing contributions and gave them opportunities to suggest constructive changes. Meanwhile, Akbari et al. (2015) demonstrated that social networks support communication and social interaction, permitting communication that is free in terms of time and space. In non-flipped approaches, teachers and students require a particular time and space for F2F communication. In the flipped classroom implemented in the present study, the learners were involved in asynchronous discussion using wikis, which could explain why the FCG developed closer relationships and friendships with their peers than was observed for the NFG, and consequently satisfied their sense of relatedness much more fully than their counterparts.

Meanwhile, Dörnyei (2003) describes the importance of providing an environment that will support the satisfaction of the need for competence, while also engendering a sense of autonomy. Dörnyei emphasises this as a factor leading to improved IM and performance, as was also statistically shown to be the case in the present study findings. In an environment which supports competence, learners receive informative feedback and are assigned challenging tasks, through which their sense of self-determination will increase (Niemic and Ryan, 2009). In the present case, the process approach was adopted and learners were given appropriate feedback by their teacher. This potentially helped them discover new ideas when revising their first draft. Providing learners with an online environment – as provided for the FCG in the present study - can assist in reducing the time constraints on asking questions and discussing learning materials, thus improving learners' sense of autonomy and competence (Akbari et al., 2015).

Moreover, a social network environment can offer learners more of an opportunity to access the same feedback repeatedly (ibid.).

### **8.2.2 The Relationship between the Supporting Environment and the Satisfaction of Basic Psychological Needs**

A further correlation test was conducted to examine the relationship between the satisfaction of basic needs in the form of autonomy, competence and relatedness and the supporting environment for satisfying these needs. Correlation analysis was conducted between the support provided for the satisfaction of each need and the extent to which it was subsequently satisfied. The results revealed a moderate positive relationship between the two, whereby an increase in support led to an increase in the level of satisfaction. The types of support provided for each need are described in section 2.2.4.

### **8.2.3 The Relationship between Basic Psychological Needs and Intrinsic Motivation (IM)**

According to SDT, the satisfaction of basic psychological needs is important for the development of IM. Further correlation analysis was therefore conducted between the satisfaction of psychological needs and IM. The correlation between the two variables was directly tested, in order to try and understand the relationship between them. The results indicate a strong positive relationship between these two variables, compatible with SDT and the sub-theory, cognitive evaluation theory. It is therefore indicated that the environment can provide a high level of satisfaction of psychological needs and is the best predictor of IM (Black and Deci, 2000). Several studies presented in the literature have examined the mediating effect on IM of each satisfied need and the corresponding support provided. This result supports Standage et al. (2005), where the researchers found that the satisfaction of needs predicted IM through the application of a structural modelling equation test. Thus, in the current study, this mediating effect is not considered, but each need is directly correlated with IM.

The results demonstrate the strong relationship of a sense of relatedness with IM ( $r=0.52$ ). The participants in the FCG were found to be more likely than their counterparts in the NFG to perceive this psychological need as being met. This was



apparent from the mean (5.4) of the FCG's overall responses, when compared with the mean of the responses from the learners using a non-flipped approach in the NFG (4.8). This sense of relatedness may in turn have had a positive impact on IM in the FCG, which corresponds to results obtained by Cox et al. (2009) – one of the few studies conducted on this phenomenon – where the correlation between the emotional support provided by the teacher, the acceptance and quality of friendships between peers, and a sense of relatedness and motivation was examined. The results of the Cox et al. (2009) study demonstrate that perceived relatedness mediates the relationship between emotional support and friendship with self-determined motivation.

Further findings from the current study indicate that satisfying the need for both autonomy and competence had a positive effect on IM, with a correlation coefficient of  $r=0.705$  and  $r=0.680$ , respectively. This is in line with Niemiec and Ryan's (2009) claim that, in order to inspire IM, it is essential to satisfy the need for autonomy and competence. This implies that students who are competent, but not autonomous, are possibly less likely to maintain their IM for learning, which would explain the failure of the NFG to improve their IM. Meanwhile, the mean values for the FCG's perceived sense of autonomy and competence were higher. Niemiec and Ryan (2009) further note that dozens of experimental studies support the SDT view that a sense of autonomy and competence are essential for maintaining IM. Moreover, this result is compatible with Wu's (2003) study, where a positive correlation was found between IM, perceived competence and perceived autonomy on an English language course.

Wu considered each sub-scale of motivation (IM-Knowledge, IM-stimulation, and IM-accomplishment) as a separate component of motivation, in order to test for a correlation. However, this approach would have been inconvenient for the current study, as several correlation tests were carried out to examine the relationship between IM and the satisfaction of various psychological needs. In addition, the literature points to IM being counted as a single construct in correlation tests (for example, Noels, 2001). Furthermore, in a study conducted by Chen and Jang (2010), IM was taken as a single construct in the analysis, using Vallerand et al.'s (1992) Academic Motivation Scale.

### **8.3 The Relationship between Intrinsic Motivation (IM) and Learning Outcomes**

Further results from the current study concern the relationship between IM and learning outcomes, as measured by the learners' final grade. This specifically relates to the research question: '*What is the relationship in the two approaches between IM and learning outcomes?*' According to Niemiec and Ryan's (2009) study, students tend to learn more and be more creative when they are intrinsically motivated, especially when undertaking tasks that require conceptual understanding. In the present study, IM was found to have a moderate positive relationship with learning outcomes (0.397). This means that if IM is enhanced, then learning is likely to be improved and achievement will be higher. A positive correlation between IM and achievement (final grade) was also found in Bryan et al.'s (2011) research on a High School science course. IM for language learners is critical, as they will learn a language as a result of having the desire to do so, wherein they obtain greater satisfaction following the activity (Gardner, 1985). Transforming learning into a goal will help learners become more intrinsically motivated (Ehrman et al., 2003). In other words, an intrinsically motivated task is exciting and challenging, and accomplishing the task is the reward in itself (ibid.).

However, the current study findings show that the NFG learners did not exhibit any change in their IM, even though their learning outcomes improved. Their enhanced writing ability may be attributed to the supporting environment, which revealed a direct relationship with their learning outcomes, as discussed earlier in this section. Thus, the lower the IM, the less likely the students were to display future learning achievement and they were less likely to reach the level of attainment they aspired to. This is consistent with the predictions of SDT, whereby the more internalised the reason for learning a language, the greater the IM and the more comfortable and diligent the learners will appear to be. This results in students feeling less anxious about their learning and less likely to give up (Noels, 2001). The latter is a major problem facing FL learners in KSA, as they tend not to find language learning enjoyable and identify it as detached from their needs (Al-Seghayer, 2005). This leaves them feeling disappointed and likely to eventually abandon the activity.

The FCG learners ultimately obtained better results than their NFG counterparts, taking into account their learning outcomes and IM. Their responses were also more positive

than those of their NFG counterparts regarding the supporting environment and the satisfaction of their psychological needs. These differences were examined and quantified using statistical tests. In the next section, various types of support provided to satisfy each need are compared with respect to each type of teaching environment used in the present study, based on the way in which the learners perceived each approach.

#### **8.4 Learners' Perceptions of the Supporting Environment**

This section considers the research question: *'How do the learners perceive the supporting environment provided by the flipped classroom, in comparison with the non-flipped approach?'* To answer this question, several approaches to satisfying each need will be considered. The supporting environment mainly relates to the teacher's support for meeting basic psychological needs, namely the need for autonomy, competence and relatedness – as described in section 2.2.4. Each of these needs can be satisfied, if the environment provides adequate support. An explanation of different types of support has already been presented in the Literature Review. An examination of additional types of support, based on the learners' perceptions, is given in this section.

According to SDT and the sub-theory of cognitive evaluation theory, changes in support for the satisfaction of basic needs are likely to result in changes in the level of self-determination, motivation and personal experience (O'Reilly, 2014). A comparison of the two teaching approaches – the flipped classroom and the non-flipped classroom – was made to address this question. In both cases, the process approach was used to teach writing. Thus, the FCG participants were exposed to new content through pre-exposure to the relevant material via use of a VLE and they attended class to practice the new element being taught. The supporting environment – intended to foster competence, relatedness and autonomy – was examined statistically through the use of questionnaires, but qualitative data were also gathered to validate these statistical results. These added further explanation and revealed new elements based on the learners' responses to the EFL writing course. Data obtained from interviews, diaries and interactive online tasks will be discussed later in this chapter.

### **8.4.1 Support for Autonomy**

As presented in the literature and as the results of this study indicate, students' autonomy can be fostered by their teacher. According to Sinclair (2016), the teacher plays a role in supporting the construction and development of positive attitudes to support learning autonomy. This could possibly minimise the salience of evaluative pressure and maximise students' perception of having a voice and choice over their academic activities (Niemic and Ryan, 2009). A previous study conducted by Deci et al. (1981) supports this, with results revealing that the learners who perceived their teacher as supporting autonomy demonstrated enhanced IM and had positive perceptions of their own competence and self-esteem. Put more simply, learners who develop a sense of autonomy in their learning will possess more self-determined motivation, which will in turn help them to enjoy their learning more and, as a consequence, produce better learning outcomes. According to the literature, there are different ways of supporting autonomy, such as defining aims and objectives, providing positive feedback and introducing choice. Moreover, the findings of this study indicate that self-preparation contributes to learners' sense of autonomy, as will be described in the coming sections.

#### ***8.4.1.1 Defining Aims and Objectives***

In order to foster a sense of autonomy, the teacher must define the aims and objectives underpinning any task that is undertaken. According to Reeve et al. (2002), one of the strategies for enhancing learners' self-determination is to present them with the rationale for a task or lesson and to explain why it is important for them. In the above-mentioned study, it was reported that autonomy is related to a supportive rationale, whereby explaining the importance of an activity contributes to students' internalisation. This will then be reflected in their increased effort to learn, especially where the teacher considers learners' intrinsic goals when explaining to them the rationale behind a task (Vansteenkiste et al., 2006). These goals include, for example, personal growth, or becoming fitter and healthier. Learners consequently become more engaged with their learning tasks, whereby they fully understand the material and

demonstrate their competence through improved performance (Vansteenkiste et al., 2006).

In the present study, it appeared to be helpful for the learners to receive an explanation of the aim behind each activity, so that they could become more autonomous in their task performance. In both groups, the teacher explained to the learners the way how the tasks could help them improve their understanding of the argumentative essay and their writing skills. The NFG and FCG learners responded positively regarding this element in their questionnaires, with a mean of 5.4 being obtained for the item: 'The writing teacher makes sure I understand the goals of the lesson and what I need to do'. The learners from both groups also indicated in their interview responses that the activities themselves were beneficial for improving their writing abilities.

#### ***8.4.1.2. Positive Feedback***

Further to the above, providing learners with positive feedback and having a less controlling attitude is crucial for establishing more of a sense of autonomy. In practical terms, feedback from the teacher is required to be able to continue with a task, but the extent of the learners' persistence in undertaking it will be determined by their degree of autonomy (Ryan and Deci, 2000). To further support this statement, the results of a previous study conducted by Noels (2001) demonstrated that the teacher's behaviour affected the learners' sense of autonomy and competence. In the study findings, the more controlling the teacher, the less of the language the students were able to learn and the less choice they felt they had over their learning. This was a further factor affecting their learning enjoyment. Meanwhile, the more the teachers were perceived as being actively involved in the students' learning by giving praise and encouragement for their efforts, the greater the sense of competence amongst the learners. This is also in line with Vansteenkiste et al. (2006), who concluded that the teacher should give feedback in a way that is positive and not critical, while also allowing students further opportunities to learn independently.

In their interview responses, the learners from both groups (the FCG and NFG) described their teacher as understanding, encouraging and supportive. The teacher had a social mediation role in both groups (Lantolf and Lantolf, 2000). Student 4 in the NFG

explained that the teacher's feedback pushed her to work hard and that she wished to impress her teacher (see section 7.1.2.2). In addition, Student 1 in the FCG described her teacher's feedback as 'nice' and claimed that it helped her to continue working (see section 7.1.2.2). This particular issue was further reflected in the questionnaire responses from both groups to the item: 'The writing teacher shows confidence in my ability to do well', from which a mean of 5.2 was obtained.

#### ***8.4.1.3 Providing Choices through Multiple Resources***

Correspondingly, an environment that provides learners with multiple and easily accessible resources to choose from, so that they can work in their own way, may be helpful for establishing a sense of autonomy. In this regard, the flipped classroom can be helpful, as it provides multiple resources to practice with and learn from. Learners can select a learning method to suit their needs, allowing them to develop a sense of autonomy and consequently, their motivation. These results are similar to the findings from a study conducted by Lai and Gu (2011), in which learners described some of their intentions behind their choice of technology. For example, they reported instances where they had used technology to create an interesting environment, to extend their study hours and to watch videos on YouTube as part of their extended language learning. These also represented the means that they adopted to motivate themselves and develop their commitment to learning.

With the flipped approach, learners are offered a chance to work on the assigned tasks at times that suit them and in a way that is comfortable for them, because of the use of an LMS, with the inclusion of educational videos as a source of mediation presented in SCT. Videos used a mediation enable self- preparation, as section 8.4.1.4 further illustrates. The use of videos in the present study allowed the learners choices over what they watched and they had the option of watching these repeatedly during their free time, as explained by Students 4 and 5 (see section 7.1.4.1). It would appear from the participants' responses that the use of videos allowed them such choices and they therefore experienced less stress in their work.

For example, in a study conducted by Sanprasert (2010), in the Thai educational context, the above researcher found that the availability of an LMS for English language

learning helped improve students' sense of autonomy. In addition, through the use of the flipped classroom in the current study, the learners apparently became much more responsible for their own learning and for performing the assigned tasks, whereby they were more aware of the importance of preparation before attending classes. This probably encouraged them to follow up their work further with the teacher and apply the knowledge they had gained for themselves, using the LMS and watching videos. An example of this is the interview response from Student 6 in the FCG; who described the videos as helpful and flexible, because she could return to them whenever she needed (see section 7.1.4.1).

The participants in the FCG tended to be more autonomous in conducting the learning tasks and were allowed choices over the times and resources for completing them. Thus, autonomy was further fostered by a change in the teacher's role, namely in the flipped classroom. The shift in the teacher's role was clearly indicated in the FCG interview responses (Students 2, 4 and 6, see section 7.1.2.1), with the teacher in the flipped classroom proving to be a facilitator, supervisor and provider of feedback, rather than merely a knowledge provider. In this way, the learners possibly valued their own efforts more, as most of the responsibility for the learning process lay with them.

#### ***8.4.1.4 Self-preparation***

The flipped classroom involves teaching, followed by practice that can contribute to self-confidence, with greater self-regulation in the corresponding learning (Strayer, 2012; Mason et al., 2013; Jiugen et al., 2014). Interviews with the learners in the FCG revealed that self-preparation before attending the classroom session encouraged their involvement in classroom activities and deepened their understanding of new elements. Student 1 stated that she would not have understood the teacher's explanations, if she had not prepared before class (see section 7.1.4.1). This is an important characteristic of the flipped classroom, which allows greater opportunity for autonomy when performing a task. The present study found that the flipped classroom approach encouraged the learners to preview and review content, according to their needs and at their own pace, which corresponds to the findings from Hung's (2015) study. This is because, as found in Hung, the learners used the platform provided to look up words, study new concepts

and access further resources. In relation to this, Mok (2014) obtained similar results, finding that learners in a flipped classroom preferred watching videos, as they found them much more engaging and took more responsibility for their own learning. Student 6 claimed that she merely needed to repeat and focus (see section 7.1.4.2).

The shift between learning and practicing, and between home and classroom time in the flipped classroom approach is justified by Bloom's Taxonomy. The flipped classroom ensures that lower levels of learning, namely remembering and understanding, take place outside the classroom, while the time spent in the classroom consists of higher levels of the learning pyramid, i.e. application, analysis, synthesis and creativity (Uzunboyulu and Karagozlu, 2015). The FCG were mostly autonomous in the way that they conducted their out-of-class activities. They were assigned deadlines, but they had a whole week to work with the material that they were given and were therefore responsible for managing their time to undertake this. In the classroom, they were involved in problem-solving activities and applying previously acquired knowledge, while completing the homework assigned to them in advance (Milman, 2012).

In light of the previous description, the FCG participants, in contrast to those of the NFG, were subjected to most of the strategies presented by Stefanou et al. (2004) in support of autonomy. The various types of autonomy categorised by Stefanou et al. (2004) consist of procedural, cognitive and organisational autonomy. With regard to procedural autonomy, the FCG learners had additional opportunities to select the materials that they wished to work with in the classroom. An example of this was their opportunity to work with their teacher on any element that they found difficult to comprehend or master. They also had a choice of how to demonstrate their competence, in that they had multiple resources to study from, such as videos and online discussions. This was mentioned earlier in relation to autonomy and will be highlighted again in the coming section concerning support for competence. In contrast, the group taught using a non-flipped approach relied on the teacher's explanations and the textbook and could only discuss their work in class. The FCG had more of a chance to discuss their work collaboratively using wikis.

With regard to cognitive autonomy, both groups received informational feedback to help them draft their work. This was because the change in the teacher's role, in order to



emphasise learning application and synthesis, meant that the teacher spoke less and listened more. The learners in the FCG were, however, better placed to access multiple ways of resolving problems, as they were able to collaborate with an online group to work on their activities through mutual scaffolding. They also learned how to debate their ideas by posting their answers and discussing the best of these with the rest of the group.

With regard to organisational autonomy, the learners in the flipped classroom had more opportunity to select their fellow group members and establish seating rules, since these corresponded to the patterns developed in the online group. However, neither of the groups had any choice over the deadlines for their assignments or the structure of their activities.

Learners from both the FCG and NFG were positive about the level of support for autonomy that they had received, but the FCG reported greater satisfaction of this need. In considering the elements described in this section and the further opportunities provided by the flipped classroom – such as the inclusion of an LMS and learners having a choice of whether or not to perform the activities, which demonstrated better learner-control – it is clear that the sense of autonomy was better promoted in the FCG than in the NFG approach.

#### **8.4.2 Support for Competence**

Niemiec and Ryan (2009) claim that competence can be supported by introducing learners to optimally challenging activities, which will help them expand and test their academic capabilities. In addition, it is essential for the teacher to provide learners with appropriate feedback, in order to promote their sense of efficacy and success. The above authors further add that learners can only engage with activities if they value them, and can understand and master them. This would explain both the importance of feedback and the need to provide the information required for mastering an activity. A further explanation of how the supportive environment can satisfy the need for a sense of competence is presented below.

#### ***8.4.2.1 Challenging Tasks and Scaffolding***

The satisfaction of competence mainly refers to the experience of behaviour as being effectively enacted (Niemic and Ryan, 2009, p.35). As described by Alm (2006), in order to foster a sense of competence, tasks should be challenging, but they also need to be in proportion to the learners' abilities. If the task is too difficult, the learners are likely to abandon attempts to accomplish it, but if it is too easy, no learning will occur. Here, it is the teacher's role to provide a learning environment in which the learner is optimally challenged, but also guided through the learning process with feedback. From a more theoretical perspective, SCT uses the notion of the Zone of Proximal Development (ZPD) to describe how learners can develop competence through the accomplishment of challenging tasks with assistance, or 'scaffolding' (Wu, 2003; see also section 4.4).

Scaffolding can take different forms and can be provided by either teachers or peers (Van Lier, 1996). On the writing course in the present study, the teacher provided the learners with feedback on their writing activities as well as their drafts, in order to help them work within their ZPD, before pulling back, so that the learners were left working on the second draft by themselves. Therefore, the teacher provided the learners with appropriate scaffolding, whereby she helped them build a stronger sense of their own competence for accomplishing challenging tasks.

Hence, an important aspect of learning in the FCG was that the learners were given the opportunity to collaborate online. This stimulated peer-instruction amongst them, as they worked in groups and communicated informally using wikis. By learning from each other, they had additional and enhanced opportunities to grasp new material – opportunities that are normally lacking in traditional homework tasks. An example of this was the interview with Student 1 in the FCG, who described the group as important for promoting peer-support and peer-motivation to work (see section 7.1.3.1).

#### ***8.4.2.2 Providing Appropriate Feedback***

As described earlier, feedback is important for fostering a sense of competence. Allowing appropriate feedback will assist learners with identifying their mistakes and

building up their sense of self-determination. By providing appropriate feedback, the teacher can offer learners the necessary scaffolding for developing their skills. Nicaise et al.'s (2006) study found a strong relationship between the two, especially amongst female participants, whereby the above researchers tested the correlation between feedback from the teacher and perceived competence. Examples of the positive effect of feedback were also presented in the interview response from Student 4 in the present study's FCG (see section 7.1.1.2). She found feedback to be helpful for identifying her mistakes and learning from them. Moreover, the interview response from Student 4 in the NFG showed that the feedback had helped her identify errors in her writing, thus greatly enhancing her development (see section 7.1.1.2). Even though Akbari et al. (2015) noted that F2F feedback can hinder learners' participation, this was not found in the current study. Learners from both groups received F2F feedback from their teacher and appreciated it. Most of them found it to be sufficient for improving their writing skills. This is despite the fact that the NFG learners did not receive immediate feedback from their teacher, but were obliged to wait until later in the week, when the teacher had finished preparing it.

An additional advantage of the flipped classroom is that the teacher, facilitated by LMS data, can provide learners with more effective feedback to help them work on their areas of weakness (Touchton, 2015). These data identify learners encountering difficulties in their attempt to complete online tasks (Moffett, 2015). Thus, the teacher will be better able to target the learners in need of more attention. Through the use of wikis, the FCG learners communicated with each other and by observing their wiki posts, the teacher could deduce the areas posing the most difficulties for them, so as to be able to address these issues in the next class.

#### ***8.4.2.3 Structure and Guidance***

An appropriate environment for facilitating the execution of challenging activities should be established under the teacher's instruction, without using controlling language. This will consequently impact autonomy. Appropriate instruction is likely to help learners focus more on the aims beyond the task and become more engaged, so that they have a greater sense of competence (Ryan and Grolnick, 1986). To clarify this

further, the positive outcome of providing structure is to establish high quality learning. In terms of the current study, the participants found the activities easy to complete and this was evident in the interview and questionnaire responses from both groups, because the deadlines and methods for accomplishing the tasks were clearly stated. For example, in the interview response from Student 3 in the FCG, the instructions provided were clear and easy to follow (see section 7.1.2.3.). She added that the learners were assigned a schedule for the weekly tasks. Moreover, in the NFG, Student 1 indicated in her interview response that the activities were clear and she did not have any difficulty completing them (see section 7.1.2.3.). It was noted that providing instructions for the assigned activities in both groups may have enhanced the learners' sense of competence, but without appearing to affect their sense of autonomy. The main aim behind providing structure for all the learners in this study was to facilitate the teaching and learning process. In this way, the learners and teachers were able to organise their time, so that the learners could gain maximum benefit from their involvement with the activities. For example, the NFG learners were assigned a deadline for submitting their first draft to the teacher, while the FCG learners were assigned a deadline for posting their online responses to their teacher through the LMS. This finding corroborates those of a study conducted by Sierens et al. (2009), where it was found that the provision of structure and order in the classroom, through the use of non-threatening language, can lead to successful learning, but without undermining the learners' sense of autonomy.

Sierens et al. (2009) add that the type of structure is also important; if the structure is delivered in a context of respect for the learner's perspective and a meaningful rationale is provided when introducing the parameters of the activities (using non-controlling language), the students will be able to conform to the structure with a greater sense of psychological freedom. The above authors also describe the teacher who establishes structure as someone providing competence-relevant feedback. Sierens et al.'s (2009) study was conducted with High School learners in Belgium and not with language classes; nonetheless, it does present further evidence concerning the impact of structure on competence and the way in which learners react to this.

#### ***8.4.2.4 Video Implementation***

The use of videos as a means of introducing new content to the FCG and again as a source of mediation, as in the current study, can have a positive effect on learners' competence, especially if these videos are followed by problem-solving activities. The use of videos in the flipped classroom helped the learners prepare for the assigned tasks, seems likely to have increased their retention, and enhanced their sense of personal effectiveness in the environment, as indicated by the FCG interview responses. For example, Student 4 stated that the videos had helped her to understand and remember difficult ideas through the use of images (see section 7.1.4.1). Student 2 also added that having multiple resources to work with, such as videos, assignments and discussion, supported her in improving her grammar and writing skills (see section 7.1.4.1). These results corroborate those of a study conducted by Choi and Johnson (2005), where the use of videos on an online course helped enhance learners' retention and motivation. In SCT terms, videos are a source of mediation. Another type of mediation in the flipped approach is text mediation (Warschauer, 1997; Lantolf and Lantolf, 2000), demonstrated in the current study through online discussion.

The FCG questionnaire responses indicate a higher level of mean satisfaction with support for competence (5.7), and perceived competence (5.0), than those of the NFG (4.8 and 4.3, respectively). This has been confirmed by other research; for example, McLaughlin (2014) found that the implementation of a flipped classroom in health education practice helped support meaningful learning, with the learners declaring increased confidence in their ability to apply knowledge and skills subsequent to the course. In the present study, the NFG participants were less confident about their sense of competence. Responses to the questionnaire item, 'I am satisfied with my performance in the essay writing' mostly fell between 'disagree' and 'agree', and this was also reflected in the interview responses. Student 6 in the same group indicated that she wanted to learn more; she found the teaching method boring and inadequate for improving her learning (see section 7.1.4.1). Student 3 further explained that an argumentative essay is not about following certain steps, but rather about listening to other people's points of view (see section 7.1.4.1).

To synthesise the above, the findings from this study demonstrate that the use of a flipped classroom can be more effective than the non-flipped approach for satisfying the need for competence. This is a finding confirmed by Hung's (2015) study, where a flipped classroom was also applied, including the advantages that are usually associated with it. Here, the learners were supported with opportunities to enhance their higher order thinking skills under the supervision of the teacher, drawing upon peer-support as required. With the flipped approach, instructional videos may be used, rather than sacrificing classroom time for in-class lectures that involve lower levels of thinking skills, according to Bloom's Taxonomy.

#### **8.4.3 Support for Relatedness**

Together with support for autonomy and competence, as described above, SDT further includes a sense of relatedness as a contributing factor of internalisation. The sense of belonging to a community is one of the basic psychological needs affecting IM and learning outcomes, according to SDT (Deci and Ryan, 1985). More precisely, individuals are better able to internalise and accept values and practices as their own, if they feel connected to the contexts involved (Niemic and Ryan, 2009). This sense of relatedness mainly concerns the feeling of belonging to a community. It is relevant to the theoretical framework adopted for designing the instruction in this study and as such, essentially typifies SCT, whereby learning is considered as a collaborative effort, rather than an isolated phenomenon (Vygotsky and Cole, 1978). As this study found, providing learners with group work in an online environment to support collaboration and friendship, together with a positive attitude to learners on the part of the teacher, can contribute to the sense of relatedness.

##### ***8.4.3.1 Teachers' Positive Attitudes***

A sense of relatedness can be fostered by building a positive relationship between teachers and students. In their interviews and questionnaire responses, the learners from both groups highlighted the positive attitude of their teacher towards them, which also encouraged them to establish a good relationship with her. This may have contributed to their sense of relatedness, as well as to their IM and learning outcomes. Even though the

teacher was providing the learners with feedback to assist and scaffold them, her relationship with them remained unaffected. In her interview, Student 1 in the NFG described her teacher as smiling and talking to her, which helped her enjoy the course (see section 7.1.2.2). Meanwhile, Student 5 in the FCG described the teacher as supportive and as never making negative comments (see section 7.1.2.2). Both groups (NFG and FCG) agreed in their questionnaire responses that their teacher showed them respect through being friendly and interested in them, with a total mean response of 5.8 for each element. The teacher's positive attitude towards them as learners encouraged them to ask questions, without any fear of being disrespected. With less aggressive feedback, learners can work in a less stressful manner and the course becomes more appealing to them. Learners then develop their relationship with their teacher and are much more open with her, especially when they encounter obstacles. An example of this is the interview response from Student 3 in the NFG, who explained that her teacher's attitude encouraged her to be bold and ask questions, with the risk of making mistakes, in the knowledge that this was promoting her learning (see section 7.1.2.2).

This result also corresponds to Whisler's (1991) study, where an intervention was applied to teacher training. Here, the trainees were encouraged to develop a good relationship with their students. The intervention took place for varying periods of time with students at different levels in US schools. Learners were encouraged to see themselves as the key element of motivation and learning – they were shown that it is not the teacher's responsibility to remedy the problems of an unsuccessful student, or to instil self-esteem or motivation in them. However, a teacher should rely on strategies to rectify situations by being caring, empowering, respectful and concerned, thus creating a much more psychologically favourable environment for students (Whisler, 1991). As a result, it is claimed that learners will display their natural curiosity, motivation and love of learning and will therefore succeed academically (*ibid.*).

In addition, the present results corroborate a study by Bryan et al. (2011), where learners indicated in interviews that they were motivated by a teacher who demonstrated sound subject knowledge, while at the same time providing inspiration, displaying enthusiasm and expressing care and concern for the students. These were also cited as the main motivating factors. In addition, it was revealed that IM, self-efficacy, and

achievement were related factors in the sample studied. Niemiec and Ryan (2009) describe the sense of relatedness in the classroom as mainly that of learners feeling that the teacher likes, respects and values them. Furthermore, the students who experience this are better able to develop self-regulation in their learning and accomplish tasks. Meanwhile, students who find themselves disconnected from or rejected by their teachers are more likely to move away from internalisation and will only respond to external contingencies and controls. The teacher's attitude and ways of dealing with learners therefore not only affect the learners' sense of relatedness, but also their sense of competence and autonomy. The findings of the above study substantiate the view that positive comments from the teacher are encouraging to learners, helping them build more trust in their own abilities. This was evident in the present study from the responses of both groups.

#### ***8.4.3.2 Collaboration with Peers***

The learners in the FCG stated that they had benefited from working collaboratively within their group to accomplish the assigned activities. Collaboration is an important component in the development of a sense of relatedness. Through the inclusion of online work and by emphasising the use of online discussion as part of the flipped classroom, learners can work collaboratively with their peers and the teacher, either within or outside the classroom. Learning in collaboration with peers is at the heart of SCT. In particular, the use of online collaboration was considered in the present study as a source of text and social mediation (Warschauer, 1997; Lantolf and Lantolf, 2000). In their experimental study, Hutchings and Quinney (2015) found that learners in a flipped classroom demonstrated better relationships with their peers, as well as a higher level of scaffolding. This in turn promoted learning and enjoyment of learning among them. In the current study, the students' enjoyment of the flipped classroom experience was evident in the high mean of the FCG responses to items describing the course as stimulating (5.1) and fun (4.5). As explained earlier, the FCG interview responses reflected the learners' pleasure at being involved in collaborative online tasks, as it helped them form friendships and enhanced learning relationships. As an example, Student 6 wrote in her diary that it felt great to work with her friends (see section 7.1.3.2.). The FCG participants also added that their relationships were built on



cooperation and being there for one another (Students 3 and 4, see section 7.1.3.2.). The FCG indicated that the activities had helped them become much more involved with their learning community – their friends and peers in the same group – increasing their level of engagement and consequently raising the level of their IM and enjoyment (Vansteenkiste et al., 2006). This particular issue was reported by FCG Student 4 in her interview response, as she described her group as cooperative, when discussing their ideas with each other and in their attempts to present convincing arguments (see section 7.1.3.2). The possible reason for the FCG participants being much more relaxed about group work was the use of an online environment. Dörnyei and Ushioda (2010) state that because the virtual classroom setting is limited to audio- and graphic communication channels, the nature of the anxiety experienced by learners may differ, in that they will not feel exposed and will therefore be more prepared to risk embarrassment, since no one can see them. Learners also tend to experience less apprehension about communicating online. As a result, a psychologically safe classroom is generated in this type of virtual setting, which can help build a sense of community amongst learners.

In fact, one potential advantage of a flipped classroom is that it enables problem-solving activities to be conducted in small groups. This can be performed online, resulting in the creation of small communities of learners (Sweet and Michaelsen, 2012). A sense of belonging to a community is likely to have a positive impact on IM and learning outcomes, as argued in SDT (Deci and Ryan, 1985). Even though the NFG learners had the chance to accomplish tasks through discussion with the rest of the class, they were unable to develop a sense of belonging to a community. As Student 1 explained, she and her colleagues only met in class; she did not even know their names, but wanted a better relationship with them (see section 7.1.3.2.). Student 5 further added that there was no relationship between group members and nothing for them to do together (see section 7.1.3.2). From these two examples, it can be seen that friendships could not develop among the NFG students.

#### ***8.4.3.3 Engagement with the Language through Collaboration***

Aside from the above, through being assigned interactive tasks to be completed collaboratively online, the FCG participants became much more engaged with the target language, as they treated it as an object (Svalberg, 2009). In this sense, the learners were using the FL (English) to undertake a language task and focus on completing the exercise. Language was also used as a vehicle for communication in the communicative tasks assigned to the learners. They engaged in online group activities, where they were obliged to communicate with each other and try to formulate answers to tasks. Therefore, there was a hybrid use of language between them. This varying use of language enhanced the different types of engagement with the language observed in the FCG, as proposed by Svalberg (2009). In their cognitive engagement, the learners derived their final answers to language tasks by synthesising multiple options from the online discussion thread posts. In this process, they needed to be selective and make inferences, so that the most suitable answer could be compiled, corresponding to the understanding they had gained from the videos. This is evident from the online interactive task analysis, where the learners mainly used an information-sharing note and then chose the best answer based on their discussion.

Regarding their social engagement, the learners were interactive and assisted one another in the online environment, as required. They tended to show a readiness to interact and become engaged with group members, without being anxious about their different levels of language proficiency. Social engagement in this instance did not include the broader sense of interacting with anyone other than classmates and the teacher. Thus, in the context of the study, the learners generally preferred using their mother tongue (Arabic) to communicate with each other in the classroom, as opposed to the FL. This shows that they were overcoming their fear of using the FL in their online communication.

In terms of affective engagement, the learners showed a willingness to engage with each other, as they built a sense of community in their groups and became friends. This particularly facilitated their use of the language and improved their engagement with the learning. Each group wanted to be the best. Affective engagement was evident from the learners working purposively to develop their writing skills. They also demonstrated

autonomy in their use of learning resources and the way in which they conducted their activities. In the current study, the supporting environment facilitated different types of engagement with the language and in turn, this contributed to the satisfaction of various psychological needs. To further clarify, all types of engagement, whether social, cognitive or affective, contributed to the learners' sense of relatedness. In brief, cognitive engagement is linked with a sense of competence, while affective engagement relates to autonomy. In turn, these contribute to IM and learning outcomes.

However, this result contradicts Baralt et al.'s (2016) findings, drawn from an open-ended questionnaire on L2 courses, whereby F2F learning was discovered to be more effective than an online course for developing all three of the above-mentioned types of engagement with interactive tasks. It must be borne in mind, however, that in contrast to the above study, flipped classroom learners have the advantage of meeting each other before entering into an online discussion. I noticed that this specific element in the flipped classroom helped build up trust amongst the participants, before they collaborated online. Moreover, English was not merely used for ordinary everyday chat, but rather to develop and enhance learning. Accordingly, the communication taking place online in the current study was elevated to a higher level. This was revealed in the FCG interview responses, which indicated that the students were pleased to have been given the chance to get to know each other and explained that they were cooperating and worked as a unified team, as described by Students 6 and 3 in their interview responses (see section 7.1.3.2). In addition, their questionnaire responses indicated that they had found their peers to be understanding, supportive and respectful, with a high mean rank of 5.4, compared with the mean of 4.8 derived from the NFG responses.

#### **8.4.3.4 Online Posts**

With regard to the type of posts observed in the online discussion, the learners in the FCG in the current study favoured information-sharing notes to express their thoughts (indicating cognitive engagement). In addition, they posted positive reflective notes to express attitudes towards each other (affective engagement). These two types of online post helped the learners build relationships with each other and fostered their sense of relatedness, with friendly attitudes being displayed. Once all responses had been posted,

the final group answer was synthesised from the online collaboration by the group mentor, after being discussed and approved by all the other members. This was found to be an efficient way for the learners to formulate appropriate and high-quality answers, with the activities concerned being completed on time. Moreover, the learners appeared to enjoy undertaking this activity and ultimately developed their writing and communication skills as a result. A clear example of this can be seen in the case of Student 2 in the FCG, who declared herself as unsociable, but also admitted that she had started to get to know her peers and work with them by participating in online discussion after meeting her group in class (see section 7.1.3.2).

The above points further correspond to the idea that Web 1.0 technologies can support FL interaction; for example, through the use of discussion boards – as in the current study – or by other means, such as educational MOOCs (Massive Open Online Courses) and chat programmes. Here, several previous studies indicate that these technologies can help timid students become more vocal and integrate into a learning community (Alm, 2006).

What is more, technology allows the teacher to build a learning environment, where it is the students, rather than the teacher, who initiate discussion with peers and receive feedback through mutual exchanges (Alm, 2006). Various FCG participants highlighted the way in which the LMS helped them to interact. Student 1 declared in her interview response that the system enabled them as learners to share their perspectives. She further included in her diary that it was easy for them to share knowledge (see section 7.1.1.3). The findings of the current study indicate that the FCG was much more engaged in the task, as its members were motivated to use English as the medium for achieving their goals.

## **8.5 Conclusion**

By comparing the learning outcomes in both groups and measuring their IM, the results of this study revealed greater gain in the FCG than in the NFG. Aside from these two variables, the satisfaction of basic psychological needs was evaluated, along with the supporting environment, for meeting each of these needs. By relating the findings of this study to the existing literature, the initial impression was reinforced, i.e. that the

flipped classroom offered better support for learners in the satisfaction of their psychological needs.

The present study extends the SDT framework to IM for learning in the EFL context and to the subsequent learning outcomes by describing new types of environmental support offered by the application of SCT. Empirical evidence concerning the impact of support provided in a teaching environment and an investigation of how this can help satisfy each of the psychological needs stated has implications for IM and eventual learning. It was thus demonstrated that providing learners with choices over their learning, in terms of time and place, together with positive feedback, contributed to their sense of autonomy. Moreover, the opportunity to work out challenging tasks with the aid of appropriate feedback from the teacher appeared to foster the learners' sense of competence. Aside from this, the learners were able to gain a sense of belonging to a community; establishing closer and more effective working relationships with others, as well as friendships with their peers. This engendered and enhanced a sense of relatedness, all of which resulted in significantly higher levels of IM, as well as greater learning achievement.

The current study reveals a positive correlation between the supporting environment, satisfaction of psychological needs, IM and learning outcomes. Future research could usefully examine other types of motivation relating to SDT, such as extrinsic motivation, or how it is linked with IM in such an environment. Furthermore, future research could examine the possibility of internalising extrinsic motivation through the application of a flipped classroom on an EFL course. In addition, further work in this area could be dedicated to exploring how the flipped classroom may actually decrease the importance of extrinsic motivation and result in a more self-regulated type of motivation.

## **Chapter Nine: Conclusions and Recommendations**

### **9.1 Introduction**

The current study aims to contribute to EFL educational literature by investigating the impact of flipped classrooms on learners' IM and learning outcomes, specifically on an English language writing course. SDT was employed as a theoretical framework, along with SCT to underpin the teaching design. These two theories were integrated as an attempt to provide a comprehensive foundation for the current research. Through the use of SDT as a theoretical framework and by inferring from the findings of a mixed-method study, this thesis describes the possible impact of flipped classrooms on learners, in comparison with the non-flipped approach and in terms of IM and learning outcomes. This final chapter summarises the main findings and their relationship to the study objectives. In addition, it describes the primary contributions made to both the literature and practice, discusses the study's limitations, and makes several concluding remarks. Recommendations are also suggested, specifically in relation to future research and with regard to the applicability of the instructional design developed.

### **9.2 Synthesis of the Main Findings**

The first few chapters of this thesis were constructed on the basis of the research questions, with each chapter examining different concepts. For instance, Chapter Two illustrated the conceptual framework for the study, especially in relation to SDT and the definition of IM. Chapter Three then described the flipped classroom, looking at its pitfalls and strengths, while at the same time considering the main elements of this instructional procedure. Meanwhile, Chapter Four presented the instructional design. This current study looks at the impact of the flipped classroom on the teaching of writing skills and in this regard, Chapter Four covered different approaches to teaching this activity and how they can be combined with the application of the flipped classroom.

Several important findings were noted in the current study. First, the positive impact of the flipped classroom on learners' IM and learning outcomes on an EFL writing course was emphasised. This finding supports the adoption of the flipped classroom as a way of integrating online and F2F teaching into EFL teaching practice. The FCG learners) in

the current study found the experience enjoyable, as it helped them discover their academic potential and become more involved in their own learning process. From the findings, the learners in the FCG were much more able to complete the given tasks and were determined to excel at them. This finding was derived from the data, even though the type of essay included in the current study was hard to accomplish and required a long period of instruction to master, as explained by some of the participants. It was therefore an experience that enabled them to become more self-determined when working through the challenging tasks assigned to them, compared to the NFG. Based on these findings, practitioners can gain confidence in using this approach, particularly as these findings are up-to-date

Another interesting finding is that the FCG learners had made more significant progress in their writing ability than was observed amongst their counterparts in the NFG, even though both groups improved beyond their baseline test and were exposed to teaching of a similar duration. The findings also reveal that the students in the FCG had increased their IM on completing the study. The FCG participants indicated that they had participated in the activities and developed their writing drafts, because they enjoyed doing so and because they found the writing course to be fun. However, the IM of the NFG had not change significantly by the end of the teaching period.

Another major finding of this study was the positive relationship between the satisfaction of basic psychological needs and IM, whereby increased satisfaction of the basic need for a sense of competence, autonomy and relatedness can result in increased IM, as proposed by SDT. The comparison between the groups with regard to the satisfaction of these needs showed that the FCG participants were more positive than their NFG counterparts in their responses. For example, the FCG perceived a greater sense of autonomy, which could be the result of the range of options available to them, as they performed the tasks in ways that suited them. This was also due to the VLE implemented, where activities and instructional videos were uploaded. The FCG learners were consequently far more responsible about preparing themselves before attending class and more self-reliant in expanding their knowledge before practicing a new element in class. Overall, the FCG tended to be much more self-determined and invested in the outcomes of their actions

In addition, the FCG learners were found to be more positive than their NFG counterparts, in the way that they responded to the items relating to the satisfaction of their sense of competence, even though both groups received similar learning materials and were assigned similar topics to write about each week. The higher level of satisfaction in the FCG learners' sense of competence may also be attributed to the shift in the teacher's role within the flipped classroom approach, as the teacher tended to be a facilitator and feedback provider. As some of the participants explained in their interviews, classroom time is better invested in receiving feedback and refining understanding.

With regard to the sense of relatedness, the learners from both groups demonstrated good relationships with their teacher, finding her to be friendly and understanding. This partially satisfied their sense of relatedness. However, as the results of this study indicate, the sense of belonging to a community - especially one made up of peers and friends - is important for fostering relatedness. The FCG learners were therefore better equipped than the NFG learners in this regard, as they were able to build strong relationships with their peers through the online work that preceded their F2F meetings. These working relationships then often developed into friendships, encouraging engagement with the activities and enhancing the students' IM.

The learners in the FCG worked in groups to complete challenging tasks assigned by their teacher. They therefore collaborated with their peers before attending class for feedback. Even though the learners in the NFG did not have the chance to work through projects online, they still met with their peers in class and had classroom discussions with their teacher while completing the weekly outline and daily activities. However, this did not help them get to know each other really well, or encourage strong relationships between them. To synthesise the above, the support provided for the satisfaction of each basic need was examined in light of the existing literature, whereby the FCG learners were much more positive than the NFG participants in their responses to the way in which they perceived the available support and perceived satisfaction of each need.

The last interesting finding from this study, indicated in the final writing test scores, refers to the relationship between the learning outcomes, the supporting environment to



meet each basic psychological need, namely the need for competence, autonomy and relatedness, and IM. These learning outcomes were found to be more strongly correlated with the supporting environment than with IM, which helped to explain the change demonstrated in the NFG, even though the students had not significantly developed their IM. Through the flipped classroom design involving the use of the process approach, the support for autonomy was provided by positive feedback, allowing choice and self-preparation through the implementation of a VLE. A sense of competence was supported by the challenging tasks set for the learners, whereby they wrote outlines and drafts, before being provided with appropriate feedback. They were presented with a structure and guidance, as well as the use of videos. Additionally, relatedness was supported by a positive relationship with the teacher and the development of friendships with peers.

To summarise, the process approach showed a positive impact in both groups on students' learning outcomes, thus the flipped classroom indicated better results. Moreover, the FCG perceived the satisfaction of their psychological needs and the supporting environment more positively than the NFG. In terms of IM, the non-flipped approach were found to be less helpful in improving it. Hence, IM is a very important aspect to consider in learning, especially in EFL classes in the context of this study in Saudi Arabia. Through these findings, an attempt was made to answer the specified research questions and that was further shown in Chapter Eight.

### **9.3 Contributions of the Research**

By using SDT as the theoretical framework for the present study, including mixed-method research, existing knowledge of the impact of the flipped classroom on IM and learning outcomes in an EFL writing course, by which it may represent an important step toward the inclusion of such an approach in EFL teaching practice either through the use of the design, or by taking the findings of the study into consideration. The findings of the current research therefore make multiple contributions to the body of literature on the implications of flipped classrooms in EFL learning in general, and more specifically in the Saudi context, these contributions being theoretical, methodological, empirical and pedagogical.

### **9.3.1 Contributions to Theory**

From a theoretical point of view, this study added to existing literature by examining the applicability of SDT in the flipped classroom environment for EFL learning, where it was found to be very helpful. This theory has been widely applied in physical education and health research, but the main aim of its application in the current study was to investigate changes in IM and learning outcomes of EFL learners with the flipped classroom. A correlation was determined between the supporting environment and the satisfaction of basic psychological needs with learning outcomes and IM, respectively. More specifically, an important theoretical contribution may be derived from the present findings on the supporting environment and learning outcomes: the supporting environment was found to be positively correlated with learning outcomes.

The current research also contributes to the theoretical debate over the positive impact of IM on learning development in EFL courses: a statistical relationship emerged from the current study, such that increases in IM will result in increase in learning outcomes. Also noted was the need to provide appropriate support for the fulfilment of basic psychological needs, as this will further impact IM. The present study's findings indicate that each type of support was statistically correlated with the corresponding need. The use of the theoretical framework presented in SDT is therefore an important theoretical contribution of the current research, with each independent variable (supporting environment) indicated in the theory being examined in relation to the other intervening variable (satisfaction of basic psychological need) and the dependent variables (learning outcome and IM).

### **9.3.2 Methodological Contributions**

The current study additionally gives rise to valuable methodological implications, which could be implemented in future research within the field. Moreover, in Saudi Arabia, research on blended learning (BL) is mainly conducted using case studies, in order to try to investigate and understand participants' perceptions of the applicability and usefulness of such instructional designs (Alebaikan and Troudi, 2010; Almalki, 2011; Alzumor et al., 2013). Few studies have used experimental design to examine BL

efficacy in courses like Medicine (Makhdom et al., 2013) and Mathematics (Yushau, 2006). The data have mostly been collected using exclusively either a qualitative or quantitative approach and the courses tested in such research are not generally aimed at EFL practice.

The current study overcame this methodological limitation by using an, experimental design, to compare changes noted in the sample groups after applying the flipped classroom. This experimental design provided different insights by introducing new ideas for developing the current situation. This design permitted an in-depth investigation of phenomena across different approaches. The results from both groups were then brought together to generate a holistic view of the case, while considering the similarities and differences between the groups for further explanation in terms of the findings. This methodological strategy has already been used in a limited way in EFL research and could be further applied in future studies.

In addition, the present research highlights the potential usefulness of a mixed-method approach to data collection and analysis for examining learning outcomes, IM, the satisfaction of basic psychological needs, and the supporting environment. The quantitative data gathered through questionnaires and a writing assessment tool were used to identify any changes in learning outcomes and IM, as well as exploring the types of relationship that exist between different variables, as proposed by SDT. Meanwhile, the qualitative data gathered from in-depth interviews, diaries and online interactive tasks were analysed to explore learners' perceptions of the support provided in each environment, and how this could help foster the satisfaction of each psychological need, thus helping to enhance the learners' achievements and their perception of their needs being met. Even though, an existing measure was used to examine the supporting environment, the use of qualitative data helped to explore additional types of support that could be available in the flipped classroom.

The use of both quantitative and qualitative data enhanced the reliability and validity of the participants' responses from both groups. The triangulation of data sources in this way augments and reinforces the trustworthiness and quality of a study. Considering the limited research employing mixed methods to examine the outcomes of the flipped classroom intervention on an EFL course, as compared to a non-flipped approach, it is

thought that the present study may provide a fuller understanding of the topic under investigation and the methodology could be used in future investigations of EFL educational practice of other skills such as reading, listening and speaking. Furthermore, the inclusion of multiple units of analysis helped to elucidate the complex phenomena occurring which resulted from a design that included various types of environments – the online environment and F2F. Besides the above, a quantitative tool was constructed, based on reliable scales, so that similar variables could be examined on other EFL educational programmes in the future.

### **9.3.3 Empirical and Pedagogical Contributions**

The flipped classroom has been shown to have a positive impact in a multitude of applied science studies in the existing literature, but has not been greatly examined in terms of EFL classes. Even though the Ministry of Higher Education in Saudi Arabia has promoted the inclusion of the flipped classroom in higher education, it has yet to establish this approach conclusively. To date, university staff have been offered training courses and workshops, so that they can better understand how to apply flipped classrooms for maximum effectiveness. However, the flipped classroom has not yet won much trust, although the future vision of universities is to integrate this approach. This current study therefore helps to fill this gap in pedagogical literature by providing the flipped classroom design, informed by theory and found to be efficient for EFL instruction. Through the use of videos and online activities to invert F2F instruction followed by the process approach. This instructional design was developed on the basis of SCT, using its three essential elements: scaffolding, ZPD and mediation (see section 4.4). A dynamic model was subsequently constructed, where online and F2F instruction work together in a similar direction to approach each lesson's objectives. This is the intended aim of the flipped classroom that was designed.

This study looked at mediation through videos, and considered the interaction between learners as a form of text-mediation to promote the collaboration among learners, as well as the importance of feedback by the teacher as a source for scaffolding with regard to supporting learners throughout their ZPD. This aspect was explored in relation to the impact on learning outcomes and satisfying the psychological needs, more specifically the sense of competence and autonomy that can relate to IM. Providing

learners with a positive and appropriate feedback that is suitable for them to enhance their understanding can foster their sense of competence and autonomy. In SCT, learning is a collaborative work rather than an isolated effort, from this perspective building up a learning community among learners is essential for learning and it can further relate to their sense of relatedness.

The present study consequently provides empirical evidence of the suitability of the flipped approach to be used in EFL classes and, more specifically, to writing courses, which require mechanical drills and practice. Nevertheless, the efficacy of the flipped classroom design remains open for further theoretical and empirical work to examine its impact in EFL context and with other language skills.

On consideration of each element of the design, it was noted that the innovative use of asynchronous online discussion using VLE wikis had a very substantial impact on EFL learners' relationships with each other, and on learning outcomes. Incorporating this asynchronous type of discussion outside the classroom by giving learners access to discussion pages designed by the researcher helped to increase the efficacy of the interactive tasks. Each group had its own wiki page, which created familiarity between group members. Through these discussion threads, the learners developed their ability to synthesise information and think critically, particularly when selecting the best answer to submit for assessment in their group activities.

This asynchronous use of interactive tasks in the flipped classroom increased the potential for learners to get to know each other through classroom meetings before engaging in online discussions. In itself, this approach could be used as empirical evidence for future EFL research and for application in other educational contexts. In conclusion, the positive outcomes shown in this study, which result from the use of the flipped classroom, provide empirical evidence for decision-makers in higher education institutions that this approach should be taken into account, specifically for EFL courses. The use of the online environment together with F2F through the use of flipped classrooms will allow a better investment for available technological resources in higher education institutions in KSA.

#### **9.4 Limitations of the Research**

This study has considered the use of a new instructional approach, which is the flipped classroom. It has not yet been widely used in the context of the current study and is not widespread in the published literature. More specifically, it is not commonly applied in EFL writing courses. Therefore, this study investigated the impact of such an intervention on the participants' IM and learning outcomes, as well as determining whether these two variables may be related.

The research began with a design phase for the flipped classroom, where an appropriate theoretical framework was applied. Regarding the intervention itself, there were no previous designs available for implementation or further testing in terms of their efficiency. The researcher therefore constructed each step by building up the instructional videos herself and validating the content with a colleague who was specialised in TESOL. The learners were unaccustomed to such a programme and so the researcher ensured that it was easy to implement, especially as there were two distinct environments intended for use in contrasting ways. Furthermore, it was considered that online interaction could be unappealing for some learners, especially if the teacher was also active online. In addition, it was evident that the learners were very limited in their interaction with the teacher and chose to keep their questions for the classroom. This deterred the researcher from considering this type of interaction in the analysis. In addition, some of the participants were still uncomfortable with using the VLE, even after the trial sessions. It therefore, took them a week to become confident in using it. Hence, the introduction of the flipped classroom is likely to increase a teacher's workload and requires an appropriate level of literacy in technology use.

With regard to the instruments implemented, even though the scales applied were already in existence in the literature for measuring IM, the supporting environment, and the satisfaction of psychological needs, they needed to be adapted by the researcher for her purposes, taking into account the learners' culture and levels of comprehension. However, the structure and intended meaning of the original items was retained. The researcher also needed to limit the number of questionnaire items to make the questionnaires easier for the learners to complete. As several tools were used, together with the work assigned for the intervention, a large number of questions could have led

to fatigue amongst the respondents. There were several confounding variables that potentially led to the IM of the NFG remaining unchanged, such as the fact that they had not been introduced to the videos and did not have an opportunity to work in collaboration with their peers. Moreover, the indirect feedback and writing multiple drafts used in the current study, through the use of the process approach, was new for both groups, which could have been a further confounding variable in each case. Furthermore, only one week of online interactive tasks was examined, as the researcher did not wish to invade the participants' time or privacy. Even though classroom observation was not considered as a data collection tool in the current study, its usefulness is acknowledged and the diaries worked well in relation to this, as the learners recorded their own attitudes. Furthermore, the interview's subjectivity was reduced as much as possible, whereby the learners could refer to different teaching components and comment on how they felt about them. In this regard, the codes evolved from the qualitative data were limited to the participants involved. Here, they presented different reflections, according to their personal attitudes to the supporting environment of the teaching approach adopted. Other codes could therefore be generated by conducting interviews at different periods of time with the same or other participants. Thus, the use of questionnaires in this study helped to include all the participants, so that their perceptions of the supporting environment could be examined statistically using an existing scale. Further to the above, the teacher's attitude to the flipped approach was not included in this study, as it was not one of its main research aims.

Another limitation to be considered in the current study is the duration of the data collection, since this study was conducted over a relatively short period, due to restricted accessibility, given that the learners needed time to finish the remaining course components before the end of term. Therefore, the teaching period studied was limited to five weeks. Moreover, the entire writing course was not considered for the integration of the flipped classroom, but rather just one unit from it, namely the component dedicated to writing the argumentative essay, as this was assumed to be one of the hardest types of essay for the students to master. Therefore, such a short period may be insufficient for revealing any change in the learners' acceptance of the flipped classroom in practice, resulting from the work assigned within that period. Finally, this

study was conducted exclusively with female participants, due to cultural boundaries in the study context, namely Saudi Arabia. As a result, future research should consider the inclusion of male participants.

### **9.5 Implications for the Teacher in Practice**

The findings of the current study demonstrate that learners are likely to improve their learning outcomes and enhance their IM, if they are taught through a suitable structured flipped approach. Regarding the elements of the design, the first to be examined here are the videos. Providing learners with videos from sources that they trust can convince them of the need to watch them. It will also build their sense of commitment, so that they understand new concepts. Aside from this, the way in which learners' understanding of new elements is verified can have an impact on their determination to watch the videos. Some of the interview participants indicated that the teacher only used the classroom to check their understanding and so if they had not watched the videos, they would have been unable to follow up with the teacher. Further to this, giving learners a choice about how they viewed the videos by posting them in the VLE was considered to be a key factor, in that it gave them options over what to use and when.

The construction of videos as a resource for teaching new materials should be based on meeting the learning objectives. Moreover, the proper use of Figures and structuring the videos appropriately in terms of length and content display is essential. The success of using videos in the current study mainly relates to these factors and every effort was made to assure of optimal quality in the videos.

Together with the use of videos, the current study included a process approach to teach writing. This method was found to be effective for both groups, in terms of improving learning outcomes, but when it was merged with the flipped classroom, it helped to enhance IM even further. Within the process approach adopted for the FCG, the learners were provided with immediate, indirect and focused feedback in writing. They also worked in collaboration after watching the videos, in order to complete the week's activity and confirm their understanding. They also built up the outline during the brainstorming stage, so that it could be used for their first draft. Additionally, the FCG formed learning communities to facilitate the process of acquiring new elements related to writing and this was enabled through the online collaborative environment based on



wikis. In conclusion, the flipped classroom teaching design in this current study was found to be effective for improving EFL learners' learning outcomes and IM, indicating that it could be used in real practice.

## **9.6 Recommendations for Future Research**

The current study points to the possible efficacy of using a flipped classroom for EFL writing courses. It examines the impact of the flipped approach on IM and learning outcomes. The correlation between the satisfaction of psychological needs and the supporting environment, along with the previously mentioned variables, was also examined, based on the selected theoretical framework. Further to this, the learners' perceptions of the supporting environment were explored, thus adding further evidence of the benefits of the flipped classroom, compared to the non-flipped approach. Through qualitative data, several types of support emerged, including self-preparation to develop a sense of autonomy; video implementation to enhance the sense of competence, and engagement with the language to support the sense of relatedness. These can be tested statistically in future studies to examine the potential effect of the flipped approach on different psychological needs and their relationship with IM.

This study also lists the challenges facing the researcher during the design phase and data collection process. Thus, it provides a flipped classroom instructional design that can be used on EFL writing courses in both the current and wider contexts. The design consists of several steps based on the process approach for teaching writing, merged together with the flipped classroom to teach new content prior to classroom time. In the process approach, the learners in the FCG and NFG practiced writing by developing their drafts, after providing them with feedback. Hence, the topics assigned to the learners in both groups were pre-specified by the researcher. In future studies, the researcher could allow learners to choose their own topics to write about and examine the possible impact of this freedom on the learners' IM and learning outcomes.

With regard to data analysis, future researchers should consider using equation modelling, in order to further discern the direct and indirect impact of the intermediate variables on IM and learning outcomes. Meanwhile, ascertaining the different types of relationship occurring between variables through a mediation effect could be helpful.

Future investigation might also include the impact of needs satisfaction on more self-regulated types of extrinsic motivation.

It would perhaps also be beneficial to conduct a longitudinal study to ensure greater consistency in the satisfaction of psychological needs and IM over time, under each type of instruction explored here. A longitudinal study could also prove the efficacy of the design for contributing to the success of FL learners. As it was found in this study that the flipped classroom resolved a major issue encountered by many learners in the current context, namely that they rarely enjoy learning English and therefore abandon the task once they leave school. In addition, the inclusion of male participants would enable a more comprehensive description of the impact of using the flipped classroom in higher EFL education in Saudi Arabia.

## **9.6 Concluding Remarks**

The current research illustrates the impact of integrating the flipped classroom into EFL writing courses, using SDT as an analytical guide. The findings of this current study are significant, given the scarcity of literature presenting flipped classroom designs for EFL writing courses. They are also important in that they measure the impact of the flipped classroom on the most important psychological element (IM) and how this can influence learning outcomes. The present research consequently shows that the flipped approach helps enhance learners' IM and learning outcomes. The implementation of the flipped classroom contributed to the way in which the learners perceived the level of support afforded by the environment and the satisfaction of their basic psychological needs. Through the implementation of the flipped classroom through videos, learning subsequently proved to be an enjoyable experience, whereby the learners were able to satisfy their learning needs and develop social relationships within their learning community – with their teacher as well as their peers. In fact, the FCG learners tended to be far more intrinsically motivated and engaged in their learning than their NFG counterparts.

This leads to a very important conclusion, namely that Saudi learners need to change their perceptions of EFL education and the flipped classroom could bring about this change. This is specifically relevant for EFL writing courses, which demand extensive

practice. It therefore follows that if learners are to witness any improvement in their skills, they need to modify their current view of language courses as unsatisfactory and boring, so that they start experiencing them as enjoyable and conducive to developing their IM and learning outcomes. Moreover, they need to build social relationships with their peers and find further opportunities to use English outside the classroom, without being anxious about making mistakes. Perhaps the inclusion of the online environment within the flipped approach satisfied the FCG as the new generation of students are generally comfortable using technology for learning, since they are technology literate, especially in the context of social media.

What consequently emerges from the current study is that by presenting learners with a suitably structured flipped classroom design, offering them additional material from sources they trust, where they have the choice over what they use and when, and providing them with further opportunities to interact securely with each other, they can become much more self-determined and able to complete the challenging tasks assigned to them. Writing skills are amongst the most difficult to acquire, develop and maintain in EFL. Both in the present case and in the literature, there is a tendency reported for learners to give up and stop practicing, due to frustration over their inability to develop their skills. Fostering IM and the satisfaction of basic psychological needs by providing proper pedagogical and environmental support can thus have a positive impact on learning, as the current study's results reveal. This study therefore provides evidence that could be used to enhance other EFL courses and consequently meet learners' demands.

## **Appendices**

### **Appendix A (Consent Form)**

#### *Informed Consent Form for the Flipped Classroom Group*

You are kindly invited to participate in this study by a Ph.D. candidate in the School of Education at the University of Leicester, UK. This research is related to the use of a certain blended model in teaching writing at..... I need your permission for your participation in this study; your contribution is massively valuable in providing rich insights for answering my research questions.

You will be involved in a one-hour offline class, preceded by online delivery of the learning content through..... (the online environment). The study will be conducted over a period of five weeks. An assessment will be required before and after the intervention. In order to determine the level of development in your writing skills, questionnaires will be administered. However, they will not be part of your real evaluation, but will only be for the purpose of this research. Online interaction for the group activities will be recorded by the researcher.

Diaries will also be requested during the study and interviews will be arranged at the end of the intervention period. These will be conducted in Arabic to make it easy for you to respond. The interviews will be recorded using an MP3 device, which will remain in the possession of the researcher. The estimated duration of the interviews will not exceed 60 minutes. You have the right not to answer any of the given questions. These recordings will be securely stored by the researcher and she will transcribe them herself.

In addition, collected data will be used for the purpose of this research and not for other purposes. Neither will they be passed to anyone else. Your name will not be identifiable to others outside the study; these and other data related to you will be kept confidential and preserved by the researcher. Every effort will be made to ensure the confidentiality and privacy of these data, which will be destroyed several years after the study has been completed. In addition, the anonymity of the participants will be considered in everyday dealings and conversations with others.

Your participation is voluntary, and you can withdraw at any stage during the study, without any penalties. Trial sessions will be provided before the main study, in order to ensure that you are acquainted with the procedure. At the end of the research period, you will be able to obtain a copy of the findings on request, which may be helpful for you in future.

Thank you for your cooperation.

Yours sincerely,

Iman M. Oraif.

For further details, feel free to contact:

Iman M. Oraif - email: Immo1@le.ac.uk

Confirmation and Consent:

I understand my role and I confirm the use of findings for the purpose of this research, which could include publication. I realise that the material will be protected. I hereby sign to confirm my participation.

Participant's signature:

Name: .....

Date: .....

Researcher's signature:

Name: .....

Date: .....

### *Informed Consent Form for the Non-flipped Group*

You are kindly invited to participate in this study by a Ph.D. candidate in the School of Education at the University of Leicester, UK. This research is related to the use of a certain blended model in teaching English writing at ..... I need your permission for your participation in this study; your contribution is massively valuable in providing rich insights for answering my research questions.

You will be kindly involved in this research through lessons which are specifically designed for this study. The study will be conducted over a period of five weeks. An assessment will be required before and after the intervention, in order to determine the level of development in your writing skill. Questionnaires will be administered. However, they will not be part of your real evaluation, but it will be used only for the research purposes.

Diaries will also be requested during the study and interviews will be arranged at the end of the intervention period. These will be conducted in Arabic, to make it easy for you to respond. The interviews will be recorded using an MP3 device, which will remain in the possession of the researcher. The estimated duration of the interviews will not exceed 60 minutes. You have the right not to answer any of the given questions. These recordings will be securely stored by the researcher and she will transcribe them herself.

In addition, collected data will be used for the purpose of this research and not for other purposes, and they will not be passed to anyone else. Your name will not be identifiable to others outside the study; these and other data related to you will be kept confidential and preserved by the researcher. Every effort will be made to ensure the confidentiality and privacy of these data, which will be destroyed after several years of the study has been completed. Also, anonymity of participants will be considered in everyday dealing and conversations with others.

Your participation is voluntary, and you can withdraw at any stage during the study, without any penalties. Trial sessions will be provided before the main study to ensure you are acquainted with the procedure. At the end of the research period, you will be able to obtain a copy of the findings on request, which might be helpful for you in the future. Thank you for your cooperation

Thank you for your cooperation.

Yours sincerely,

Iman M. Oraif.

For further details, feel free to contact:

Iman M. Oraif - email: Immo1@le.ac.uk

Confirmation and Consent:

I confirm that I will take a part in this study. I understand my role and I confirm the use of findings for the purpose of this research, which could include publication. I realise that the material will be protected. I hereby sign to confirm my participation.

Participant's signature

Name: .....

Date: .....

Researcher's signature:

Name: .....

Date: .....

## Appendix B (Translated Consent Form)

### نموذج الموافقة الخاص بالمجموعة في فصل التعليم المنقلب

يسرني دعوتكم مشكورين للمشاركة في هذه الدراسة التي تجريها الطالبة في مرحلة الدكتوراة في كلية التربية في جامعة لستر في بريطانيا، و هذه الدراسة تتعلق باستخدام أسلوب في التعلم الاندماجي و يستخدم في تعليم مادة الكتابة ضمن تعلم اللغة الإنجليزية..... المملكة العربية السعودية.

أحتاج أنا الباحثة لموافقتكم على المشاركة في هذه الدراسة ، و مساهمتكم فيها مهمة و ذات قيمة عالية و تمثل رؤية واضحة و ثرية، كما تعين الباحثة على الإجابة على الأسئلة التي تطرحها دراستها.

ستكونين مشاركة في فصل دراسي، مسبق بعرض للمحتوى التعليمي الكترونيا عن طريق ..... و ستجري الدراسة خلال خمس اسابيع، و سيجري إختبار قبلي و من ثم إختبار بعدي قبل و بعد تطبيق التعلم الإندماجي، للتعرف على التطور الذي حصل في مهارة الكتابة لديك، كما سيتم توزيع إستبانات و لن تستخدم النتيجة في التقييم الفعلي لمهارتك، بل ستستخدم لأغراض البحث العلمي فقط. و تفاعل المشاركين في تجربة التعلم الالكتروني سوف تسجله الباحثة.

و ملاحظتكم مطلوبة أيضا و سيتم ترتيب مواعيد للمقابلات معكم بعد إنتهاء الدراسة لمعرفة وجهة نظركم بخصوص الدعم المتوفر في هذه البيئة التعليمية . و هذه المقابلات ستجري باللغة العربية لتسهيل الإجابة عليكم. و ستسجل المقابلات باستخدام جهاز تسجيل الذي سيقى في حيازة الباحثة. و لن تتجاوز مدة المقابلة ساعة واحدة. ولكم الحق في عدم الإجابة على أي سؤال. و ستحرص الباحثة على الاحتفاظ بهذه التسجيلات في مكان آمن و ستقرعها بنفسها لاحقا. و تؤكد الباحثة أن المادة العلمية التي ستجمعها، ستستعمل لأغراض البحث العلمي فقط دون أي إستخدامات أخرى.

ولن تسلم لأي شخص آخر، ولن يعلن إسمك أبدا خارج نطاق هذه الدراسة، و كل المعلومات الأخرى المتعلقة بك ستبقى سرية و محفوظة لدى الباحثة.

و ستبذل كل الجهود الممكنة لضمان السرية و الخصوصية لهذه المادة العلمية، و ستلتف هذه المادة بعد مرور سنوات على إجراء الدراسة كما أن عدم الإعلان عن أسماء المشاركين سيراعى بإستمرار أثناء التحدث مع الآخرين.

إن مشاركتكم تطوعية، و يمكنكم الانسحاب في أي مرحلة من مراحل الدراسة دون أدنى مسؤولية، و ستكون هناك تجارب أولية قبل إجراء الدراسة الفعلية لضمان اطمئنناكم للدراسة. و بعد الإنتهاء من البحث، يمكنكم الحصول على صورة من النتائج عند الطلب، و قد تكون لهذه النتائج فائدة لكم في المستقبل.

و نشكركم مجددا على تعاونكم  
الباحثة

إيمان محمد عريف

للمزيد من المعلومات نرجو الإتصال بالباحثة

[Immo1@le.ac.uk](mailto:Immo1@le.ac.uk)



تأكيد على الموافقة  
أؤكد على موافقتي على المشاركة في هذه الدراسة، و أؤكد معرفتي لدوري في الدراسة، و أن إستخدام النتائج  
سيكون لأغراض البحث العلمي و أن الدراسة قد تنشر مستقبلا و علمت من الباحثة أن المادة العلمية ستكون  
محفوظة، و أؤكد على موافقتي على المشاركة بالتوقيع  
توقيع المشارك

الإسم.....  
التاريخ.....  
توقيع الباحثة  
الإسم.....  
التاريخ.....

## نموذج الموافقة الخاص بمجموعة فصل التعليم الغير منقلب

يسرني دعوتكم مشكورين للمشاركة في هذه الدراسة التي تجربها الطالبة في مرحلة الدكتوراة في كلية التربية في جامعة لستر في بريطانيا، وهذه الدراسة تتعلق باستخدام أسلوب في التعلم الاندماجي و يستخدم في تعليم مادة الكتابة ضمن تعلم اللغة الإنجليزية في ...المملكة العربية السعودية.

أحتاج أنا الباحثة لموافقتكم على المشاركة في هذه الدراسة ، و مساهمتكم فيها مهمة و ذات قيمة عالية و تمثل رؤية واضحة و ثرية، كما تعين الباحثة على الإجابة على الأسئلة التي تطرحها دراستها.

ستكونين مشاركة لفصل دراسي صمم خصيصا لهذه التجربة، و ستجرى الدراسة خلال خمس اسابيع، و سيجرى إختبار قبلي و من ثم إختبار بعدي ، للتعرف على التطور الذي حصل في مهارة الكتابة لديك، كما سيتم توزيع إستبانات و لن تستخدم النتيجة في التقييم الفعلي لمهارتك، بل ستستخدم لأغراض البحث العلمي فقط.

و ملاحظتكم مطلوبة أيضا ، و سيتم ترتيب مواعيد للمقابلات معكم بعد إنتهاء مدة التجربة لمعرفة وجهة نظركم بخصوص الدعم المتوفر في هذه البيئة التعليمية . و هذه المقابلات ستجرى باللغة العربية لتسهيل الإجابة عليكم. و ستسجل المقابلات باستخدام جهاز تسجيل الذي سيقى في حيازة الباحثة. و لن تتجاوز مدة المقابلة ساعة واحدة. ولكم الحق في عدم الإجابة على أي سؤال. و ستحرص الباحثة على الاحتفاظ بهذه التسجيلات في مكان آمن ستقرعها بنفسها لاحقا. و تؤكد الباحثة أن المادة العلمية التي ستجمعها، ستستعمل لأغراض البحث العلمي فقط دون أي إستخدامات أخرى.

ولن تسلم لأي شخص آخر، ولن يعلن إسمك أبدا خارج نطاق هذه الدراسة، و كل المعلومات الأخرى المتعلقة بك ستبقى سرية و محفوظة لدى الباحثة.

و ستبذل كل الجهود الممكنة لضمان السرية و الخصوصية لهذه الملدة العلمية، و ستتلف هذه المادة بعد مرور سنوات على إجراء الدراسة كما أن عدم الإعلان عن أسماء المشاركين سيراعى بإستمرار أثناء التحادث مع الآخرين.

إن مشاركتكم تطوعية، و يمكنكم الانسحاب في أي مرحلة من مراحل الدراسة دون أدنى مسؤولية، و ستكون هناك تجارب أولية قبل إجراء الدراسة الفعلية لضمان اطمئنناكم للدراسة. و بعد الإنتهاء من البحث، يمكنكم الحصول على صورة من النتائج عند الطلب، و قد تكون لهذه النتائج فائدة لكم في المستقبل.

و نشكركم مجددا على تعاونكم  
الباحثة

إيمان محمد عريف

للمزيد من المعلومات نرجو الإتصال بالباحثة

[Immo1@le.ac.uk](mailto:Immo1@le.ac.uk)

تأكيد على الموافقة  
أؤكد على موافقتي على المشاركة في هذه الدراسة، و أؤكد معرفتي لدوري في الدراسة، و أن إستخدام النتائج  
سيكون لأغراض البحث العلمي و أن الدراسة قد تنشر مستقبلا و علمت من الباحثة أن المادة العلمية ستكون  
محفوظة، و أؤكد على موافقتي على المشاركة بالتوقيع  
توقيع المشارك

الإسم.....  
التاريخ.....  
توقيع الباحثة  
الإسم.....  
التاريخ.....

## Appendix C (Approval from the Institution)

رقم الوثيقة	قسم اللغات الأوروبية والآداب	رقم الوثيقة
Document Number	Department of European Languages and Literature	Document Number
Date 18/05/2015		
Ref. Mrs. Iman M. Khidr Oraif		
Consent to Conduct a Research		
Dear Mrs. Iman M. Khidr Oraif,		
Teacher Assistant at the English Language Institute at		
Thank you for your interest in conducting your study at the Department of European Languages and Literatures at during the academic year 1436 – 1437.		
It is my pleasure to inform you that we welcome you to conduct your study in the Department of European Languages and Literature. Your study focus, as you stated in your letter, will be on the students in Writing: Course in the female section, and will be during the academic year 1436 – 1437. Should you need further assistance, please feel free to let us know.		
Sincerely,		

## Appendix D (Interview Protocol)

Interview no.:

Date of interview:

### Introduction

The purpose of this interview is to gain a deep understanding of your experiences of the writing course you have just taken. Your responses will be used for the purposes of this research. I would like you to read the consent form informing you that this interview will be recorded and to sign it if you consent to being audio-recorded.

1. How would you describe your experience on this writing course? Why?
2. Were you able to understand the new content explained through...? Can you explain?

*Probe:*

...watching video lectures  
...attending classroom instruction.

3. Did you find that any part of this unit encouraged you to keep going in your learning? Why?
4. Did you find that completing some of the coursework, like... outside the classroom supported your learning? Why?

*Probe:*

...performing the assigned work on Blackboard  
...improving drafts outside the classroom.

5. How would you describe your relationship with your colleagues when taking this unit? Why? What was your teacher's role in that?
6. How did you find the instructions provided for the assigned activity within and outside the classroom? Please give reasons for your answer.
7. How did you find your teacher in terms of supporting you in improving your writing skills? Can you please explain further?
8. Would you recommend this type of teaching to other students? If so, why?
9. Do you have any other comments about the course?

## Appendix E (Translated Interview Protocol)

رقم المقابلة:

تاريخ المقابلة:

المقدمة

الغرض من هذه المقابلة هو الحصول على فهم عميق لتجربتك مع مادة الكتابة التي أخذتها، وإجابتك ستستخدم لأغراض البحث العلمي، وأود قراءة نموذج الموافقة لتعلمي أن هذه المقابلة ستكون مسجلة، كي توقعي موافقتك على التسجيل الصوتي للمقابلة.

1. كيف تصفي تجربتك في مادة الكتابة التي تلقيتها؟ ولماذا؟
2. هل تمكنتي من فهم المحتوى المطلوب مثلا خلال--- ؟ هل يمكن أن توضحي ذلك؟  
التوضيح:

--- خلال مشاهدة دروس الفيديو

--- خلال حضور الدروس الفصلية

3. هل وجدت بعض الطرق المتبعة في هذه الوحدة مشجعة لك للاستمرار في التعلم؟ ولماذا؟
4. هل وجدت تكملة بعض الأعمال الفصلية خارج الفصل الدراسي مثلا خلال --- داعما لك في تطوير الكتابة لديك ولماذا؟  
التوضيح:

---إنجاز النشاطات المطلوبة من خلال البلاك بورد

--- تحسين المسودات المطلوبة خارج الفصل الدراسي

5. صفي علاقتك مع زيملاتك أثناء دراسة هذه الوحدة من مادة الكتابة ؟ ولماذا؟ ما دور معلمتك في ذلك؟
6. ما مدى وضوح التعليمات المعطاة لك للقيام بالنشاط المطلوب داخل الفصل و خارجه؟ الرجاء توضيح الأسباب
7. كيف وجدت دعم المعلمة لك لتحسين قدرتك على التعلم ، هل تستطيعي شرح ذلك بالتفصيل فضلا؟
8. هل توصي بمثل هذا النوع من التعليم طلابا آخرين، ولماذا؟
9. هل لديك أي تعليقات أخرى حول هذه المادة؟

## Appendix F (Diary Form)

Dear student,

Kindly make entries in this diary every day about the ‘Argumentative essay’ unit on the ‘Writing 2’ course. Please feel free to contact me if you do not understand any part of these instructions. I appreciate your participation.

Kind regards,

Iman Oraif

Immo1@le.ac.uk

Name:

Date:

Describe your personal experience and how you felt about the following:

- Working with your friends on this writing course

---

---

- Working out the assigned activities

---

---

- The availability of the required course material

---

---

- Your teacher’s feedback and the way it helped you develop your draft

---

- Other information

---

---

**Thank you for your participation**

## Appendix G (Pre-Post Questionnaires)



School of Education  
University of Leicester  
Leicester  
UK

### Pre-questionnaire

Dear English language student,

I am a Saudi Ph.D. candidate at the University of Leicester, UK. This questionnaire is designed to help gain a better understanding of the feelings and beliefs of English learners in relation to a writing course they completed previously. Please note that it consists of two sections. Read each set of instructions carefully and respond accordingly. However, it is not a test and there are no 'right' or 'wrong' answers. Furthermore, there will be no impact on your actual grades and your participation is completely voluntary. Finally, your responses will be kept confidential and will only be used for the purposes of this research. Thank you for your cooperation.

Yours sincerely,

Iman M. Oraif

If you have any questions, please feel free to contact the researcher,

Iman Oraif

[Immo1@le.ac.uk](mailto:Immo1@le.ac.uk)

### **Part 1**

Name:.....

1. How long have you been studying English? .....years
2. Please choose from the following categories (Tick [☐] your choice):  
Age: 18-21    21-24    other.....
3. Your current university level.....
4. Have you ever had any prior experience with a course that included online learning:  
Yes ( ☐ ) No ( ☐ )  
If yes, please state when and describe your experience:

.....



## **Part 2**

The following sections include items related to your feelings about attending the writing class. Please read them carefully and choose the one that is closest to your current feeling (tick [✓] your choice):

1. Strongly disagree (I am absolutely against this statement)
2. Disagree (I do not fully agree with this statement)
3. Slightly disagree (I am somewhat against this statement)
4. Slightly agree (I somewhat concur with this statement)
5. Agree (to a certain extent, I concur with this statement)
6. Strongly agree (I absolutely concur with this statement).

<b>1. I attend the English writing course:</b>						
Statement	Strongly disagree 1	Disagree 2	Slightly disagree 3	Slightly agree 4	Agree 5	Strongly Agree 6
1. For the pleasure I experience when I learn more about how to write a good essay.						
2. For the satisfied feeling I get on finding out about different types of essay writing.						
3. Because I enjoy the feeling of learning more about various components of different types of essays.						
4. Because I have lots of fun in the English writing class.						
5. Because I like to have the teacher's feedback on my writing.						
6. Because I believe the English writing course is stimulating.						
7. Because I feel good when I write properly in English in the class.						
8. For the positive feeling I experience when I communicate my ideas to my classmates in the writing class.						
9. For the pleasure I experience when I can work out difficult writing activities.						

10. For the satisfaction I feel when I understand a difficult idea related to essay writing.						
11. For the positive feeling I get when I am able to modify my writing.						

**Thank you**

Dear English language student,

I am a Saudi Ph.D. candidate at the University of Leicester, UK. This questionnaire is designed to help gain a better understanding of the feelings and beliefs of English learners in relation to a writing course they have just completed. Please note that it consists of three sections. Read each set of instructions carefully and respond accordingly. However, it is not a test and there are no 'right' or 'wrong' answers. Furthermore, there will be no impact on your actual grades and your participation is completely voluntary. Finally, your responses will be kept confidential and will only be used for the purposes of this research. Thank you for your cooperation.

Yours sincerely,

Iman M. Oraif

If you have any questions, please feel free to contact the researcher,

Iman

[Immo1@le.ac.uk](mailto:Immo1@le.ac.uk)

**Name:**.....

### **Part 1**

The following sections include items related to your feelings about attending the writing course. Your responses will be kept confidential. Please read the items carefully and choose the one that is closest to your current feeling:

1. Strongly disagree (I am absolutely against this statement)
2. Disagree (I do not fully agree with this statement)
3. Slightly disagree (I am somewhat against this statement)
4. Slightly agree (I somewhat concur with this statement)
5. Agree (to a certain extent, I concur with this statement)
6. Strongly agree (I absolutely concur with this statement).

1. I attend the English writing course:						
Statement	Strongly disagree 1	Disagree 2	Slightly disagree 3	Slightly agree 4	Agree 5	Strongly Agree 6
1. For the pleasure I experience when I learn more about how to write a good essay.						
2. For the satisfied feeling I get on finding out about different types of essay writing.						
3. Because I enjoy the feeling of learning more about the various components of different types of essays.						
4. Because I have lots of fun in the English writing class.						
5. Because I like to have the teacher's feedback on my writing.						
6. Because I believe the English writing course is stimulating.						
7. Because I feel good when I write properly in English in the class.						
8. For the positive feeling I experience when I communicate my ideas to my classmates in the writing class.						
9. For the pleasure I experience when I can work out difficult writing activities.						
10. For the satisfaction I feel when I understand a difficult idea related to essay writing.						
11. For the positive feeling I get when I am able to modify my writing.						

## **Part 2**

The following sections include items related to your satisfaction with the writing course. Your responses will remain confidential. Please read these items carefully and choose the one that is closest to your current feeling:

1. Strongly disagree (I am absolutely against this statement)
2. Disagree (I do not fully agree with this statement)
3. Slightly disagree (I am somewhat against this statement)
4. Slightly agree (I somewhat concur with this statement)
5. Agree (to a certain extent, I concur with this statement)
6. Strongly agree (I absolutely concur with this statement).

<b>1. What do you think about your relationship with your classmates on this writing course?</b>						
Statement	Strongly disagree	Disagree	Slightly disagree	Slightly agree	Agree	Strongly agree
<i>Perceived relatedness</i>	1	2	3	4	5	6
1. My classmates understand me.						
2. My classmates respect my ideas when doing the writing activities.						
3. My classmates support me.						
<b>2. What do you think about the way you learn and practice new elements on this writing unit?</b>						
Statement	Strongly disagree	Disagree	Slightly disagree	Slightly agree	Agree	Strongly agree
<i>Perceived autonomy</i>	1	2	3	4	5	6
4. I feel free to choose when and how to learn.						
5. I have the freedom to improve my writing.						
6. I feel I do the work assigned on the writing course because I want to.						
7. I force myself to write the essay.						

<b>3. How would you describe your writing ability?</b>						
Statement	Strongly disagree	Disagree	Slightly disagree	Slightly agree	Agree	Strongly agree
<i>Perceived competence</i>	1	2	3	4	5	6
8. I am developing my knowledge of essay-writing (for example, argumentative essays).						
9. I feel I am unable to write very well.						
10. When I work out the writing activities, I become better at writing.						
11. I am satisfied with my performance in essay writing.						

### **Part 3**

The following sections include items related to the support you have received on the writing course. Your responses will remain confidential. Please read the items carefully and choose the one that is closest to your current feeling:

1. Strongly disagree (I am absolutely against this statement)
2. Disagree (I do not fully agree with this statement)
3. Slightly disagree (I am somewhat against this statement)
4. Slightly agree (I somewhat concur with this statement)
5. Agree (to a certain extent, I concur with this statement)
6. Strongly agree (I absolutely concur with this statement).

<b><i>On this writing course:</i></b>						
<b>1. How does your teacher support you in learning by yourself?</b>						
Statement	Strongly disagree	Disagree	Slightly disagree	Slightly agree	Agree	Strongly agree
<i>Support for autonomy</i>	1	2	3	4	5	6
1. The writing teacher shows confidence in my ability to do well.						
2. My teacher gives me additional resources to help me work by myself.						
3. The writing teacher makes sure I understand the goals of the lesson and what I need to do.						

4. I receive timely and helpful feedback from the teacher when I ask questions.						
<b>On this writing course:</b>						
<b>2. How does your teacher support you in developing your writing?</b>						
Statement	Strongly disagree	Disagree	Slightly disagree	Slightly agree	Agree	Strongly agree
<i>Support for competence</i>	1	2	3	4	5	6
5. The teacher makes us feel we are good at writing.						
6. I receive clear instructions about how to carry out the activities.						
7. I feel as if the teacher wants us to do well.						
8. The teacher's feedback helps me improve my drafts.						
<b>On this writing course:</b>						
<b>3. How does your teacher support you in developing your relationship with her and with your peers?</b>						
Statement	Strongly disagree	Disagree	Slightly disagree	Slightly agree	Agree	Strongly agree
<i>Support for relatedness</i>	1	2	3	4	5	6
9. The writing teacher encourages us to work together on the activities.						
10. The writing teacher shows us respect.						
11. The writing teacher is interested in us.						
12. I find the writing teacher to be friendly towards us.						

**Thank You**

## Appendix H (Test Form)

Name: .....

Date: .....

1- You have one hour to finish your essay writing. You should write about whether you find “...*working as a cashier to be a suitable job for women in Saudi Arabia*”. You can argue for or against this.

2- You should write between 250 and 300 words (5 paragraphs).

3- Your handwriting must be clear and easy to read and you should consider the following points as you write:

*a) The organisation of your essay (introduction with a thesis statement, main body and conclusion)*

*d) The logical development of your ideas*

*e) The appropriateness of the grammar*

*g) Structuring your sentences well, with effective use of vocabulary.*



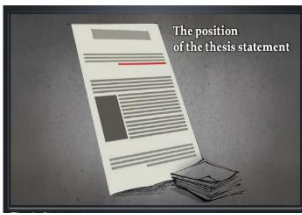
### Appendix I (Writing Test Analytical Scale)

	<b>20-18 Excellent to Good</b>	<b>17-15 Good to Adequate</b>	<b>14-12 Adequate to Fair</b>	<b>11-6 Unacceptable</b>	<b>5-1 Not College-level Work</b>
<b>I. Organisation: Introduction, body and conclusion</b>	Appropriate title, effective introductory paragraph, clear thesis statement, leading to body. Arrangement of material shows plan (can be outlined by the reader), supporting evidence given for generalisation, refutation paragraph is well-structured. Conclusion is logical and complete.	Adequate title, introduction, and conclusion. Body of essay is acceptable, but some evidence may be lacking. Not all ideas are fully developed in each paragraph (including refutation paragraph). Sequence is logical, but transitional expressions may be absent or misused.	Mediocre or scant introduction and conclusion. Problems with order of ideas in main body. Generalisation in each paragraph, with refutation paragraph perhaps not fully supported by evidence provided. Problems of organisation interfere.	Shaky or minimally recognisable introduction. Organisation barely evident; severe problems with ordering of ideas. Lack of supporting evidence in each paragraph (including refutation paragraph). Conclusion weak or illogical. Inadequate effort made with organisation.	Absence of introduction or conclusion. No apparent organisation of body. Severe lack of supporting evidence; writer has made no effort to organise composition (cannot be outlined by reader). No refutation paragraph.
<b>II. Logical development of ideas: Content</b>	Easily addresses the assigned topic; ideas are concrete and thoroughly developed; no extraneous material; easily reflects writer's thoughts.	Easily addresses the issue, but misses some points; ideas could be more fully developed; some extraneous material is present.	Incomplete development of ideas, or essay somewhat off-topic; paragraphs are not divided exactly in the right way.	Ideas incomplete; essay does not reflect careful thought, or was hurriedly written. Inadequate effort in area of content.	Essay incomplete, inadequate and does not reflect college-level work; no apparent effort to consider topic carefully.
<b>III. Grammar</b>	Native-like fluency in English grammar in the use of modals, connectors, verb forms, tense sequencing and transition words.	Advanced proficiency in English grammar; not all grammar problems influence communication, even if reader is aware of them.	Ideas get through to the reader, but grammar problems are apparent and have a negative effect on communication.	Numerous serious grammar problems interfere with communication of writer's ideas; grammar review of some areas clearly needed.	Severe grammar problems interfere greatly with message; reader cannot understand what writer is trying to say,

					unintelligible sentence structure.
<b>IV. Style and quality of expression</b>	Parallel structure, precise vocabulary usage; logical use of Figure captions; avoidance of words that are too broad in their meaning; concise. Good vocabulary with neither positive nor negative connotations. Use of parallel structure, concise conclusions are not overly general; information is adequate.	Attempts variety, good vocabulary; style fairly concise. Some evidence of overly general conclusions with inadequate information. Some vocabulary with positive or negative connotations evident. Not much generalisation apparent in the use of expressions.	Some vocabulary is misused; some loaded words may be evident; style may be somewhat inadequate. Some generalisations made in the use of expressions.	Poor expression of ideas. Problems with vocabulary. Lack of variety in structure. Generalisations are apparent to some extent.	Inappropriate use of vocabulary; no sentence variety; inadequate style; too many generalisations made.

## Appendix J (Sample of a Detailed Instructional Plan)

### Week (2) (Thesis Statement)

Writing stage	The Flipped Classroom	The Non-flipped Classroom	Learning Materials
Exposure to new content	<ul style="list-style-type: none"> <li>- Learners watch the video of the week on the platform, posted on the page for Week 2.</li> <li>- Learners work together on the activity related to the week's new element posted in the system.</li> <li>- Learners submit their answers to the teacher through the VLE system, before the first F2F meeting.</li> </ul> <p><b><u>F2F (class1)</u></b> <b><u>(1 hour)</u></b></p> <ul style="list-style-type: none"> <li>- Learners are to be seated in groups, similar to their online group.</li> <li>- The teacher will check the learners' understanding, after they have watched the video.</li> <li>- Together with the learners, the teacher will check their answers for the activity through</li> </ul>	<p><b><u>F2F (Class 1)</u></b> <b><u>(1 hour)</u></b></p> <ul style="list-style-type: none"> <li>- Regular classroom instruction.</li> <li>- Learners hand in their first draft for the previous week's topic.</li> </ul> <p><b><u>F2F (Class 2)</u></b> <b><u>(1 hour)</u></b></p> <ul style="list-style-type: none"> <li>- Regular classroom instruction.</li> <li>- Learners will work individually on the activity in class and will be given the topic to think about for their essay.</li> </ul>	<p>Learners will practice the following:</p> <ul style="list-style-type: none"> <li>- Developing a suitable thesis statement.</li> <li>- Adopting the right position in a thesis statement for the essay.</li> <li>- The video lecture sample for this week.</li> </ul> <p>2.2. Video lecture ( Writing an effective thesis statement for an argumentative essay) ▶</p> 

	classroom discussion.		
Prewriting/ Brain- storming stage	<p><b><u>(Online)</u></b></p> <ul style="list-style-type: none"> <li>- Each group will work together to create the outline of the week's topic, which was posted on the Week2 page.</li> <li>- The learners will be provided with links to help them build up their ideas.</li> <li>- The teacher will be available for an hour to provide help.</li> </ul>	<p><b><u>F2F (Class 3)</u></b> <b><u>(1 hour)</u></b></p> <ul style="list-style-type: none"> <li>- The learners will discuss the week's topic with their teacher, which will help them build their outline.</li> </ul>	<ul style="list-style-type: none"> <li>- The week's activity</li> </ul> <p>Writing pro and con thesis statements (Folse, 2010, p.122).</p> <p><b>Read the following list of topics for argumentative essays. For each topic, write a pro (for) and a con (against) thesis statement:</b></p> <p><b>1. Topic: Using animals in disease research</b>  Pro thesis statement.....  Con thesis statement.....</p> <p><b>2. Topic: Age restrictions for driver's licenses</b>  Pro thesis statement.....  Con thesis statement.....</p> <p><b>3. Topic: Space exploration</b>  Pro thesis statement.....  Con thesis statement.....</p> <p><b>4. Topic: Internet privacy</b>  Pro thesis statement.....  Con thesis statement.....</p> <ul style="list-style-type: none"> <li>- Topic of the week: Do violent video games make children's behaviour more violent in real life?</li> </ul>
Drafting/ Composing stage	<p><b><u>F2F (Class 2)</u></b> <b><u>(1 hour)</u></b></p> <ul style="list-style-type: none"> <li>- The learners will write their first draft using the outline they have constructed with their groups.</li> </ul>	Assignment to be handed in at the beginning of the coming week.	<ul style="list-style-type: none"> <li>- Learners will start writing their first draft.</li> </ul>

Revision stage	<p><b><u>F2F(Class 2)</u></b> <b><u>(1 hour)</u></b></p> <ul style="list-style-type: none"> <li>- The teacher will provide the learners with written indirect feedback for the first draft in class.</li> </ul> <p><b><u>(Online)</u></b></p> <p>By using the wiki:</p> <ul style="list-style-type: none"> <li>- The learners will go online to assist each other if necessary.</li> <li>- The teacher will be available for an hour to help the learners.</li> <li>- The teacher will provide the learners with supporting materials related to the most problematic elements in their writing, either by posting them online or covering them in class.</li> <li>- The learners will keep a memo of their mistakes, based on the feedback given for the 1<sup>st</sup> draft, before coming to their next class.</li> </ul>	<ul style="list-style-type: none"> <li>- During her office hours, the teacher will check the learners' essays, giving them written indirect feedback based on the week's objective and conducting one-to-one tutorials with them if necessary.</li> <li>- The teacher will return to learners the first draft with the feedback before the end of the week.</li> </ul>	<p>For the flipped classroom group:</p> <ul style="list-style-type: none"> <li>- The learners will work online in groups to revise and assist each other, while working out their teacher's feedback.</li> <li>- The learners will keep a memo of their work to use for the second draft in the coming class.</li> </ul>
Editing & Publishing stage	<p><b><u>F2F (Class 3)</u></b> <b><u>(1 hour)</u></b></p> <ul style="list-style-type: none"> <li>- The learners will use the memo to write</li> </ul>	<p>Assignment to be written up after receiving feedback.</p>	

	the final draft in the class.		
--	----------------------------------	--	--

## List of References

- ABEYSEKERA, L. and DAWSON, P. (2015) 'Motivation and cognitive load in the flipped classroom: definition, rationale and a call for research', *Higher Education Research & Development*, 34(1), pp.1-14.
- ABU-GHARARAH, A.H. (1989) 'EFL speaking inability: Its causes and remedies', *NABE Journal*, 14(1-3), pp.63-75.
- ADAS, D. and BAKIR, A. (2013) 'Writing Difficulties and New Solutions: Blended Learning as an Approach to Improve Writing Abilities', *International Journal of Humanities*, 3(9), pp.254-266.
- ADAS, D. and SHMAIS, W.A. (2011) 'Students' Perceptions towards Blended Learning Environment Using the OCC', *An-Najah University Journal for Research*, 25(6), pp.1681-1710.
- AHMED, M. A. E. A. S. (2016) 'The effect of a flipping classroom on writing skill in English as a foreign language and students' attitude towards flipping', *US-China Foreign Language*, 14(2), pp. 98-114.
- AKBARI, E., PILOT, A. and SIMONS, P.R. (2015) 'Autonomy, competence, and relatedness in foreign language learning through Facebook', *Computers in Human Behavior*, 48, pp.126-134.
- AL ZUMOR, ABDUL WAHED Q, AL REFAAI, I.K., EDDIN, E.A.B. and AL-RAHMAN, F.H.A. (2013) 'EFL Students' Perceptions of a Blended Learning Environment: Advantages, Limitations and Suggestions for Improvement', *English Language Teaching*, 6(10), p.95.
- AL-DOSARI, H. (2011) 'Faculty members and students perceptions of E-learning in the English department: A project evaluation', *Journal of Social Sciences*, 7(3), pp.391-407.
- AL-JARF, R.S. (2004) 'The Effects of Web-Based Learning on Struggling EFL College Writers', *Foreign Language Annals*, 37(1), pp.49-57.

- AL-KHAIRY, M.A. (2013) 'Saudi English-Major Undergraduates' Academic Writing Problems: A Taif University Perspective', *English Language Teaching*, 6(6), p.1.
- AL-MANSOUR, N.S. and AL-SHORMAN, R.A. (2012) 'The effect of computer-assisted instruction on Saudi University students' learning of English', *Journal of King Saud University-Languages and Translation*, 24(1), pp.51-56.
- AL-SEGHAIR, K., (2005) 'Teaching English in the Kingdom of Saudi Arabia: Slowly but steadily changing', *Teaching English to the World: History, Curriculum, and Practice*, pp.125-134.
- AL-SEGHAIR, K. (2014) 'The four most common constraints affecting English teaching in Saudi Arabia', *International Journal of English Linguistics*, 4(5), p.17.
- AL-SORAIEY-ALQAHTANI, A. (2010) *The Effectiveness of Using E-learning, Blended Learning and Traditional Learning on Students' Achievement and Attitudes in a Course on Islamic Culture: an Experimental study* ., Ph.D., Durham University.
- ALEBAIKAN, R. and TROUDI, S. (2010) 'Online discussion in blended courses at Saudi Universities', *Procedia - Social and Behavioral Sciences*, 2(2), pp.507-514.
- ALGHAMDI, R. and GILLIES, R. (2013) 'The impact of cooperative learning in comparison to traditional learning (small groups) on EFL learners' outcomes when learning English as a foreign language', *Asian Social Science*, 9(13), p.19.
- ALJUMAH, F.H. (2012) 'Saudi learner perceptions and attitudes towards the use of blogs in teaching English writing course for EFL Majors at Qassim University', *English Language Teaching*, 5(1), p.100.
- ALM, A. (2006) 'CALL for autonomy, competence and relatedness: Motivating language learning environments in Web 2.0', *The JALT CALL Journal*, 2(3), pp.29-38.
- ALMALKI, A. (2011) *Blended learning in higher education in Saudi Arabia: A study of Umm Al-Qura University*.



- ALRABAI, F. (2014) 'Motivational Practices in English as a Foreign Language Classes in Saudi Arabia: Teachers Beliefs and Learners Perceptions', *Arab World English Journal*, 5(1). pp.224-243.
- ALSHAMMARI, M.M. (2011) 'The use of the mother tongue in Saudi EFL classrooms', *Journal of International Education Research*, 7(4), p.95.
- ANDERSON, L.W. and SOSNIAK, L.A. (Eds.) (1994) 'Bloom's taxonomy: A forty-year retrospective', *Ninety-third yearbook of the National Society for the Study of Education*, Pt.2. Chicago, IL: University of Chicago Press.
- AXELSON, R.D. and FLICK, A. (2010) 'Defining Student Engagement', *Change: The Magazine of Higher Learning*, 43(1), pp.38-43.
- AYAZ, M. F. and SEKERCI, H. (2015) 'The Effects of the Constructivist Learning Approach on Student's Academic Achievement: A Meta-Analysis Study', *Turkish Online Journal of Educational Technology-TOJET*, 14(4), pp.143-156.
- BADGER, R. and WHITE, G. (2000) 'A Process Genre Approach to Teaching Writing', *ELT Journal*, 54(2), pp.153-160.
- BARALT, M. GURZYNSKI-WEISS, L. and KIM, Y-J. (2016) 'Engagement with the language. How examining learners' affective and social engagement explains successful learner-generated attention to form', in: Sato, M. and Ballinger, S. (Eds.) *Peer Interaction and Second Language Learning: Pedagogical potential and research agenda*. Amsterdam/Philadelphia: John Benjamins, pp.209-240.
- BARNARD, R. and CAMPBELL, L. (2005) *Sociocultural theory and the teaching of process writing: The scaffolding of learning in a university context*. The TESOLANZ Journal, 13, pp.76-88.
- BERG, B.L., LUNE, H. and LUNE, H. (2004) *Qualitative research methods for the social sciences*. Pearson Boston, MA.

- BEYTH-MAROM, R., SAPORTA, K. and CASPI, A. (2005) 'Synchronous vs. asynchronous tutorials: Factors affecting students' preferences and choices', *Journal of Research on Technology in Education*, 37(3), pp.245-262.
- BI, X. (2015) 'Associations between psychosocial aspects of English classroom environments and motivation types of Chinese tertiary-level English majors', *Learning Environments Research*, 18(1), pp.95-110.
- BISHOP, J.L. and VERLEGER, M.A. (2013) 'The flipped classroom: A survey of the research', *ASEE National Conference Proceedings*. Atlanta, GA 2013.
- BITCHENER, J. and KNOCH, U. (2008) 'The value of written corrective feedback for migrant and international students', *Language Teaching Research*, 12(3), pp.409-431.
- BLACK, A.E. and DECI, E.L. (2000) 'The effects of instructors' autonomy support and students' autonomous motivation on learning organic chemistry: A self-determination theory perspective', *Science Education*, 84(6), pp.740-756.
- BONK, C.J. and GRAHAM, C.R. (2012) *The handbook of blended learning: Global perspectives, local designs*. San Francisco: John Wiley & Sons.
- BRADLEY, L., LINDSTROM, B. and RYSTEDT, H. (2010) 'Rationalities of collaboration for language learning in a wiki', *ReCALL*, 22(02), pp.247-265.
- BRIGGS, A.R., MORRISON, M. and COLEMAN, M. (2012) *Research methods in educational leadership and management*. Sage Publications.
- BROWN, H.D. (1994) *Teaching by principles*. Englewood Cliffs, NJ: Prentice Hall.
- BROWN, H.D. (2006) *Principles of language learning and teaching*. White Plains, NY: Longman.
- BROWN, H.D. (2010) *Language assessment: Principles and classroom practices* (2nd ed.). Upper Saddle River, N.J; Harlow: Pearson Education.

- BRYAN, R.R., GLYNN, S.M. and KITTLESON, J.M. (2011) 'Motivation, achievement, and advanced placement intent of high school students learning science', *Science Education*, 95(6), pp.1049-1065.
- BRYMAN, A. (2012) *Social research methods* (4th ed.). Oxford: Oxford University Press.
- CAMAHALAN, F.M.G. and RULEY, A.G. (2014) 'Blended learning and teaching writing: A teacher action research project', *Journal of Instructional Pedagogies*, 15, p.1.
- CARR, N.T. (2011) *Designing and analyzing language tests*. Oxford: Oxford University Press.
- CARRIÓ-PASTOR, M.L. and MESTRE, E.M.M. (2014) 'Motivation in Second Language Acquisition', *Procedia - Social and Behavioral Sciences*, 116, pp.240-244.
- CHANDLER, J. (2003) 'The efficacy of various kinds of error feedback for improvement in the accuracy and fluency of L2 student writing', *Journal of Second Language Writing*, 12(3), pp.267-296.
- CHAPELLE, C.A. (2009) The relationship between second language acquisition theory and Computer-Assisted language learning. *The Modern Language Journal*, 93(s1), pp. 741-753.
- CHATZISARANTIS, N. L. and HAGGER, M. S. (2009) 'Effects of an intervention based on self-determination theory on self-reported leisure-time physical activity participation', *Psychology and Health*, 24(1), pp.29-48.
- CHEN, K.C. and JANG, S.J. (2010) 'Motivation in online learning: Testing a model of self-determination theory', *Computers in Human Behavior*, 26(4), pp.741-752.
- CHEN, Y. (2012) 'The effect of thematic video-based instruction on learning and motivation in e-learning', *International Journal of Physical Sciences*, 7(6), pp.957-965.
- CHOI, H.J. and JOHNSON, S.D. (2005) 'The effect of context-based video instruction on learning and motivation in online courses', *The American Journal of Distance Education*, 19(4), pp.215-227.

- CHOU, S. and LIU, C. (2005) 'Learning effectiveness in a Web-based virtual learning environment: a learner control perspective', *Journal of Computer Assisted Learning*, 21(1), pp.65-76.
- COHEN, J. (1988) *Statistical power analysis for the behavioural sciences*. Hillsdale, New Jersey: Lawrence Earlbaum Associates.
- COHEN, J. (1992) 'A power primer', *Psychological Bulletin*, 112(1), p.155.
- COHEN, L., MANION, L. and MORRISON, K. (2013) *Research methods in education* (6<sup>th</sup> ed.). London: Routledge.
- COLEMAN, D. and ISO-AHOLA, S. E. (1993) 'Leisure and health: The role of social support and self-determination', *Journal of Leisure Research*, 25(2), p.111.
- COPE, B. and KALANTZIS, M. (2014) *The Powers of Literacy (RLE Edu I): A Genre Approach to Teaching Writing*. Routledge.
- COX, A., DUNCHEON, N. and MCDAVID, L. (2009) 'Peers and teachers as sources of relatedness perceptions, motivation, and affective responses in physical education', *Research Quarterly for Exercise and Sport*, 80(4), pp.765-773.
- CRESWELL, J.W. (2013) *Research design: Qualitative, quantitative, and mixed methods approaches*. Sage Publications.
- CRONBACH, L.J. (1951) 'Coefficient alpha and the internal structure of tests', *Psychometrika*, 16(3), pp.297-334.
- CROOKES, G. and SCHMIDT, R.W. (1991) 'Motivation: Reopening the research agenda', *Language Learning*, 41(4), pp.469-512.
- CUMMING, A.H. (2006) *Goals for academic writing: ESL students and their instructors*. Amsterdam; Philadelphia: John Benjamins Pub. Co.
- DASKALOVSKA, N., GUDEVA, L.K. and IVANOVSKA, B. (2012) 'Learner motivation and interest', *Procedia-Social and Behavioral Sciences*, 46, pp.1187-1191.

- DECI, E.L. (1975) *Intrinsic motivation*. New York; London: Plenum Press.
- DECI, E.L. and RYAN, R.M. (1985) *Intrinsic motivation and self-determination in human behavior*. New York: Springer.
- DECI, E.L. and RYAN, R.M. (2004) *Handbook of self-determination research*. Rochester, NY: University of Rochester Press.
- DECI, E. L., SCHWARTZ, A. J., SHEINMAN, L. and RYAN, R.M. (1981) 'An instrument to assess adults' orientations toward control versus autonomy with children: Reflections on intrinsic motivation and perceived competence', *Journal of Educational Psychology*, 73, pp.642-650.
- DENZIN, N.K. and LINCOLN, Y.S. (1994) *Handbook of qualitative research*. Sage Publications Inc.
- DEVELLIS, R.F. (2016) *Scale development: Theory and applications*. Sage Publications.
- DE WINTER, P., and CAHUSAC, P. M. (2014) *Starting Out in Statistics: An Introduction for Students of Human Health, Disease, and Psychology*. John Wiley & Sons.
- DODERO, J.M., FERNÁNDEZ, C. and SANZ, D. (2003) 'An experience of students' participation in blended vs. online styles of learning', *ACM SIGCSE Bulletin*, 35(4), pp.39-42.
- DÖRNYEI, Z. and CUMMING, A. (2003) *Attitudes, orientations, and motivations in language learning: Advances in theory, research, and applications*. Oxford: Blackwell.
- DÖRNYEI, Z. and TAGUCHI, T. (2009) *Questionnaires in second language research: Construction, administration, and processing*. Routledge.
- DÖRNYEI, Z. and USHIODA, E. (2010) *Teaching and Researching: Motivation*. White Plains; La Vergne: Longman Publishing Group.
- DÖRNYEI, Z. (2014) *The psychology of the language learner: Individual differences in second language acquisition*. Routledge.

- EDMUNDS, J., NTOUMANIS, N. and DUDA, J. L. (2007) 'Adherence and well-being in overweight and obese patients referred to an exercise on prescription scheme: A self-determination theory perspective', *Psychology of Sport and Exercise*, 8(5), pp.722-740
- EHRMAN, M.E., LEAVER, B.L. and OXFORD, R.L. (2003) 'A brief overview of individual differences in second language learning', *System*, 31(3), pp.313-330.
- ELLIS, R. (2009) 'A typology of written corrective feedback types', *ELT Journal*, 63(2), pp.97-107.
- ELY, C.M. (1986) 'Language learning motivation: A descriptive and causal analysis', *The Modern Language Journal*, 70(1), pp.28-35.
- ENGİN, M. (2014) 'Extending the flipped classroom model: Developing second language writing skills through student-created digital videos', *Journal of the Scholarship of Teaching and Learning*, 14(5), pp.12-26.
- FAGEEH, A.I. (2011) 'EFL learners' use of blogging for developing writing skills and enhancing attitudes towards English learning: An exploratory study', *Journal of Language & Literature*, 2(1), pp.31-48.
- FAREH, S. (2010) 'Challenges of teaching English in the Arab world: Why can't EFL programs deliver as expected?', *Procedia-Social and Behavioral Sciences*, 2(2), PP. 3600-3604.
- FEILZER, M.Y. (2010) 'Doing mixed methods research pragmatically: Implications for the rediscovery of pragmatism as a research paradigm', *Journal of Mixed Methods Research*, 4(1), pp.6-16.
- FIELD, A. (2013) *Discovering statistics using IBM SPSS statistics*. Sage.
- FOLSE, K. S. (2010). *Great writing 4: great essays*. Boston, USA.: Heinle Cengage Learning.

FOTOS, S. (2004) 'Writing as talking: E-mail exchange for promoting proficiency and motivation in the foreign language classroom', in: Fotos, S. and Browne, C.M. (Eds.) *New perspectives on CALL for second language classrooms*. Routledge, pp.109-129.

FRAGA, L. M. and HARMON, J. (2014) 'The flipped classroom model of learning in higher education: An investigation of preservice teachers' perspectives and achievement', *Journal of Digital Learning in Teacher Education*, 31(1), pp.18-27

GARDNER, R.C. (2010) *Motivation and second language acquisition: The socio-educational model*. Peter Lang.

GARDNER, R.C. and LAMBERT, W.E. (1972) *Attitudes and motivation in second-language learning*. Rowley, Mass.: Newbury House Publishers.

GARDNER, R.C. and MACINTYRE, P.D. (1991) 'An instrumental motivation in language study', *Studies in Second Language Acquisition*, 13(1), pp.57-72.

GARRISON, D. R., ANDERSON, T. and ARCHER, W. (1999). Critical Inquiry in a Text-Based Environment: Computer Conferencing in Higher Education, *The Internet and Higher Education*, 2(2-3), pp.87-105. [http://dx.doi.org/10.1016/S1096-7516\(00\)00016-6](http://dx.doi.org/10.1016/S1096-7516(00)00016-6).

GARRISON, D.R. and KANUKA, H. (2004) 'Blended learning: Uncovering its transformative potential in higher education', *The Internet and Higher Education*, 7(2), pp.95-105.

GARRISON, D.R. and VAUGHAN, N.D. (2008) *Blended learning in higher education: Framework, principles, and guidelines*. John Wiley & Sons.

GEORGE-WALKER, L.D. and KEEFFE, M. (2010) 'Self-determined blended learning: a case study of blended learning design', *Higher Education Research & Development*, 29(1), pp.1-13.

GHANDOURA, W.A. (2012) 'A Qualitative Study of ESL College Students' Attitudes about Computer-Assisted Writing Classes', *English Language Teaching*, 5(4), p.57.

GILAKJANI, A.P., LEONG, L. and SABOURI, N.B. (2012) 'A Study on the Role of Motivation in Foreign Language Learning and Teaching', *International Journal of Modern Education and Computer Science*, 4(7), pp.9-16.

GILBOY, M.B., HEINERICHS, S. and PAZZAGLIA, G. (2015) 'Enhancing student engagement using the flipped classroom', *Journal of Nutrition Education and Behavior*, 47(1), pp.109-114.

GRAHAM, C (2006) 'Blended Learning Systems: Definition, Current Trends and Future Directions', in: Bonk, C. J. and Graham, C. R. (Eds.) *Handbook of Blended Learning: Global Perspectives, Local Designs*. San Francisco: John Wiley & Sons, pp.3-21.

GRAMI, G.M.A. (2010) *The effects of integrating peer feedback into university-level ESL writing curriculum: A comparative study in a Saudi context*. Ph.D., University of Newcastle upon Tyne.

GRANT, L. and GINTHER, A. (2000) 'Using computer-tagged linguistic features to describe L2 writing differences', *Journal of Second Language Writing*, 9(2), pp.123-145.

Guba, E. (1990) *The paradigm dialogue*. London: Sage.

HAMOUDA, A. (2012) 'An exploration of causes of Saudi students' reluctance to participate in the English language classroom', *International Journal of English Language Education*, 1(1), pp.1-34.

HAWKINS, M.R. (2004) *Language learning and teacher education: A sociocultural Approach*. Clevedon: Multilingual Matters.

HAYES, C. (2009) 'Student Motivation, Blended Learning & an iPod Project in Tertiary Japanese Language Teaching at ANU', *e-FLT: Electronic Journal of Foreign Language Teaching*, 6 [Supplement], pp.230-244.

HEIGHAM, J. and CROKER, R.A. (2009) *Qualitative research in applied linguistics: A practical introduction*. London: Palgrave Macmillan.



- HENRI F. (1992) 'Computer Conferencing and Content Analysis', in: Kaye A.R. (Ed.) *Collaborative Learning through Computer Conferencing*. Berlin; Heidelberg: Springer, pp.117-136.
- HINKIN, T.R., TRACEY, J.B. and ENZ, C.A. (1997) 'Scale construction: Developing reliable and valid measurement instruments', *Journal of Hospitality & Tourism Research*, 21(1), pp.100-120.
- HIROMORI, T. (2009) 'A process model of L2 learners' motivation: From the perspectives of general tendency and individual differences', *System*, 37(2), pp.313-321.
- HOIC-BOZIC, N., MORNAR, V. and BOTICKI, I. (2009) 'A blended learning approach to course design and implementation', *IEEE transactions on education*, 52(1), pp.19-30.
- HOROWITZ, D. (1986) 'Process, Not Product: Less Than Meets the Eye', *TESOL Quarterly*, 20(1), pp.141-144.
- HUANG, Y. and HONG, Z. (2016) 'The effects of a flipped English classroom intervention on students' information and communication technology and English reading comprehension', *Educational Technology Research and Development*, 64(2), pp.175-193.
- HUBER, P. J. (1981) *Robust Statistics*. New York: John Wiley and Sons.
- HUFFMYER, J.L. and NEMERGUT, E.C. (2015) 'Test-Enhanced Learning in the Flipped Classroom', *Anesthesia & Analgesia*, 121(3), pp.589-590.
- HUGHES, H. (2012) 'Introduction to flipping the college classroom', *World Conference on Educational Multimedia, Hypermedia and Telecommunications*. Denver, Colorado: USA, 26-29 June, pp.2434-2438.
- HUNG, H. (2015) 'Flipping the classroom for English language learners to foster active learning', *Computer Assisted Language Learning*, 28(1), pp.81-96.

- HUSSEIN, G. (2011) 'The attitudes of undergraduate students towards motivation and technology in a foreign language classroom', *International Journal of Learning and Teaching*, 2(2), pp.14-24.
- HYLAND, K. (2003) 'Genre-based pedagogies: A social response to process', *Journal of Second Language Writing*, 12(1), pp.17-29.
- HYLAND, K. (2009). *Teaching and researching writing*. Harlow: Longman.
- HYLAND, K. and HYLAND, F. (2006). *Feedback in Second Language Writing: Contexts and Issues*. Cambridge: Cambridge University Press.
- HUTCHINGS, M. and QUINNEY, A. (2015) 'The flipped classroom, disruptive pedagogies, enabling technologies and wicked problems: Responding to the bomb in the basement', *Electronic Journal of e-Learning*, 13(2), pp.106-119.
- ILTER, B.G. (2009) 'Effect of technology on motivation in EFL classrooms', *Turkish Online Journal of Distance Education*, 10(4), pp.136-158.
- ISAAC, S. and MICHAEL, W.B. (1971) *Handbook in research and evaluation*. San Diego: Robert R. Knapp.
- JAVID, C.Z., FAROOQ, U. and GULZAR, M.A. (2012) 'Saudi English-major undergraduates and English Teachers' perceptions regarding effective ELT in SA: A Comparative Study', *European Journal of Scientific Research*, 85(1), pp.55-70.
- JIUGEN, Y., RUONAN, X. and WENTING, Z. (2014) 'Essence of flipped classroom teaching model and influence on traditional teaching', in: *IEEE Workshop on Electronics, Computer and Applications*. IEEE, May, pp.362-365.
- JONES, B.D., LLACER-ARRASTIA, S. and NEWBILL, P.B. (2009) 'Motivating foreign language students using self-determination theory', *Innovation in Language Learning and Teaching*, 3(2), pp.171-189.

- JONES, C., RAMANAU, R., CROSS, S. and HEALING, G. (2010) 'Net generation or Digital Natives: Is there a distinct new generation entering university?' *Computers & Education*, 54(3), pp.722-732.
- KAY, J. (2001) 'Learner control', *User Modeling and User-adapted Interaction*, 11(1), pp.111-127.
- KHAN, I.A. (2011) 'Learning difficulties in English: Diagnosis and pedagogy in SA', *Educational Research*, 2(7), pp.1248-1257.
- KHANSIR, A.A. (2012) 'The role of process and product approaches to the teaching of writing', *Language in India*, 12(7), p.280.
- KEBLAWI, F. (2006) 'A review of language learning motivation theories', *Jameea*, (12), pp.23-57.
- KIM, M.K., KIM, S.M., KHERA, O. and GETMAN, J. (2014) 'The experience of three flipped classrooms in an urban university: An exploration of design principles', *The Internet and Higher Education*, 22, pp.37-50.
- KINZIE, M.B. (1990) 'Requirements and benefits of effective interactive instruction: Learner control, self-regulation, and continuing motivation', *Educational Technology Research and Development*, 38(1), pp.5-21.
- KLIMOVAL, B.F. (2011) 'Blended learning in the teaching of foreign languages', in: I. Semradova et al., *Reflections on the exploitation of a virtual study environment*. Hradec Kralove: Milos Vognar Publishing House, pp.63-75.
- KROLL, B. (1990). *Second language writing: Research insights for the classroom*. Cambridge: Cambridge University Press.
- LAI, C. and GU, M. (2011) 'Self-regulated out-of-class language learning with technology', *Computer Assisted Language Learning*, 24(4), pp.317-335.
- LALANDE, J.F. (1982) 'Reducing Composition Errors: An Experiment', *The Modern Language Journal*, 66(2), pp.140-149.

- LAMY, M. and HAMPEL, R. (2007) *Online communication in language learning and teaching*. Basingstoke: Palgrave Macmillan.
- LANTOLF, J.P. and LANTOLF, J.P. (2000) *Socio cultural theory and second language learning*. Oxford: Oxford University Press.
- LARSON-HALL, J. (2015) *A guide to doing statistics in second language research using SPSS and R*. Routledge.
- LINCOLN, Y.S. and GUBA, E.G. (1985) *Naturalistic Inquiry*. Sage.
- LITON, H. A. (2012) 'Developing EFL Teaching and Learning Practices in Saudi Colleges: A Review' [online submission], *International Journal of Instruction*, 5(2), pp.129-152.
- LITTLEJOHN, A. and PEGLER, C. (2007) *Preparing for blended e-learning*. Routledge.
- LIU, T. and CHU, Y. (2010) 'Using ubiquitous games in an English listening and speaking course: Impact on learning outcomes and motivation', *Computers & Education*, 55(2), pp.630-643.
- LONG, M.H. and PORTER, P.A. (1985) 'Group work, interlanguage talk, and second language acquisition', *TESOL Quarterly*, pp.207-228.
- LÓPEZ-PÉREZ, M.V., PÉREZ-LÓPEZ, M.C. and RODRÍGUEZ-ARIZA, L. (2011) 'Blended learning in higher education: Students' perceptions and their relation to outcomes', *Computers & Education*, 56(3), pp.818-826.
- MACKENZIE, N. and KNIPE, S. (2006) 'Research dilemmas: Paradigms, methods and methodology', *Issues in Educational Research*, 16(2), pp.193-205.
- MAKHDOOM, N., KHOSHHAL, K. I., ALGAIDI, S., HEISSAM, K. and ZOLALY, M. A. (2013) 'Blended learning' as an effective teaching and learning strategy in clinical medicine: A comparative cross-sectional university-based study', *Journal of Taibah University Medical Sciences*, 8(1), pp.12-17.

- MARSHALL, M.N. (1996) 'Sampling for qualitative research', *Family Practice*, 13(6), pp.522-525.
- MASON, G.S., SHUMAN, T.R. and COOK, K.E. (2013) 'Comparing the effectiveness of an inverted classroom to a traditional classroom in an upper-division engineering course', *IEEE Transactions on Education*, 56(4), pp.430-435.
- MAXSON, K. and SZANISZLO, Z. (2015) 'An Introduction to the Flipped Classroom', *PRIMUS*, 25(8), pp.597-599.
- McCONVILLE, S. A. and LANE, A. M. (2006). 'Using on-line video clips to enhance self-efficacy toward dealing with difficult situations among nursing students'. *Nurse Education Today*, 26(3), 200-208.
- MCGOVERN, J. and ENGLISH-TEACHING INFORMATION CENTRE LONDON (1983) *Video applications in English language teaching*. Oxford: Pergamon Press in association with the British Council.
- MCLACHLAN, S. and HAGGER, M.S. (2010) 'Effects of an autonomy-supportive intervention on tutor behaviors in a higher education context', *Teaching and Teacher Education*, 26(5), pp.1204-1210.
- MEHRING, J. (2016) 'Present Research on the Flipped Classroom and Potential Tools for the EFL Classroom', *Computers in the Schools*, 33(1), pp.1-10.
- MERTENS, D.M. (2014) *Research and evaluation in education and psychology: Integrating diversity with quantitative, qualitative, and mixed methods*. London: Sage.
- MILES, M.B., HUBERMAN, A.M. and SALDAÑA, J. (2013) *Qualitative data analysis: A methods sourcebook*. London: SAGE.
- MILMAN, N.B. (2012) 'The flipped classroom strategy: What is it and how can it best be used?' *Distance Learning*, 9(3), p.85.
- MIYAZOE, T. and ANDERSON, T. (2010) 'Learning outcomes and students' perceptions of online writing: Simultaneous implementation of a forum, blog, and wiki in an EFL blended learning setting', *System*, 38(2), pp.185-199.

- MOFFETT, J. (2015) 'Twelve tips for "flipping" the classroom', *Medical Teacher*, 37(4), pp.331-336.
- MOK, H.N. (2014) 'Teaching tip: The flipped classroom', *Journal of Information Systems Education*, 25(1), p.7.
- MORA-FLORES, E. (2008) *Writing instruction for English learners: A focus on genre*. London: SAGE.
- MOSKOVSKY, C. and ALRABAI, F. (2009) 'Intrinsic motivation in Saudi learners of English as a foreign language', *The Open Applied Linguistics Journal*, 2(1), pp.1-10.
- NEUMEIER, P. (2005) 'A closer look at blended learning-parameters for designing a blended learning environment for language teaching and learning', *ReCALL*, 17(02), pp.163-178.
- NICAISE, V., COGÉRINO, G., BOIS, J. and AMOROSE, A.J. (2006) 'Students' perceptions of teacher feedback and physical competence in physical education classes: Gender effects', *Journal of Teaching in Physical Education*, 25(1), pp.36-57.
- NIEMIEC, C.P. and RYAN, R.M. (2009) 'Autonomy, competence, and relatedness in the classroom Applying self-determination theory to educational practice', *Theory and Research in Education*, 7(2), pp.133-144.
- NOELS, K.A. (2001) 'Learning Spanish as a second language: Learners' orientations and perceptions of their teachers' communication style', *Language Learning*, 51(1), pp.107-144.
- NOELS, K.A., CLÉMENT, R. and PELLETIER, L.G. (1999) 'Perceptions of teachers' communicative style and students' intrinsic and extrinsic motivation', *The Modern Language Journal*, 83(1), pp.23-34.
- NOELS, K.A., PELLETIER, L.G., CLÉMENT, R. and VALLERAND, R.J. (2000) 'Why are you learning a second language? Motivational orientations and self-determination theory', *Language Learning*, 50(1), pp.57-85.

- O'BYRNE, W.I. and PYTASH, K.E. (2015) 'Hybrid and Blended Learning', *Journal of Adolescent & Adult Literacy*, 59(2), pp.137-140.
- O'REILLY, E.N. (2014) 'Correlations among Perceived Autonomy Support, Intrinsic Motivation, and Learning Outcomes in an Intensive Foreign Language Program', *Theory and Practice in Language Studies*, 4(7), p.1313.
- OLIVER, M. and TRIGWELL, K. (2005) 'Can 'blended learning' be redeemed?' *E-learning and Digital Media*, 2(1), pp.17-26.
- ONWUEGBUZIE, A.J. and LEECH, N.L. (2005) 'On becoming a pragmatic researcher: The importance of combining quantitative and qualitative research methodologies', *International Journal of Social Research Methodology*, 8(5), pp.375-387.
- ORAIF, I. M. (2016) 'The Right Approach in Practice: A Discussion of the Applicability of EFL Writing Practices in a Saudi Context', *English Language Teaching*, 9(7), pp.97-102.
- OROUJLOU, N. and VAHEDI, M. (2011) 'Motivation, attitude, and language learning'. *Procedia - Social and Behavioral Sciences*, 29, pp.994-1000.
- OXFORD, R. and SHEARIN, J. (1994) 'Language learning motivation: Expanding the theoretical framework', *The Modern Language Journal*, 78(1), pp.12-28.
- PAE, T. (2008) 'Second Language Orientation and Self-Determination Theory: A Structural Analysis of the Factors Affecting Second Language Achievement', *Journal of Language and Social Psychology*, 27(1), pp.5-27.
- PATRICK, H. and WILLIAMS, G. C. (2012) 'Self-determination theory: its application to health behavior and complementarity with motivational interviewing', *International Journal of Behavioral Nutrition and Physical Activity*, 9(1), p.18.
- PLATT, E. and BROOKS, F.B. (2002) 'Task engagement: A turning point in foreign language development', *Language Learning*, 52(2), pp.365-400.

PUNCH, K.F. (2009) *Introduction to research methods in education*. London: SAGE.

QENAEY, Y.A. (2014) *The effects and usefulness of blending asynchronous online discussion with face-to-face classes on students' reading comprehension, participation and learning at first year of secondary school in SA.* , Ph.D., The University of Sydney.

RAIMES, A. (1983) *Techniques in teaching writing*. Oxford; New York: Oxford University Press.

REEVE, J. (1998) 'Autonomy support as an interpersonal motivating style: Is it teachable?', *Contemporary Educational Psychology*, 23(3), pp.312-330.

REEVE, J., JANG, H., HARDRE, P. and OMURA, M. (2002) 'Providing a rationale in an autonomy-supportive way as a strategy to motivate others during an uninteresting activity', *Motivation and Emotion*, 26(3), pp.183-207.

REEVES, T.C. and REEVES, P.M. (1997) 'Effective dimensions of interactive learning on the World Wide Web', *Web-based Instruction*, pp.59-66.

RIFAI, N.A. (2010). 'Attitude, motivation, and difficulties involved in learning the English language and factors that affect motivation in learning it'. *Procedia - Social and Behavioral Sciences*, 2(2), pp.5216-5227.

RODGERS, W.M., MARKLAND, D., SELZLER, A., MURRAY, T.C. and WILSON, P.M. (2014) 'Distinguishing Perceived Competence and Self-Efficacy: An Example from Exercise', *Research Quarterly for Exercise and Sport*, 85(4), pp.527-539.

RUEGG, R. (2015) 'The relative effects of peer and teacher feedback on improvement in EFL students' writing ability', *Linguistics and Education*, 29, pp.73-82.

RYAN, R.M. (2009) 'Self determination theory and wellbeing', *Social Psychology*, 84(822), p.848.



- RYAN, R.M. and DECI, E.L. (2000) 'Intrinsic and extrinsic motivations: Classic definitions and new directions', *Contemporary Educational Psychology*, 25(1), pp.54-67.
- RYAN, R. M. and DECI, E. L. (2008) 'A self-determination theory approach to psychotherapy: The motivational basis for effective change', *Canadian Psychology/Psychologie canadienne*, 49(3), p.186
- RYAN, R.M. and GROLNICK, W.S. (1986) 'Origins and pawns in the classroom: Self-report and projective assessments of individual differences in children's perceptions', *Journal of Personality and Social Psychology*, 50(3), p.550.
- RYAN, R. M. and PATRICK, H. (2009) 'Self-determination theory and physical', *Hellenic Journal of Psychology*, 6, pp.107-124.
- RYAN, R. M., PATRICK, H., DECI, E. L. and WILLIAMS, G. C. (2008) 'Facilitating health behaviour change and its maintenance: Interventions based on self-determination theory', *European Health Psychologist*, 10(1), pp.2-5.
- SAID, N.E.M., YUNUS, M., DORING, L.K., ASMI, A., AQILAH, F. and LI, L.K.S. (2013) 'Blogging to Enhance Writing Skills: A Survey of Students' Perception and Attitude', *Asian Social Science*, 9(16), p.95.
- SANPRASERT, N. (2010) 'The application of a course management system to enhance autonomy in learning English as a foreign language', *System*, 38(1), pp.109-123.
- SCHEGLOFF, E.A. (1993) 'Reflections on quantification in the study of conversation', *Research on Language and Social Interaction*, 26(1), pp.99-128.
- SCOTT, D. and MORRISON, M. (2005) *Key ideas in educational research*. New York: A&C Black.
- SHARMA, P. and BARRETT, B. (2011) *Blended learning: Using technology in and beyond the language classroom*. Oxford: Macmillan.

- SHARMA, P. and HANNAFIN, M.J. (2007) 'Scaffolding in technology-enhanced learning environments', *Interactive Learning Environments*, 15(1), pp.27-46.
- SHIH, M. (1986) 'Content-based approaches to teaching academic writing'. *TESOL Quarterly*, 20, pp.617-48.
- SHROFF, R.H., VOGEL, D.R., COOMBES, J. and LEE, F. (2007) 'Student e-learning intrinsic motivation: A qualitative analysis', *Communications of the Association for Information Systems*, 19(1), p.12.
- SIERENS, E., VANSTEENKISTE, M., GOOSSENS, L., SOENENS, B. and DOCHY, F. (2009) 'The synergistic relationship of perceived autonomy support and structure in the prediction of self-regulated learning', *British Journal of Educational Psychology*, 79(1), pp.57-68.
- SILVA, M. N., VIEIRA, P. N., COUTINHO, S. R., MINDERICO, C. S., MATOS, M. G., SARDINHA, L. B. and TEIXEIRA, P. J. (2010) 'Using self-determination theory to promote physical activity and weight control: A randomized controlled trial in women', *Journal of Behavioral Medicine*, 33(2), pp.110-122.
- SILVERMAN, D. (2016) *Qualitative research*. London: SAGE.
- SINCLAIR, B. (2016) 'Learner autonomy', *IATEFL Newsletter*, 3, p.15.
- SLOMANSON, W.R. (2014) 'Blended learning: a flipped classroom experiment', *Journal of Legal Education*, 64(1), p.93.
- SO, L. and LEE, C.H. (2013) 'A Case Study on the Effects of an L2 Writing Instructional Model for Blended Learning in Higher Education', *Turkish Online Journal of Educational Technology - TOJET*, 12(4), pp.1-10.
- STANDAGE, M., DUDA, J.L. and NTOUMANIS, N. (2005) 'A test of self-determination theory in school physical education', *British Journal of Educational Psychology*, 75(3), pp.411-433.

- STEFANOU, C. and RÉVÉSZ, A. (2015) 'Direct Written Corrective Feedback, Learner Differences, and the Acquisition of Second Language Article Use for Generic and Specific Plural Reference', *The Modern Language Journal*, 99(2), pp.263-282.
- STEFANOU, C.R., PERENCEVICH, K.C., DICINTIO, M. and TURNER, J.C. (2004) 'Supporting Autonomy in the Classroom: Ways Teachers Encourage Student Decision Making and Ownership', *Educational Psychologist*, 39(2), pp.97-110.
- STORCH, N. (2005) 'Collaborative writing: Product, process, and students' reflections', *Journal of Second Language Writing*, 14(3), pp.153-173.
- STRAYER, J.F. (2012) 'How learning in an inverted classroom influences cooperation, innovation and task orientation', *Learning Environments Research*, 15(2), pp.171-193.
- SUCAROMANA, U. (2013) 'The Effects of Blended Learning on the Intrinsic Motivation of Thai EFL Students', *English Language Teaching*, 6(5), p.141.
- SVALBERG, A.M. (2009) 'Engagement with language: Interrogating a construct', *Language Awareness*, 18(3-4), pp.242-258.
- SWEET, M. and MICHAELSEN, L.K. (2012) *Team-based learning in the social sciences and humanities: Group work that works to generate critical thinking and engagement*. Stylus Publishing, LLC.
- TEDDLIE, C. and TASHAKKORI, A. (2009) *Foundations of mixed methods research: Integrating quantitative and qualitative approaches in the social and behavioral sciences*. Thousand Oaks: Sage Publications.
- THOMAS, G. (2013). *How to do your research project: A guide for students in education and applied social sciences* (2nd ed.). London: SAGE Publications Ltd.
- THORNE, K. (2003) *Blended learning: How to integrate online & traditional learning*. Kogan Page Publishers.

- TOUCHTON, M. (2015) 'Flipping the Classroom and Student Performance in Advanced Statistics: Evidence from a Quasi-Experiment', *Journal of Political Science Education*, 11(1), pp.28-44.
- TRAXLER, J. and KUKULSKA-HULME, A. (2005) *Mobile Learning in Developing Countries*. Vancouver, Canada: Commonwealth of Learning.
- TRIBBLE, C. (1996) *Writing*. Oxford: Oxford University Press.
- TURNER III, D.W. (2010) 'Qualitative interview design: A practical guide for novice investigators', *The Qualitative Report*, 15(3), pp.754-760.
- TURUK, M.C. (2008) 'The relevance and implications of Vygotsky's sociocultural theory in the second language classroom', *ARECLS*, 5, pp.244-262.
- UNRUH, T., PETERS, M.L. and WILLIS, J. (2016) 'Flip This Classroom: A Comparative Study', *Computers in the Schools*, 33(1), pp.38-58.
- UR RAHMAN, M.M. and ALHAISONI, E. (2013) 'Teaching English in SA: Prospects and challenges', *Academic Research International*, 4(1), p.112.
- UZUNBOYLU, H. and KARAGOZLU, D. (2015) 'Flipped classroom: A review of recent literature', *World Journal on Educational Technology*, 7(2), pp.142-147.
- VAISMORADI, M., TURUNEN, H. and BONDAS, T. (2013) 'Content analysis and thematic analysis: Implications for conducting a qualitative descriptive study', *Nursing & Health Sciences*, 15(3), pp.398-405.
- VALLERAND, R. J., PELLETIER, L. G., BLAIS, M. R., BRIERE, N. M., SENEAL, C., and VELLIERES, E. F. (1992) 'The academic motivation scale: a measure of intrinsic, extrinsic, and a motivation in education', *educational and psychological measurement*, 52(4), pp.1003-1017.
- VAN LIER, L. (1996) *Interaction in the language curriculum: Awareness, autonomy, and authenticity*. London: Longman.

- VANSTEENKISTE, M., LENS, W. and DECI, E. L. (2006) 'Intrinsic versus extrinsic goal contents in self-determination theory: Another look at the quality of academic motivation', *Educational Psychologist*, 41(1), pp.19-31.
- VYGOTSKY, L.S. (1980) *Mind in society: The development of higher psychological processes*. Cambridge, Mass; London: Harvard University Press.
- VYGOTSKY, L.S. and COLE, M. (1978) *Mind in society: The development of higher psychological processes*. Cambridge, Mass; London: Harvard University Press.
- WANG, B. (2009) 'Motivation and Language Learning', *Asian Social Science*, 5(1), 98.
- WANKEL, C. and BLESSINGER, P. (Eds.) (2013) *Increasing student engagement and retention in e-learning environments: Web 2.0 and blended learning technologies*. London: Emerald Group Publishing Limited.
- WARSCHAUER, M. (1997) 'Mediated collaborative learning: Theory and practice', *The Modern Language Journal*, 81(4), pp.470-481.
- WEIR, C.J. (2004) *Language testing and validation: An evidence-based approach*. Basingstoke: Palgrave.
- WERTSCH, J.V. (1991) *A sociocultural approach to socially shared cognition*. In L. B. Resnick, J. M. Levine, & S. D. Teasley (Eds.), *Perspectives on socially shared cognition* (pp. 85–100). Washington, DC: American Psychological Association.
- WHISLER, J.S. (1991) 'The impact of teacher relationships and interactions on self-development and motivation', *The Journal of Experimental Education*, 60(1), pp.15-30.
- WIGFIELD, A. and GUTHRIE, J.T. (2000) 'Engagement and motivation in reading', *Handbook of Reading Research*, 3, pp.403-422.
- WILLIAMS, G. C. and DECI, E. L. (1996) 'Internalization of biopsychosocial values by medical students: A test of self-determination theory', *Journal of Personality and Social Psychology*, 70, pp.767-779.

WILLIAMS, G. C., GROW, V. M., FREEDMAN, Z. R., RYAN, R. M. and DECI, E. L. (1996) 'Motivational predictors of weight loss and weight-loss maintenance', *Journal of Personality and Social Psychology*, 70(1), p.115.

WINER, B. (1990) 'History of motivational research in education', *Journal of educational Psychology*, 82(4), p.616.

WU, X. (2003) 'IM and young language learners: The impact of the classroom environment', *System*, 31(4), pp.501-517.

WU, W.V., YEN, L.L. and MAREK, M. (2011) 'Using online EFL interaction to increase confidence, motivation, and ability', *Journal of Educational Technology & Society*, 14(3), pp.118-129.

YANG, M., BADGER, R. and YU, Z. (2006) 'A comparative study of peer and teacher feedback in a Chinese EFL writing class', *Journal of Second Language Writing*, 15(3), pp.179-200.

YIN, R.K. (2009) *Case study research: Design and methods*. Thousand Oaks, Calif.: Sage Publications.

YUSHAU, B. (2006) 'The effects of blended e-learning on mathematics and computer attitudes in pre-calculus algebra', *The Mathematics Enthusiast*, 3(2), pp.176-183.

ZHU, E. (1998) 'Learning and mentoring: Electronic discussion in a distance learning course', *Electronic collaborators: Learner-centered technologies for literacy, apprenticeship, and discourse*, 233-259.