



## Durham E-Theses

---

# *A STUDY ON THE EFFECTS OF BLOGS IN EFL PROCESS/GENRE-BASED WRITING CLASSROOMS AND ITS RELATIONSHIP WITH COLLEGE STUDENTS' WRITING STRATEGIES*

CHANG, WEI-YU

### How to cite:

---

CHANG, WEI-YU (2016) *A STUDY ON THE EFFECTS OF BLOGS IN EFL PROCESS/GENRE-BASED WRITING CLASSROOMS AND ITS RELATIONSHIP WITH COLLEGE STUDENTS' WRITING STRATEGIES*, Durham theses, Durham University. Available at Durham E-Theses Online: <http://etheses.dur.ac.uk/11829/>

### Use policy

---

The full-text may be used and/or reproduced, and given to third parties in any format or medium, without prior permission or charge, for personal research or study, educational, or not-for-profit purposes provided that:

- a full bibliographic reference is made to the original source
- a [link](#) is made to the metadata record in Durham E-Theses
- the full-text is not changed in any way

The full-text must not be sold in any format or medium without the formal permission of the copyright holders.

Please consult the [full Durham E-Theses policy](#) for further details.

---

Academic Support Office, Durham University, University Office, Old Elvet, Durham DH1 3HP  
e-mail: [e-theses.admin@dur.ac.uk](mailto:e-theses.admin@dur.ac.uk) Tel: +44 0191 334 6107  
<http://etheses.dur.ac.uk>



UNIVERSITY OF DURHAM

SCHOOL OF EDUCATION

A STUDY ON THE EFFECTS OF BLOGS IN EFL PROCESS/GENRE-BASED WRITING  
CLASSROOMS AND ITS RELATIONSHIP WITH COLLEGE STUDENTS' WRITING  
STRATEGIES

Submitted by

WEI-YU CHANG

A thesis submitted to the University of Durham in fulfilment of the  
requirements for the Degree of Doctor of Philosophy in Technology Enhanced  
Learning (Education)

October, 2016

## **ABSTRACT**

The purposes of this quasi-experimental study were to examine the effects of the integration of the process/genre approach (hereafter cited as PGA) and blog on EFL college students' writing development, and the changes of the use of writing strategies. A total of thirty-four second-year English major undergraduates who were randomly labelled as the control and experimental groups took part in this eight-week programme. An English writing essay and the questionnaires were completed in both the pre-test and post-test to contribute to accumulating quantitative data, while the observations and interviews provided qualitative data. The quantitative data was computed by applying IBM SPSS statistics to find the differences as well as the correlations, while the qualitative data was interpreted by myself to explore possible reasons and explanations to support the quantitative outcomes and to answer the research questions.

The difference test revealed that there were statistically significant differences on the participants' English writing performances in both groups. There were some statistically significant differences in terms of the students' perceptions of the PGA in both groups, as well as perceptions of the blog writing in the experimental group. However, neither the control group nor the experimental group showed significant differences in terms of the use of writing strategies after the treatments. The correlation tests also indicated significant different correlations between the two groups in which the results in the experimental group had greater significances.

In terms of the qualitative research findings, several obstacles had been found to be considered before conducting this type of class. However, encouraging feedback regarding the instruction had been indicated by the students to explain how they perceived the application of the PGA as well as blogs in their writing classrooms, and how the instruction developed their English writing competence.

*Keywords: college students, EFL writing, blog, process/genre approach, writing strategies*

## TABLE OF CONTENTS

<b>ABSTRACT .....</b>	<b>i</b>
<b>TABLE OF CONTENTS.....</b>	<b>ii</b>
<b>LIST OF TABLES.....</b>	<b>viii</b>
<b>LIST OF FIGURES .....</b>	<b>xi</b>
<b>LIST OF ABBREVIATIONS .....</b>	<b>xii</b>
<b>DECLARATION .....</b>	<b>xiii</b>
<b>STATEMENT OF COPYRIGHT.....</b>	<b>xiii</b>
<b>ACKNOWLEDGEMENTS .....</b>	<b>xiv</b>
<b>DEDICATION.....</b>	<b>xv</b>
<b>CHAPTER ONE: INTRODUCTION .....</b>	<b>1</b>
<b>1.1 Backgrounds and Motivations of this Study.....</b>	<b>1</b>
<b>1.2 Purposes of this Study and Research Questions .....</b>	<b>3</b>
<b>1.3 Significance, Originality, and Contribution of this Study to the Field.....</b>	<b>5</b>
<b>1.4 Definitions of the Key Terms.....</b>	<b>7</b>
<b>1.5 Structures of the Thesis.....</b>	<b>7</b>
<b>CHAPTER TWO: LITERATURE REVIEW .....</b>	<b>9</b>
<b>2.1 History and Theory of CALL in Language Education .....</b>	<b>9</b>
2.1.1 The Introduction of CALL .....	9
2.1.2 The Development of CALL in Language Education .....	10
2.1.3 The Utilisation of Computer Technology in Language Classrooms.....	15
2.1.4 Technology-Enhanced Language Learning in Taiwan .....	18
2.1.5 Advantages and Disadvantages of CALL in Language Education .....	20
2.1.6 Concluding Remark for History and Theory of CALL in Language Education .....	23
<b>2.2 Teaching Approaches and Learning strategies in Writing Education.....</b>	<b>24</b>
2.2.1 Teaching Approaches in Writing Classrooms.....	25
2.2.1.1 Product Approach .....	26
2.2.1.2 Process Approach.....	27
2.2.1.3 Genre Approach .....	30
2.2.1.4 Process/Genre Approach.....	34
2.2.2 Learning Strategies in Language Classrooms .....	38
2.2.2.1 Definitions of Learning Strategies .....	39
2.2.2.2 Cognitive Strategies.....	40
2.2.2.3 Metacognitive Strategies.....	40
2.2.2.4 Affective Strategies .....	41
2.2.2.5 Social Strategies .....	42
2.2.2.6 Oxford’s Strategy Inventory for Language Learning .....	42

2.2.2.7 Empirical Research on Learning Strategies in Writing Classrooms.....	44
2.2.3 Concluding Remark for Teaching Approaches and Learning Strategies in Writing Education .....	47
<b>2.3 Blogs in Writing Classrooms .....</b>	<b>47</b>
2.3.1 Computer Technology in Writing Education .....	47
2.3.2 The Nature of Blogs .....	51
2.3.3 The Use of Blogs in Writing Classrooms.....	55
2.3.4 Empirical Research on the Use of Blogs in Writing Classrooms .....	57
2.3.5 Concluding Remark for Blogs in Writing Classrooms.....	64
<b>2.4 Chapter Summary .....</b>	<b>64</b>
<b>CHAPTER THREE: METHODOLOGY .....</b>	<b>66</b>
<b>3.1 Research Design .....</b>	<b>66</b>
<b>3.2 Introduction of the Research Methods in this Study.....</b>	<b>68</b>
<b>3.3 Sampling Technique and the Participants .....</b>	<b>71</b>
3.3.1 Sampling Technique .....	71
3.3.2 The Participants.....	72
<b>3.4 Research Instruments .....</b>	<b>74</b>
3.4.1 English Writing Samples.....	74
3.4.2 Questionnaires.....	75
3.4.2.1 Questionnaire for Process/Genre Approach.....	77
3.4.2.2 Questionnaire for Writing Strategies.....	77
3.4.2.3 Questionnaire for Blog Writing .....	79
3.4.3 Observations .....	80
3.4.4 Interviews .....	82
<b>3.5 Data Collection .....</b>	<b>83</b>
3.5.1 The Blog.....	83
3.5.2 Materials.....	85
3.5.3 The Course .....	86
3.5.4 Procedures .....	89
<b>3.6 Data Analysis.....</b>	<b>92</b>
3.6.1 Quantitative Data Analysis.....	92
3.6.2 Qualitative Data Analysis .....	95
<b>3.7 Research Validity and Reliability.....</b>	<b>97</b>
<b>3.8 Trustworthiness .....</b>	<b>99</b>
3.8.1 Credibility.....	99
3.8.2 Transferability .....	100
3.8.3 Dependability.....	101
3.8.4 Confirmability.....	101
<b>3.9 Research Ethics .....</b>	<b>102</b>
<b>3.10 Chapter Summary .....</b>	<b>103</b>

<b>CHAPTER FOUR: PILOT STUDY.....</b>	<b>106</b>
<b>4.1 Back Translation.....</b>	<b>106</b>
<b>4.2 Expert Judgement .....</b>	<b>107</b>
4.2.1 Questionnaires.....	107
4.2.2 Observational Checklist .....	108
4.2.3 Interview Questions .....	109
<b>4.3 The Statistical Analysis on the Questionnaires .....</b>	<b>110</b>
4.3.1 Factor Analysis on the Questionnaires .....	111
4.3.1.1 Questionnaire for Process/Genre Approach.....	114
4.3.1.2 Questionnaire for Writing Strategies.....	117
4.3.1.3 Questionnaire for Blog Writing .....	121
4.3.2 Test-Retest Reliability and Internal Consistency Reliability for the Questionnaires.....	125
4.3.2.1 Questionnaire for Process/Genre Approach.....	128
4.3.2.2 Questionnaire for Writing Strategies.....	129
4.3.2.3 Questionnaire for Blog Writing .....	131
<b>4.4 Interviews .....</b>	<b>134</b>
<b>4.5 Chapter Summary .....</b>	<b>135</b>
<b>CHAPTER FIVE: QUANTITATIVE DATA ANALYSIS AND RESULTS.....</b>	<b>137</b>
<b>5.1 The Inter-Rater Reliability for the Writing Scores between the Two Groups.....</b>	<b>139</b>
<b>5.2 Independent <i>t</i>-Test for the Participants’ Initial English Writing Proficiency between the Two Groups .....</b>	<b>139</b>
5.2.1 The Descriptive Statistics for the Participants’ Initial English Writing Proficiency between the Two Groups.....	139
5.2.2 Levene’s Test for the Participants’ Initial English Writing Proficiency between the Two Groups ....	140
<b>5.3 Paired-Sample <i>t</i>-Test for the Participants’ Overall English Writing Performances between the Two Groups .....</b>	<b>141</b>
5.3.1 The Descriptive Statistics for the Participants’ Overall English Writing Performances between the Two Groups .....	141
5.3.2 The Inferential Statistics for the Participants’ Overall English Writing Performances between the Two Groups .....	141
<b>5.4 Paired-Sample <i>t</i>-Test for the Participants’ Sub-Componential English Writing Performances between the Two Groups .....</b>	<b>142</b>
5.4.1 The Descriptive Statistics for the Participants’ Sub-Componential English Writing Performances between the Two Groups.....	142
5.4.2 The Inferential Statistics for the Participants’ Sub-Componential English Writing Performances between the Two Groups.....	143
<b>5.5 Mann-Whitney <i>U</i>-Test for the QPGA and QWS between the Two Groups.....</b>	<b>145</b>
5.5.1 Mann-Whitney <i>U</i> -Test for the QPGA and QWS in the Pre-Test between the Two Groups .....	145
5.5.1.1 Mann-Whitney <i>U</i> -Test for the QPGA in the Pre-Test between the Two Groups.....	145
5.5.1.2 Mann-Whitney <i>U</i> -Test for the QWS in the Pre-Test between the Two Groups .....	145

5.5.2 Mann-Whitney <i>U</i> -Test for the QPGA and QWS in the Post-Test between the Two Groups .....	146
5.5.2.1 Mann-Whitney <i>U</i> -Test for the QPGA in the Post-Test between the Two Groups .....	146
5.5.2.2 Mann-Whitney <i>U</i> -Test for the QWS in the Post-Test between the Two Groups.....	147
<b>5.6 Wilcoxon Signed-Rank Test for the QPGA, QWS, and QBW between the Two Groups</b>	
.....	<b>147</b>
5.6.1 Wilcoxon Signed-Rank Test for the QPGA between the Two Groups.....	147
5.6.2 Wilcoxon Signed-Rank Test for the QWS between the Two Groups .....	149
5.6.3 Wilcoxon Signed-Rank Test for the QBW in the Experimental Group .....	149
<b>5.7 Spearman’s Correlation Coefficient for the QPGA, QWS, and QBW after the</b>	
<b>Treatments in the Two Groups .....</b>	<b>150</b>
5.7.1 Spearman’s Correlation Coefficient for the QPGA after the Treatments in the Two Groups .....	151
5.7.2 Spearman’s Correlation Coefficient for the QWS after the Treatments in the Two Groups.....	153
5.7.3 Spearman’s Correlation Coefficient for the QBW after the Treatments in the Experimental Group	
.....	155
<b>5.8 Chapter Summary .....</b>	<b>156</b>
<b>CHAPTER SIX: QUALITATIVE DATA ANALYSIS AND RESULTS.....</b>	<b>157</b>
<b>6.1 Results of the Observational Data .....</b>	<b>157</b>
6.1.1 Inactive Peers’ Discussion .....	157
6.1.2 Inconvenience of Blogs .....	158
6.1.3 Unconstructive Feedback .....	159
6.1.4 Inactive Class Participation .....	160
6.1.5 Lengthy Instruction.....	161
6.1.6 Difficulty in Marking Essays on Blogs.....	162
<b>6.2 Results of the Interview Data.....</b>	<b>163</b>
6.2.1 Perceptions of the Process/Genre Approach.....	163
6.2.1.1 Teacher’s Facilitation.....	163
6.2.1.2 Learning with Peers .....	167
6.2.1.3 Understanding for Writing.....	169
6.2.1.4 Model Article Enhanced Writing .....	172
6.2.2 Perceptions of the Use of the Writing Strategies .....	174
6.2.2.1 Cognition.....	175
6.2.2.2 Known-Knowledge Using .....	177
6.2.2.3 Pressure Reducing .....	179
6.2.2.4 Self-Enhancement .....	181
6.2.3 Perceptions of the Blog Writing .....	185
6.2.3.1 Blog vs. Paper-Pencil Writing .....	185
6.2.3.2 Blog Enhanced Writing .....	186
6.2.3.3 Blog for Socialisation .....	188
6.2.3.4 Attitudes toward Blog Writing .....	190
6.2.3.5 Affections toward Blog Writing.....	191
<b>6.3 Chapter Summary .....</b>	<b>193</b>



<b>CHAPTER SEVEN: RESEARCH DISCUSSIONS AND FINDINGS .....</b>	<b>194</b>
<b>7.1 Discussions and Findings for Research Question One .....</b>	<b>194</b>
7.1.1 Thematic Discussions on the Research Findings .....	194
7.1.1.1 Model Paper Analysis and Demonstration.....	195
7.1.1.2 Group Discussion and Imitation .....	197
7.1.1.3 Individual Imitation and Writing .....	198
7.1.1.4 Whole-Class Comment and Modification .....	199
7.1.1.5 Final Drafting and Publication.....	201
7.1.2 Concluding Remark for Research Question One .....	202
<b>7.2 Discussions and Findings for Research Question Two .....</b>	<b>204</b>
7.2.1 Thematic Discussions on the Research Findings .....	205
7.2.1.1 Teacher’s Facilitation.....	206
7.2.1.2 Learning with Peers .....	208
7.2.1.3 Understanding for Writing.....	210
7.2.1.4 Model Article Enhanced Writing .....	212
7.2.2 Concluding Remark for Research Question Two .....	213
<b>7.3 Discussions and Findings for Research Question Three .....</b>	<b>216</b>
7.3.1 Thematic Discussions on the Research Findings .....	217
7.3.1.1 Cognition.....	218
7.3.1.2 Known-Knowledge Using .....	220
7.3.1.3 Pressure Reducing .....	222
7.3.1.4 Self-Enhancement .....	224
7.3.2 Concluding Remark for Research Question Three.....	225
<b>7.4 Discussions and Findings for Research Question Four .....</b>	<b>227</b>
7.4.1 Thematic Discussions on the Research Findings .....	227
7.4.1.1 Blog vs. Paper-Pencil Writing .....	228
7.4.1.2 Blog Enhanced Writing .....	230
7.4.1.3 Blog for Socialisation .....	232
7.4.1.4 Attitudes toward Blog Writing .....	234
7.4.1.5 Affections toward Blog Writing .....	236
7.4.2 Concluding Remark for Research Question Four.....	237
<b>7.5 Chapter Summary .....</b>	<b>239</b>
<b>CHAPTER EIGHT: CONCLUSIONS.....</b>	<b>241</b>
<b>8.1 Summary of this Study .....</b>	<b>241</b>
<b>8.2 Limitations of this Study .....</b>	<b>245</b>
<b>8.3 Pedagogical Implications.....</b>	<b>247</b>
<b>8.4 Suggestions for Future Research .....</b>	<b>251</b>
<b>8.5 Conclusion of this Study .....</b>	<b>253</b>
<b>REFERENCES .....</b>	<b>256</b>

<b>APPENDICES .....</b>	<b>276</b>
Appendix A. English as a Second Language Composition Profile .....	276
Appendix B. The Questionnaires .....	277
B.1. Mandarin Chinese Version .....	277
B.2. English Version .....	281
Appendix C. Observational Checklist .....	285
Appendix D. Interview Questions .....	287
D.1. Mandarin Chinese Version .....	287
D.2. English Version .....	288
Appendix E. Snapshot of the Tutor Blog (example) .....	290
Appendix F. Snapshot of the Learner Blog (example) .....	291
Appendix G. The Front Cover of the Textbook .....	292
Appendix H. Paper Handouts Employed in the Control Group .....	293
H.1. Global Warming .....	293
H.2. Low Birth Rate .....	294
Appendix I. Research Participation Consent Form .....	295
I.1. Mandarin Chinese Version .....	295
I.2. English Version .....	296
Appendix J. The Essay .....	297
Appendix K. Interview Consent Form .....	298
K.1. Mandarin Chinese Version .....	298
K.2. English Version .....	299
Appendix L. Ethical Approval Letter .....	300
Appendix M. Interview Transcripts .....	301

## LIST OF TABLES

Table 1. The Development of CALL.....	15
Table 2. A Comparison between the PCA and PDA.....	28
Table 3. A Comparison between the PCA and GRA.....	31
Table 4. The Quasi-Experimental Design: Pre-test and Post-test Design.....	67
Table 5. The Employed Quasi-Experimental Design: Pre-test and Post-test Design .....	67
Table 6. The Instructional Objectives and Contents in this Study .....	88
Table 7. The Employed Instruments and My Role in the Data Collection Process .	92
Table 8. The Criteria for the KMO Values .....	112
Table 9. The KMO and Bartlett's Test for the QPGA .....	114
Table 10. The Rotated Component Matrix for the QPGA.....	115
Table 11. The Total Variance Explained for the QPGA .....	117
Table 12. The KMO and Bartlett's Test for the QWS .....	118
Table 13. The Rotated Component Matrix for the QWS .....	119
Table 14. The Total Variance Explained for the QWS.....	121
Table 15. The KMO and Bartlett's Test for the QBW.....	122
Table 16. The Rotated Component Matrix for the QBW.....	123
Table 17. The Total Variance Explained for the QBW .....	125
Table 18. The Criteria for the Cronbach's $\alpha$ coefficients.....	127
Table 19. The Test-Retest Reliability for the QPGA (Individual Item) .....	128
Table 20. The Test-Retest Reliability for the QPGA (Subcategory) .....	129
Table 21. The Internal Consistency Reliability for the QPGA.....	129
Table 22. The Test-Retest Reliability for the QWS (Individual Item).....	130
Table 23. The Test-Retest Reliability for the QWS (Subcategory).....	131
Table 24. The Internal Consistency Reliability for the QWS .....	131

Table 25. The Test-Retest Reliability for the QBW (Individual Item) .....	132
Table 26. The Test-Retest Reliability for the QBW (Subcategory) .....	133
Table 27. The Internal Consistency Reliability for the QBW .....	133
Table 28. A Presentation of the RQs with the Employed Statistical Tools .....	137
Table 29. The Inter-Rater Reliability for the Writing Scores between the Two Groups .....	139
Table 30. The Descriptive Statistics for the Participants' Initial English Writing Proficiency between the Two Groups.....	140
Table 31. Levene's Test for the Participants' Initial English Writing Proficiency between the Two Groups.....	140
Table 32. The Descriptive Statistics for the Participants' Overall English Writing Performances between the Two Groups .....	141
Table 33. The Inferential Statistics for the Participants' Overall English Writing Performances between the Two Groups .....	142
Table 34. The Descriptive Statistics for the Participants' Sub-Componential English Writing Performances between the Two Groups.....	143
Table 35. The Inferential Statistics for the Participants' Sub-Componential English Writing Performances in the Control Group .....	144
Table 36. The Inferential Statistics for the Participants' Sub-Componential English Writing Performances in the Experimental Group .....	144
Table 37. Mann-Whitney <i>U</i> -Test for the QPGA in the Pre-Test between the Two Groups .....	145
Table 38. Mann-Whitney <i>U</i> -Test for the QWS in the Pre-Test between the Two Groups .....	146
Table 39. Mann-Whitney <i>U</i> -Test for the QPGA in the Post-Test between the Two Groups .....	146
Table 40. Mann-Whitney <i>U</i> -Test for the QWS in the Post-Test between the Two Groups .....	147
Table 41. Wilcoxon Signed-Rank Test for the QPGA in the Control Group .....	148
Table 42. Wilcoxon Signed-Rank Test for the QPGA in the Experimental Group .	148

Table 43. Wilcoxon Signed-Rank Test for the QWS in the Control Group.....	149
Table 44. Wilcoxon Signed-Rank Test for the QWS in the Experimental Group ..	149
Table 45. Wilcoxon Signed-Rank Test for the QBW in the Experimental Group ..	150
Table 46. Spearman’s Correlation Coefficient for the QPGA in the Control Group .....	151
Table 47. Spearman’s Correlation Coefficient for the QPGA in the Experimental Group.....	152
Table 48. Spearman’s Correlation Coefficient for the QWS in the Control Group .....	153
Table 49. Spearman’s Correlation Coefficient for the QWS in the Experimental Group.....	154
Table 50. Spearman’s Correlation Coefficient for the QBW in the Experimental Group.....	155
Table 51. Equivalence between the Proposed Strategies and Oxford’s Strategies .....	226

## LIST OF FIGURES

Figure 1. The Framework of the Research Purposes and Research Questions in this Study.....	5
Figure 2. Yearly Budget for IT Education in Taiwan from 2007 to 2016.....	19
Figure 3. The Framework of Section 2.2 .....	25
Figure 4. The Model of Process Approach .....	29
Figure 5. The Model of Genre Approach .....	32
Figure 6. The Model of Process/Genre Approach .....	35
Figure 7. Oxford’s Language Learning Strategy System .....	43
Figure 8. The Model of Community of Inquiry .....	53
Figure 9. The Triangulation of Data Collection in this Study .....	68
Figure 10. The Explanatory Sequential Design.....	70
Figure 11. The Employed Explanatory Sequential Design .....	71
Figure 12. The Flow Chart of Data Collection Process.....	105
Figure 13. The Scree Plot for the QPGA.....	116
Figure 14. The Scree Plot for the QWS .....	120
Figure 15. The Scree Plot for the QBW .....	124
Figure 16. The Flow Chart of the Pilot Study .....	136
Figure 17. The Instructional Procedures of the Integration of the PGA and Blog	204
Figure 18. The Interactive Model of the PGA.....	216
Figure 19. Blog Writing in the Col Model.....	239
Figure 20. A Circulated Cycle for the Integration of the PGA and Blog Writing ...	255

## **LIST OF ABBREVIATIONS**

CALL	Computer-Assisted Language Learning
CEEPT	Computerised Enhanced ESL Placement Test
CoI	Community of Inquiry
EFL	English as a Foreign Language
ESLCP	English as a Second Language Composition Profile
FL	Foreign Language
GEPT	General English Proficiency Test
GRA	Genre Approach
IELTS	International English Language Testing System
IT	Information Technology
KMO	Kaiser-Meyer-Olkin
L1	First Language
L2	Second Language
PCA	Process Approach
PDA	Product Approach
PGA	Process/Genre Approach
QBW	Questionnaire for Blog Writing
QPGA	Questionnaire for Process/Genre Approach
QWS	Questionnaire for Writing Strategies
RQ	Research Question
SILL	Strategy Inventory for Language Learning
TESOL	Teaching English to Speakers of Other Languages
TOEIC	Test of English for International Communication
WWW	World Wide Web

## **DECLARATION**

This thesis is my own work and has not been submitted in candidature at this or any other university.

## **STATEMENT OF COPYRIGHT**

© Wei-Yu Chang 2016

The copyright of this thesis rests with the author. No quotation from it should be published without author's prior written consent and information derived from it should be acknowledged.



## **ACKNOWLEDGEMENTS**

This thesis work could not be completed without many people's professional guidance, enthusiastic encouragement, and unconditional support. I would love to extend my heartfelt gratitude to:

Dr. Alan Walker-Gleaves and Dr. Prue Holmes, for supervising this study

Dr. Andrew Szanajda, for allowing me to conduct this study in the classes and proofreading this thesis

All the participants, for cooperating and participating

Professor Hui-Fang Shang, Dr. Hsueh-Chu Chen, Dr. Hsiu-Tzu Shen, and Dr. Yu-Wan Hung, for giving me suggestions while I was designing the research instruments

Dr. Ming-Che Lu and Miss Wan-Ting Lo, for guiding me the SPSS

Miss Ming-Fang Chiang, for examining the translation of the questionnaires as well as the interview transcripts

My friends in Taiwan and Durham, for encouraging me when I was downhearted

My family, for giving me endless love and unconditional support

Thank you very much to you all. My appreciation goes far beyond words.

## DEDICATION

Dedicated to my beloved family  
獻給我最摯愛的家人

*especially:*

*In memory of my great-grandmom & my dad, for giving me faith*

*To my mom, for giving me innumerable love*

*To my wife, for being aside with me at all times*

*To my son & the upcoming baby, for reminding me of being assiduous*

## **CHAPTER ONE: INTRODUCTION**

This chapter provides an overview of this work, including the backgrounds and motivations of this study that are presented in section 1.1. The purposes of this study and research questions are presented in section 1.2. The significance, originality, and contribution of this study are presented in section 1.3. Definitions of the key terms are presented in section 1.4, and the structures of the thesis are presented in section 1.5.

### **1.1 Backgrounds and Motivations of this Study**

According to a recent report conducted by Education First (2015), a private language training company whose data is widely used for academic, official, or business purposes, English is the primary international language, and fluency in this language is regarded as a fundamental skill for students in different educational systems worldwide. In addition, English is the dominant international language in the twenty-first century, as 1.75 billion people – a quarter of the current world’s population, use it. The British Council thereby reported in 2013 that English is an important tool for one’s professional future in the workplace. The Taiwanese government also perceives the importance of English in this age of globalisation, so English education has been implemented officially and formally as a foreign language (hereafter cited as FL) in the primary education curriculum since 2001 to contribute to adapting to contemporary trend (Chen, 2014).

Taiwanese English learners learn English via regular classes in schools, television broadcasts, magazines, among other means. However, most of them learn English through reiterative recitation and rote memorisation (Yang & Chen, 2007) because English is not the vehicle for everyday communication in this English as a Foreign Language (hereafter cited as EFL) learning context, and it is rarely used for daily communication in Taiwan (Wu, Yen, & Marek, 2011). Chen (2014) indicated that the English using rate among Taiwanese in different occasions in daily lives is quite low, and they spend very little time using English every day since it is very seldom used as a tool for cognition or socialisation in Taiwan.

In spite of the low rate of using English, the Taiwanese IELTS (International English Language Testing System) test-takers’ overall band scores have been increasing recently. However,

the writing results are the worst among the four language skills (listening, speaking, reading, and writing) among Taiwanese IELTS candidates (Chen, 2015, August 11). Li (2010, June 29) indicated that the reasons of the Taiwanese students' inadequate writing abilities could be attributed to the nature of examination systems, curriculum designs, and learning attitudes because of the English education curriculum emphasis on being results-driven and score-oriented. This could greatly undermine students' English learning motivations (Li, 2012). Unfortunately, the skill of writing is deemed as one of the most difficult skills to improve (Lin, Yu, Wang, & Ho, 2015). Hence, the purposes of this study were to examine whether the integration of the process/genre approach (hereafter cited as PGA) and blog could change the Taiwanese college students' perceptions of English writing and improve their writing performances.

In view of the accelerated growth and proliferation of computer technology in the twenty-first century, a variety of forms of computer technology have been introduced in FL education, which have greatly changed the way of how people learn FLs. For example, Skype, Twitter, Google Talk, MSN Messenger, YouTube, My Space, Google Video, BBC, Blackboard, Blogs, Facebook, Wikis, among other online sources, are all also used for language learning. Owing to their features of being user-friendly, there being ease of use, and allowing for collaborative learning in blogs, a study related to blog writing was conducted. Considering the advantages of the PGA, which combines both the process approach (hereafter cited as PCA) and genre approach (hereafter cited as GRA), I applied this approach in a blog-based writing classroom to develop the EFL college students' awareness of the writing process, fulfil the writing purposes, and examine the contexts concerning certain genres. The study also attempted to determine whether there were any differences in terms of the participants' use of the writing strategies after administering treatments, since it would be helpful to both EFL instructors and learners to understand how instructional and learning approaches facilitate their language teaching and learning. As a result, EFL instructors might be able to provide students with more efficient teaching approaches, and students might be able to have more efficient learning methods for English writing.

The study thus examined college students' writing performances, their perceptions of the PGA, the use of their writing strategies, and their perceptions of blog writing by comparing the results in a control group and an experimental group, following the purposes of this study along with the research questions (hereafter cited as RQ).

## **1.2 Purposes of this Study and Research Questions**

The primary purposes of this study are to examine whether the integration of the PGA and blog developed the EFL college students' writing performances, and also to determine the use of their English writing strategies after the treatments by comparing the outcomes collected from the control group and the experimental group in both the pre-test and the post-test at a university in central Taiwan. In view of the primary research purposes, four research objectives are proposed as follows:

1. Examining whether the participants' English writing performances were enhanced, and how the writing instruction influenced the participants' writing performances in the two groups in order to provide effective instructional and learning suggestions to PGA-based writing classrooms.
2. Examining how the participants perceived the writing approach, the PGA, and whether there were any inter-relationships among the participants' conceptions in the PGA in order to determine how the PGA benefited the participants' writing performances.
3. Examining whether there were any differences in terms of the participants' use of the writing strategies in the two groups, and whether there were any inter-relationships among the participants' conceptions in the writing strategies in order to determine how the integration of the PGA and blog influenced the participants' learning.
4. Examining the participants' perceptions of the affordance of blogs in the English writing classroom, and whether there were any inter-relationships among the participants' conceptions in blog writing in order to determine how using blog facilitated the participants' writing performances in a PGA-based writing classroom.

To achieve the research objectives mentioned above, four RQs are therefore proposed and presented below.

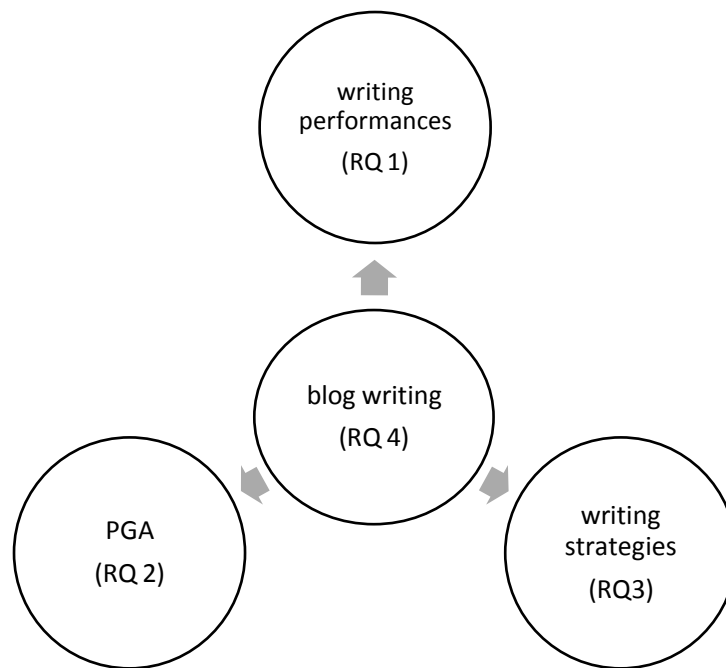
RQ1. Are there any statistically significant differences in terms of the participants' English writing performances after the treatments, and are there any inter-relationships among the instructional procedures? If there are, are there any differences between the two groups?

RQ2. Are there any statistically significant differences in terms of the participants' perceptions of the PGA after the treatments, and are there any inter-relationships among the participants' conceptions in the PGA? If there are, are there any differences between the two groups?

RQ3. Are there any statistically significant differences in terms of the participants' use of the writing strategies after the treatments, and are there any inter-relationships among the participants' conceptions in the writing strategies? If there are, are there any differences between the two groups?

RQ4. Are there any statistically significant differences in terms of the participants' perceptions of blog writing after the treatments, and are there any inter-relationships among the participants' conceptions in the use of blog writing in the experimental group?

Figure 1 demonstrates the framework of the research purposes and RQs. The concept of blog writing (RQ 4) was placed in the central position to understand its relationships with the participants' writing performances (RQ 1), the application of the PGA (RQ 2), and the use of the writing strategies (RQ 3) in EFL writing contexts.



*Figure 1.* The Framework of the Research Purposes and Research Questions in this Study

### **1.3 Significance, Originality, and Contribution of this Study to the Field**

The study was implemented in an EFL learning context in Taiwan where results-driven and score-oriented have been much emphasised in English education, and Taiwanese students' English writing ability has been considered the worst among separate English language skills. Hence, I attempted to determine whether the application of a new teaching and learning approach facilitated Taiwanese college students' writing performances, and whether there were any differences in terms of their use of the writing strategies. In order to do so, I integrated both the PGA and blog in an English writing classroom at a university in central Taiwan to verify its effectiveness and efficacy on Taiwanese college students' writing performances, and determine the differences of their use of the writing strategies in the classroom of this kind.

The PGA is relatively new, and related research application that has also been scarcely used in comparison to other approaches for conducting related studies in FL writing classrooms (Nordin & Mohammad, 2006). In addition, many studies (Aljumah, 2012; Armstrong & Retterer, 2008; Arslan & Şahin-Kızıl, 2010; Fageeh, 2011; Kitchakarn, 2012; Lin, Groom, & Lin,

2013; Lin, Li, Hung, & Huang, 2014; Liu & Chang, 2010; Noytim, 2010; Silviyanti & Yusuf, 2014) have been undertaken in respect to the effects of blog in EFL writing classrooms, but the practical usage of blogging in language writing classrooms remains uncommon (Golonka, Bowles, Frank, Richardson, & Freynik, 2014; Lin et al., 2013; Miyazoe & Anderson, 2010). Research on the investigation of the impacts of blogs in language writing classrooms is also recommended (Aljumah, 2012; Habul-Šabanović, 2015). Golonka et al. (2014) and Lin et al. (2014) further suggested studies related to blog affordance in language education with the comparison of a control group in traditional paper-pencil writing classrooms are necessary because very few of empirical studies have examined this issue. More importantly, research in relation to the integration of blog in PGA-based writing classrooms and the relationships with EFL college students' writing strategies has not hitherto been executed. Hence, the current study was expected to address a gap in the existing literature in this respect, and bridge the correlations between the language pedagogy and instructional technology.

In order to provide more convincing research findings, both the quantitative and qualitative research methods were employed since quantitative research methods examine research contents in a wider scope among a larger population, while qualitative research methods gauge research results in a more in-depth manner with a smaller group of participants. Quantitative research can generally explain the relationships among variables, but it is not advisable when attempting to prove a more specific understanding of a matter that can be offset by qualitative research (Creswell & Clark, 2011). In this study, the quantitative research methods comprised the application of English writing essays and questionnaires, while the qualitative research methods consisted of the implementation of the observations and interviews. The use of the combination of the quantitative and qualitative research methods, known as the mixed methods, has been widely applied in educational research nowadays (Punch, 2009) because mixed methods are applicable in a wide range of studies in social science, and also provide more persuasive and conscientious research consequences (Creswell & Clark, 2011).

Finally, I hope that this pioneering study on administering an innovative instructional and learning approach could contribute to reforming English writing education in Taiwan. In addition, it is also expected that the study could provide innovative and informative



perspectives to bridge the research gap between the Computer-Assisted Language Learning (hereafter cited as CALL) and Teaching English to Speakers of Other Languages (hereafter cited as TESOL) fields for future research and practical pedagogy in EFL writing classrooms.

#### **1.4 Definitions of the Key Terms**

Several terms are used in this study, which are defined in this section.

EFL: an acronym meaning English as a Foreign Language, which refers to English that is taught in countries where it is not the vehicle for everyday communication.

Process/Genre Approach: this approach synthesises both the process approach and genre approach to help students understand the writing processes, realise writing purposes, and comprehend contexts concerning certain genres (Yan, 2005).

Blogs: these are “up-to-the-minute posts, latest first” (Nardi, Schiano, Gumbrecht, & Swartz, 2004, p. 42) electronic journals, which record users’ written work in an Internet community (Johnson, 2004).

Strategies: these are students’ behaviour and techniques that they employ when learning a FL, which “make learning easier, faster, more enjoyable, more self-directed, more effective, and more transferrable to new situations” (Oxford, 1990, p. 8).

#### **1.5 Structures of the Thesis**

The thesis consists of eight chapters. Chapter One, the Introduction, outlines the general ideas of this work. Chapter Two, the Literature Review, synthesises the theories and findings reported in previous studies that are correlated with the contents found in this work. The primary knowledge of the current study was the history and theory of CALL in language education, teaching approaches and learning strategies in writing education, and using blogs in writing classrooms. Chapter Three, Methodology, deals with how the research was carried out, including discussions on the research design, the research methods, the sampling technique and the participants, research instruments, data collection, data analysis, research validity and reliability, trustworthiness, and research ethics. Chapter Four,

the Pilot Study, presents the methods applied in this pilot study and the results, including back translation, expert judgement, factor analysis, test-retest reliability, internal consistency reliability as well as the interview. Chapter Five, Quantitative Data Analysis and Results, provides a series of statistical and numerical analysis, including an independent  $t$ -test, a paired-sample  $t$ -test, a Mann-Whitney  $U$ -test, a Wilcoxon signed-rank test, a Spearman's correlation coefficient, and a Pearson correlation coefficient. Chapter Six, Qualitative Data Analysis and Results, reports an analysis of the observational and interview data based on the thematic analysis approach. Chapter Seven, Research Discussions and Findings, answers the RQs by determining how they relate with the earlier literature sources and elucidating potential consequences of this study. Finally, Chapter Eight, Conclusions, summarises the study and the major findings while setting forth the research limitations, providing theoretical, methodological, and pedagogical implications, and offering suggestions for future research.

## **CHAPTER TWO: LITERATURE REVIEW**

This chapter focuses on addressing the related theories and practice found in previous studies. There are four principal sections: (a) the history and theory of CALL in language education provide a complete concept of CALL rationales in language education (section 2.1); (b) teaching approaches and learning strategies in writing education provide both the theories and practice regarding writing approaches and language learning strategies (section 2.2); (c) the section of blogs in writing classrooms provides the theories and practice of blogs in writing classrooms (section 2.3); and (d) a chapter summary is provided in section 2.4.

### **2.1 History and Theory of CALL in Language Education**

In order to understand the growth of CALL, the introduction of CALL (section 2.1.1) is firstly presented. The development of CALL in language education (section 2.1.2) and the utilisation of computer technology in language classrooms (section 2.1.3) are subsequently described. This is followed by describing technology-enhanced language learning in Taiwan (section 2.1.4), followed by the advantages and disadvantages of CALL in language education (section 2.1.5). Finally, a concluding remark (section 2.1.6) is used to summarise the discussion in each case.

#### **2.1.1 The Introduction of CALL**

CALL is the abbreviation for Computer-Assisted Language Learning, which refers to the use of various kinds of computer technology to facilitate language learning, such as the implementation of interactive multimedia, including CD-ROMs (compact disk-read only memory), and other language exercises, electronic materials, and online resources (Chapelle, 2010b). CALL is also defined as “the search for and study of applications of the computer in language teaching and learning” (Levy, 1997, p. 1). However, it is more than the application of computer technology in language classrooms because it intertwines technology, theory, and pedagogy (Garrett, 2009).

The origin of CALL is to facilitate language learners’ listening, speaking, reading, and writing skills (Beatty, 2003; Lai & Kritsonis, 2006; Nerbonne, 2002), so they have been widely used in FL education to help language learners be exposed to target languages and cultures

(Amaral & Meurers, 2011). For example, language teachers use computer technology to help students be exposed to the real language input and connect with the outside world where the language is used for real tasks (Motteram, 2011). Students can face many words, phrases, and sentence structures when learning a FL on computers (Tsou, Wang, & Tzeng, 2006), or authentic materials, such as songs and pictures from the native-speaking countries, which can be retrieved through using computers (Tsou et al., 2006; Warschauer, 1996a). The variability and versatility in computer technology are possible reasons for their being extensively used in FL education, since computers offer various types of practice and exercises that integrate sounds, pictures, and colours (Al-Jarf, 2005), and these creations construct genuine interactive and communicative learning contexts for learners (Liu, Liu, Liu, & Yang, 2011). Providing understandable language learning materials, assisting students with understanding language learning contents, and supplying language learning exercises and assessments have brought about the use of CALL (Nerbonne, 2002).

The execution of CALL includes individual application inside and outside of classrooms, online education via the World Wide Web (hereafter cited as WWW), classrooms with computers, among other means (Beatty, 2003). In addition, computer technology connects people together to communicate and interact without cultural and linguistic boundaries (Kelm, 1996), which may offer a fully complete learning environment for language learners (Beatty, 2003) because language learning involves being involved in a cognitive and social process (Liaw, Hatala, & Huang, 2010). In short, the major purpose of CALL is to enhance language learners' learning (Lai & Kritsonis, 2006) via teaching and learning the language through computers (Nerbonne, 2002; Torut, 2000). However, technology is not a panacea for all language learners since it depends how one uses it, and it achieves its highest efficacy when it is properly used (Zhao, 2003).

### **2.1.2 The Development of CALL in Language Education**

Computers were initially invented in the US for military purposes to calculate trajectories, and in the UK to decipher enemy codes, and they were then applied for the commercial and governmental purposes (Higgins & Johns, 1984) since they can deal with a great deal of information rapidly and accurately (Gündüz, 2005). Since the 1950s, computers have been used in education formally (Chapelle, 2001; Higgins & Johns, 1984). However, its application

in education was not recorded until the 1960s when many projects were conducted to investigate how computers assisted language teaching and learning (Chapelle, 2001; Gündüz, 2005; Zhytska, 2012). During the late 1960s and early 1970s, the rapid growth of computer technology successfully led computers to be applied in language education (Ahmad, Corbett, Rogers, & Sussex, 1985).

Computers have become instructional tools and have been applied in many fields extensively, such as business, industry, military, or higher education since the 1980s (Reiser, 2001) because they are able to display, store, recognise, and be used to communicate with numbers, words, pictures, and sounds (Gündüz, 2005). In the early 1990s, the impacts of computers on language development had been questioned. However, many researchers have successively investigated how the infusion of computer technology improved language education (Liu, Moore, Graham, & Lee, 2003). Moreover, the progress of computer technology has advanced the development of CALL, and every step of CALL development has varied learners' learning and understanding toward language education (Garrett, 2009). Over the past decades, the development of CALL can be divided into the behaviouristic CALL, communicative CALL, and integrative CALL (Walker & White, 2013; Warschauer, 1996a).

Behaviouristic CALL, affected by the behaviourism, was popularised between the 1960s and 1970s (Torut, 2000; Warschauer & Healey, 1998). The trend of language teaching and learning in this period emphasised the grammar-translation and audio-lingual methods, which focused on stimulus, response, and reinforcement because behaviourists believed that language learning is a process of habit-formation. Through reiterative drills and practice, students' language abilities could be developed when imitating and repeating were greatly applied (Ellis, 1997; Levy, 1997; Torut, 2000; Warschauer, 2000). Based on the basis of the predominant approach, computers served as repetitive course deliverers since the proponents claimed that it was helpful to learners to be exposed to the same language input repeatedly to develop their language abilities. Computers did not tire of conveying the same materials over and over, and could be used in a flexible manner to cater to learners' time, learners' needs, and numbers of learners (Warschauer, 1996a; Zhytska, 2012). However, students were not permitted to learn at their own pace, which decreased their learning motivations (Gündüz, 2005), and the advocates of the communicative approach

who emerged in the late 1970s and early 1980s argued that the repetitive drills and practice were not authentic (Gündüz, 2005; Reiser, 2001).

Communicative CALL was influenced by the cognitive psychology and communicative language teaching approach, so learning in this phase emphasised functions of languages, language use, contextualisation, communicative competence, and implicit grammar instruction (Torut, 2000). The proponents of the communicative CALL offered various non-drill programmes for students to practise the target language, provided different types of programmes to stimulate students' thoughts, ideas, and discussions, and created programmes for students to understand the language, instead of learning a language from instructional materials (Warschauer, 1996a) because the communicative CALL theorists asserted that language learning is a process of discovery, expression, and development that originated from the perspectives of the cognitive theory (Gündüz, 2005; Torut, 2000; Warschauer & Healey, 1998; Zhytska, 2012). However, it is worth noting that computer technology in language education was not only used for the purposes of language teaching and learning, but also for the individual and societal developments. In other words, it helped students improve their language competence, and it was advisable for students to make use of it to foster their communicative abilities and research knowledge (Warschauer, 2002). The critiques on CALL did not cease at that time. On the contrary, some advocators started discovering more integrative teaching methods due to the on-going technological development that has led to the emergence of the integrative CALL.

Integrative CALL was constructed based on the social and socio-cognitive rationales that featured using a language in real contexts (Warschauer & Healey, 1998), so content based instruction was the mainstream in this phase (Gruba, 2004). Social learning theorists maintained that learning is a participation in a social context in which "learning is a relational activity, not an individual process of thought" (Elkjaer, 2006, ¶ 21), so the communicative approach was replaced by this socio-collaborative approach in language teaching and learning (Gruba, 2004).

Bandura's social learning theory which "has often been called a bridge between behaviourist and cognitive learning theories" (Learning-Theories.com, n.d., ¶ 4) combined

both the behavioural and cognitive aspects. Behaviourists proposed one's environment decides how a person behaves, while cognitive psychologists argued psychological factors influence one's behaviour the most. Social learning theorists believed both the environment and psychology affect how one behaves (Bandura, 1977). The theory stated that a "learning context includes biological and psychological characteristics of the person, the person's behaviour, and the environment. The three factors are highly interdependent, and each factor influences, and is influenced by, each of the others" (Miller, 2002, p. 183). It is obvious to see that both cognition and environment act vital roles in social learning contexts in which interaction is one of the most important elements in a learning environment of this kind (Tu, 2000), because "most human behaviour is learned observationally through modelling: from observing others one forms an idea of how new behaviours are performed, and on later occasions this coded information serves as a guide for action" (Bandura, 1977, p. 22). Social learning theory asserts that observation, imitation, and modelling explain how one learns from others (Learning-Theories.com, n.d.).

In addition, Vygotsky's sociocultural theory also emphasises the importance of interaction because it is believed that social aspect is one of the most important factors in one's language learning process, and one needs to interact with others to learn a language in a social context no matter where they learn it (Cook, 2008). Sociocultural theory situated the social environment in a very central place because learning is mediated (Hall, 2007), which is a very fundamental concept in sociocultural theory (Lantolf, 2000). As a result, language learning takes place in a face-to-face interaction or in a sharing process in terms of sociocultural perspectives (Mitchell & Myles, 2004). Based on the sociocultural theorists' points of view, language learning involves in a collaborative process in which learners use the language for the purpose of interaction to gain grammatical, expressive, and cultural abilities (Ohta, 2000), so language learning is a type of social interaction with others, and it is not an individual information process (Donato, 2000). Briefly speaking, sociocultural theory helps learners understand how important interaction is to develop one's cognitive and linguistic abilities (Turuk, 2008) because people have to interact with others to enhance learning, and then one's cognitive ability could be developed (Hall, 2007).

Therefore, a new rationale of CALL, integrative CALL, which emphasises interaction with a community, is based on the use of multimedia and the use of the Internet that has emerged since the 1990s (Torut, 2000; Warschauer, 2000). Multimedia has prevailed since the early 1990s, and language teaching and learning goals focuses on language meanings, use of authentic, meaningful and contextualised materials, and interactive learning (Torut, 2000). They help learners acquire a language from genuine learning contexts, integrate the four skills naturally, allow students to learn a language at their own pace, and enhance both students' major and minor learning objectives (Warschauer, 1996a). Nonetheless, the Internet that has been used in language education since the 1990s (Torut, 2000) has greatly improved language education because students are more able to actively engage in learning (Silviyanti & Yusuf, 2014). This change not only influences how people share and gather information or communicate with others, but also transforms how people teach and learn FLs (Habul-Šabanović, 2015). One example of the launch of Web 2.0 provides language learners with a greater range of opportunities to communicate and interact in target languages with others, and helps students to learn collaboratively (Huang, 2015). In contrast to the traditional education mode, the integrative CALL develops students' active and autonomous learning as well as their critical thinking and interactive abilities (Habul-Šabanović, 2015). It cannot be denied that the employment of multimedia and the Internet has benefited language learners a great deal, and they will continue contributing to language education in the twenty-first century (Yu, 2015, September 30). Finally, all of the aforementioned rationales regarding the development of CALL are outlined in Table 1.



Table 1. *The Development of CALL* (Gruba, 2004; Torut, 2000; Walker & White, 2013; Warschauer, 2000)

	<b>Behaviouristic CALL</b>	<b>Communicative CALL</b>	<b>Integrative CALL</b>
<b>Timeframe</b>	1960s-1970s	late 1970s-late 1980s	1990s-present
<b>Language Learning Theory</b>	behaviourism	cognitive psychology	social and socio-cognitive approaches
<b>Language Teaching Method</b>	grammar translation & audio-lingual methods	communicative approach	content based instruction
<b>Language Learning Objective</b>	accuracy	fluency	agency
<b>Utilisation of Computer</b>	drills and practice	communicative exercises	authentic contexts
<b>Belief in Language Education</b>	.emphasise stimulus, response, and reinforcement .stress drills and practice .believe in habit - formation	.emphasise functions of language, language use .stress communicative competence and contextualization .believe in process of discovery, expression, and development	.emphasise language meaning .use genuine and meaningful materials .stress interactive learning
<b>Task of Computer in Classrooms</b>	acting as course delivers to convey repetitive teaching contents	providing various of programmes to stimulate students' learning	offering authentic learning materials via multimedia and the Internet

### 2.1.3 The Utilisation of Computer Technology in Language Classrooms

The appearance of Web 2.0 applications (e.g. wikis or blogs) has much transformed how people interact and communicate with other users on the Internet because they allow users to create and publish their own comments and ideas or exchange their experiences or opinions on these online platforms for real interaction and collaboration. Different forms of Web 2.0 technology have infused new thoughts into FL education, which improves students'

active and autonomous learning, and also enhances their critical thinking abilities and social interactions (Habul-Šabanović, 2015). Similarly, as computer technology has become more accessible and user friendlier, it has greatly changed how language instructors deliver courses to increase language learners' learning motivations, target language exposures, interactive opportunities, and feedback provisions (Golonka et al., 2014).

Computer technology in language classrooms is not simply about hardware and software applications, but more importantly, it is about procedures, processes, structures, and systems (Wright, 2000), because CALL combines technology, theory, and pedagogy (Garrett, 2009). Not only does computer technology help instructors obtain authentic teaching and learning materials, such as songs and pictures from the native-speaking cultures (Tsou et al., 2006; Warschauer, 1996a), but also allows students to be exposed to real language input, connects students with the outside world where the language is used for real tasks to compensate for insufficient time of language exposure in traditional language classrooms (Motteram, 2011), and allows students to exchange knowledge and practise language skills (Lin et al., 2015). Thereby, instructors have more opportunities to enhance students' active and autonomous learning, train their critical thinking abilities, and increase social interactions that can be accomplished through computers synchronously or asynchronously (Habul-Šabanović, 2015). These benefits are all due to the emergence of the Internet, which provides a ubiquitous tool to retrieve information effectively (Schaffert & Schwalbe, 2010).

Due to the rapid expansion of the Internet in cooperation with using computers and other forms of digital technology, the Internet, one of the latest computer innovations for FL learning (Zhytska, 2012), has swiftly led to computers being used as the instructional tools since 1995 (Reiser, 2001). The use of the Internet has guided CALL into a new era (Alonso, López, Manrique, & Viñes, 2005), and it has become one of the most widespread instructional tools in FL education due to its feasibility all over the world (Torut, 2000) and accessibility for users at all times (Lee, 2000). Because of the unique features of the feasibility and accessibility found online, language learners are able to discuss what they have learned online (Tsou, Wang, & Li, 2002), which not only encourages students to learn from peers but also helps them reflect themselves toward their language use through a peer reviewing process (Zha, Kelly, Park, & Fitzgerald, 2006).

The Internet has also greatly changed language education because the amalgamation of the technology and pedagogy is beneficial to both instructors and learners (Habul-Šabanović, 2015; Lee, 2000; Sarica & Cavus, 2009; Silviyanti & Yusuf, 2014; Stahl, Koschmann, & Suthers, 2006). It has become a gateway for students to acquire plentiful amounts of information without national boundaries (Osin, 1998), and allows learners to receive language input and to interact with native speakers, which not only improves students' listening, speaking, reading, and writing competence, but also cultivates their intercultural understandings (Yang & Chen, 2007). Moreover, it also convenes the same target-language learners from different places to practise the language in Internet communities (Chapelle, 2010a; Zhytska, 2012). Hence, this can not only enhance students' linguistic knowledge, but also broaden their cultural visions (Chapelle, 2010a; Gündüz, 2005). Through the use of Internet technology, the features of real interactions and authentic materials are likely to encourage language learners' learning motivations, and develop their positive attitudes toward language learning (Rashtchi & Hajihassani, 2010).

The Internet thus represents a valuable language learning platform since it helps learners retrieve information, receive instant feedback, and learn independently, as was demonstrated in Son's study (2007), providing a great number of technological means to enhance students' language listening, speaking, reading, and writing abilities. Examples of communication software, such as Skype, Twitter, Google Talk, MSN Messenger, YouTube, My Space, Google Video, BBC, Blackboard, Blogs, Facebook, and Wikis can all be used for language learning and support learners' language learning through realistic and social interactions (Kervin & Derewianka, 2011).

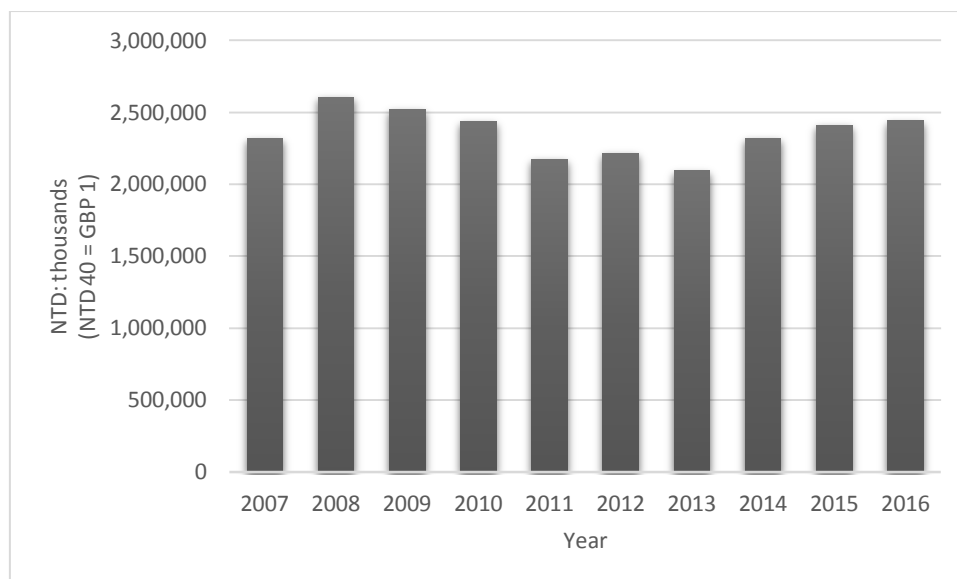
Although the Internet and some other forms of online learning have been widely used to aid language teaching and learning among instructors and learners (Liu et al., 2003), there are certain disadvantages when applying the Internet in language classrooms. The availability of computers and accessibility of the Internet should be carefully considered prior to the application. Classroom settings should be thoroughly planned based on learners' learning style and class activities (Son, 2007). Connecting problems and costly expense on purchasing equipment and facilities also result from the implementation of the Internet in language

classrooms (Singhal, 1997). Sometimes, it may take much time to retrieve the information when many users are using the Internet at the same time (Zhytska, 2012).

#### **2.1.4 Technology-Enhanced Language Learning in Taiwan**

This study was carried out in Taiwan, an EFL learning context, and therefore understanding the rate of popularity of computer technology in Taiwanese English language classrooms is of particular relevance. A study conducted by Liu in 2011 pointed out that the Taiwanese government has invested a large amount of money into information technology (hereafter cited as IT) education, and has promoted the use of computer technology to integrate the traditional classroom instruction in primary and secondary schools for over two decades. Also, the hours for computer courses have been increased in both primary and secondary schools as well. It has been determined that teachers in the twenty-first century should not only have professional knowledge and pedagogical skills, but also possess IT application knowledge to improve students' learning efficacy because instructors are key persons for educating students' IT application abilities and attitudes toward IT applications. The main purposes of the project were to enhance students' learning abilities and life skills by applying IT knowledge, improve instructors' teaching quality by adopting IT skills, and provide equal opportunities to use IT products among teachers and students in classrooms. (Ministry of Education, 2008).

A series of programmes with reference to IT education has been executed, such as: "A blueprint for information technology education in primary and secondary schools from 2002 to 2005" implemented in 2001, "A white book for information technology education in primary and secondary schools from 2008 to 2011" implemented in 2008, "A white book for digital learning from 2012 to 2016" implemented in 2011, "A white book for information and technology education from 2013 to 2015" implemented in 2012, and "Digital learning promoting programme from 2014 to 2017" implemented in 2013 (Ministry of Education, 2015c). The Taiwanese government has thus successively invested into improving and promoting the IT education. Figure 2 indicates that at least NTD 2 billion (about GBP 50 million) has been directed to IT education in Taiwan every year from 2007 to 2016 (Ministry of Education, 2009a, 2009b, 2010, 2011, 2012, 2013, 2014, 2015a, 2015b).



*Figure 2. Yearly Budget for IT Education in Taiwan from 2007 to 2016*

All university freshmen in Taiwan are required to take English courses focusing on listening, speaking, reading, and writing, in which traditional teaching approaches are still applied in classrooms. For example, the grammar-translation method is utilised to deliver reading and writing contents, while the audiolingual method is used to improve students' listening and speaking abilities. As a result, Taiwanese students often lack interactive and communicative opportunities in classrooms (Liu, 2005). These outdated lectures or memorisation methodologies may lead to low learning effectiveness because students are not motivated to learn English intrinsically (Wu et al., 2011). Many studies (Aljumah, 2012; Aydin, 2014; Fageeh, 2011; Golonka et al., 2014; Habul-Šabanović, 2015; Huang, 2015; Lai & Kritsonis, 2006; Lin et al., 2013; Lin et al., 2014; Lin et al., 2015; Noytim, 2010; Sarica & Cavus, 2009; Silviyanti & Yusuf, 2014; Sun, 2010; Zhytska, 2012) have shown that the use of technology is likely to increase students' language learning motivations and also develop their positive attitudes toward language learning. Hence, the Taiwanese government has been constantly integrating FL education with computer technology to facilitate students' learning in higher education (Liu, 2005).

A recent report that investigated Taiwanese university students' media usage behaviour pointed out that the Internet was the most commonly used medium among Taiwanese university students, with there being a 98.9% utility rate while using the Internet 6.8 days a

week for an average of 6.8 hours per day (Liu, 2015, July 24). Due to the very high usage demands, it is recommended that language instructors incorporate using the Internet in classrooms to provide students with a wider range of opportunities to be exposed to language and cultural input, have in-depth discussions, and learn collaboratively in order to contribute to helping Taiwanese university students become more proficient in using both oral and written English (Liu, 2005).

Fang (2010) conducted a study to examine the effectiveness of a computer-assisted writing programme in an EFL writing class at a university in Taiwan. The results showed that the majority of the students were quite satisfied with the programme, and there was a positive effect on the development of the learners' writing skills. Therefore, the students had very positive attitudes toward the use of computer technology in writing classrooms, and further revealed how they expected to have a programme of this kind in their future writing classes. Chang et al. (2014) also carried out a study related to the impact of the Internet self-efficacy on Taiwanese university students' learning motivations and learning performances. This research indicated that the learners' Internet self-efficacy was closely related to their learning motivations and learning performances, and those who had higher Internet self-efficacy performed better than those who had lower Internet self-efficacy. Since new generation of students in particular very much relied on the Internet to acquire information, this approach was especially effective to generate learning motivations.

Wu et al. (2011) concluded that the employment of computer technology in EFL classrooms should particularly emphasise interactions and communication, use formal and informal materials, and adopt authentic and enjoyable frequent interactions. This could potentially improve students' English knowledge toward the varieties of usage, culture, vocabulary, writing, and technological abilities as well as the perceptions of collaborative learning (Yang & Chen, 2014).

#### **2.1.5 Advantages and Disadvantages of CALL in Language Education**

CALL has both advantages and disadvantages. Advantages include flexibility, versatility, and authenticity, while the disadvantages include inadequate support, insufficient time, and unsatisfactory resources. These aspects are examined individually hereafter.

Flexibility: the feature of flexibility in CALL facilitates language education the most (Intratat, 2004). Ahmad et al. (1985), Chapelle (2010a), Chapelle (2010b), Chin (2004), Lai and Kritsonis (2006), Reiser (2001), Selwyn (2011), and Warschauer (1996a) all indicated that students are allowed to use it whenever they want and wherever they are. They can learn a language at their convenience and their own pace (Dudeny & Hockly, 2007; Dwyer, 1993; Ehsani & Knodt, 1998; Singhal, 1997; Warschauer, 1996a). By incorporating computer technology in language classrooms, some flexible tools, such as blogs or wikis, are able to develop students' language abilities via communication, collaboration, networking, and scaffolding (Warschauer & Liaw, 2011), so learners' positive attitudes toward writing, and perceptions of collaborative learning during writing process might be therefore developed. All of these factors are very likely to enhance ones' writing performances (Aydin, 2014).

Versatility: owing to the provision of texts, graphics, animations, and sounds (Al-Jarf, 2005; Dwyer, 1993; Gündüz, 2005; Marcus, 1993; Slater & Varney-Burch, 2001; Torut, 2000), computers help teachers express abstract concepts (Lai & Kritsonis, 2006). Pictures are useful and meaningful in language education as pictures convey meanings and inspire students' language learning (Torut, 2000). Thanks to the provision of the audio and visual aids in computer technology, students are more able to recall what they have learned and to develop their forms of learning creativity (Tsou et al., 2006). For instance, a study related to the use of blogs in EFL classrooms conducted by Noytim (2010) demonstrated that EFL learners could write more freely with lower levels of pressure and anxiety when writing on blogs, which also increased their learning motivations and confidence. EFL students might become more creative during blogging since they were able to employ different types of fonts, colours, graphics, video, or audio clips to attract the attention of readers.

Authenticity: computer technology offers many authentic teaching and learning materials (Tsou et al., 2006; Warschauer, 1996). It provides students a large number of genuine learning materials that contain multicultural and interdisciplinary aspects (Lai & Kritsonis, 2006). Students can also have authentic and meaningful interaction inside and outside of classrooms (Warschauer & Meskill, 2000). It helps teachers obtain authentic teaching and learning materials, such as songs and pictures from the native-speaking cultures (Tsou et al., 2006; Warschauer, 1996a). More importantly, the use of the Internet has advanced CALL a

great deal because many technological means are accessible to help students retrieve authentic materials or have real interaction with others, which improve their language abilities (Chapelle, 2010a; Sarica & Cavus, 2009; Yang & Chen, 2007; Zhytska, 2012). The examples of Skype, Twitter, Google Talk, MSN Messenger, YouTube, My Space, Google Video, BBC, Blackboard, Facebook, Wikis, and Blogs have provided genuine interaction, motivated students' learning, and offered language knowledge (Kervin & Derewianka, 2011).

Although CALL has brought a number of benefits for both instructors and students, there are also major problems involved in using CALL (Bordbar, 2010).

Inadequate support: although the use of computer technology in education has been expanding (Al-Jarf, 2004), financial considerations still compose the most serious problem of all (Lee, 2000). This includes the expense of software, hardware, maintenance, infrastructure, staff training, and technical support (Al-Jarf, 2004; Hokanson & Hooper, 2000; Lee, 2000; Wang, 2005; Warschauer & Meskill, 2000; Zhytska, 2012). Building CALL laboratories is costly since CALL programmes need a great deal of hardware and software as well as some other forms of equipment and facilities (Gündüz, 2005). Garrett (2009) pointed out that the expense for CALL is a conundrum in some developing countries. For example, the educational budgets for software and hardware were limited in Thai universities (Intratat, 2004). Warschauer and Meskill (2000) also described that budgets for hardware sometimes come from a one-off subsidy, some second-hand facilities are acquired from other departments in poorly-funded schools, and a small amount of money is invested in staff training, equipment maintenance, or software purchase. It is unfair for those who come from low-income families or low-budget schools, and therefore this leads to one of the most serious problems being a "digital divide."

Insufficient time: many programme designers have limited linguistic knowledge and teaching experience, so some software packages lack instructional perspectives and are deficient in terms of discourse, contexts, and cultural knowledge. Some CALL software in the markets does not meet instructors' or students' requirements, so teachers have to create teaching and learning software by themselves in order to suit their teaching and learning objectives tightly (Torut, 2000). However, it really takes time to have CALL programmes set



up by teachers themselves when ready-made packages are not available (Intratat, 2004). In addition, teachers have to spend a lot of time learning the continuously-changing CALL programmes and have to design lessons for those new programmes repeatedly in order to apply them in classrooms (Warschauer & Meskill, 2000). A study on instructors' attitudes toward CALL conducted by Bordbar (2010) showed that the limited length of class time also discouraged the teachers from utilising computer technology in language classrooms.

Unsatisfactory resources: since many English teachers are unfamiliar with CALL, they often ignore the benefits that CALL offers (Carballo-Calero, 2001). Teachers' inadequate computer knowledge is a barrier to employ CALL in language classrooms (Gündüz, 2005; Lee, 2000; Zhytska, 2012). Those teachers who have limited computer knowledge may feel anxious and may have negative attitudes toward CALL because their computer skills and knowledge are insufficient to cope with class management, and they may be afraid that they would be superseded by computers. Thus, many language teachers need to be trained appropriately. Unfortunately, the training expenses are usually high (Torut, 2000), and only a small amount of money is invested in this type of training (Warschauer & Meskill, 2000). As a result, many language teachers would rather use non-CALL instruction instead due to the complexity of computer knowledge (Carballo-Calero, 2001). Bordbar (2010) pointed out that almost all of the English teachers who participated in the study, in addition to their self-study, did not have CALL trainings when they were students. They had very basic fundamental knowledge about it, such as installing software, sending E-mails, using CD/DVD players, and printing documents, and they could not do anything further in terms of using technology. Consequently, it has shown that the lack of confidence due to inadequate computer knowledge discourages teachers to use computer technology in language classrooms (Lam, 2000; Sugar, Crawley, & Fine, 2004).

#### **2.1.6 Concluding Remark for History and Theory of CALL in Language Education**

The issue of CALL is an on-going challenge that consumes time and energy (Lee, 2000) because computer technology changes all the time, which is the nature of CALL (Blake, 2009). Computers are not problem solvers to all troubles that can be experienced, and they will never replace teachers in education (Lee, 2000). It is "the servant of the user" (Gündüz, 2005, p. 197) since it could only work well under teacher's sufficient preparation of

materials, instructor's careful laid-out lesson plans and classroom management, and a well-trained user's operation. It is incapable of producing instructional materials without teachers (Gündüz, 2005; Johnson, 2002), and its effectiveness depends on how it is used in language classrooms (Torut, 2000). Nevertheless, language teachers have to supplement what computers are unable to offer. Educators should not overestimate the value of computers, and should not establish an objective that is difficult to achieve (Carballo-Calero, 2001). Teachers are facilitators in CALL classrooms in which they provide diversified learning materials that students need in order to improve their language competence (Torut, 2000; Warschauer & Healey, 1998). Also, instructors should bear in mind that computers are merely instructional aids (Gündüz, 2005) that could achieve effectiveness under teachers' appropriate and creative affordance (Gündüz, 2005; Johnson, 2002; Wang, 2005).

This current study examines how CALL developed EFL college students' writing performances, while also casting light on the underlying issues of teaching approaches and learning strategies in writing education.

## **2.2 Teaching Approaches and Learning strategies in Writing Education**

This section discusses both writing theories and practice. First, the teaching approaches regarding EFL writing are described in section 2.2.1. Second, learning strategies that account for how learners learn a FL are examined in section 2.2.2, which is followed by the concluding summary in section 2.2.3. However, since there are several sub-sections in each perspective, Figure 3 explains the framework of the current section. The main idea of the section is to talk about the writing education which is divided into the teaching approaches and the learning strategies in this study. The former deals with how the instructional methods develop EFL writers' performances while the latter pertains to the facilitation of the learning strategies on students' writing development. Both of them are discussed to understand how to improve EFL students' writing competence.

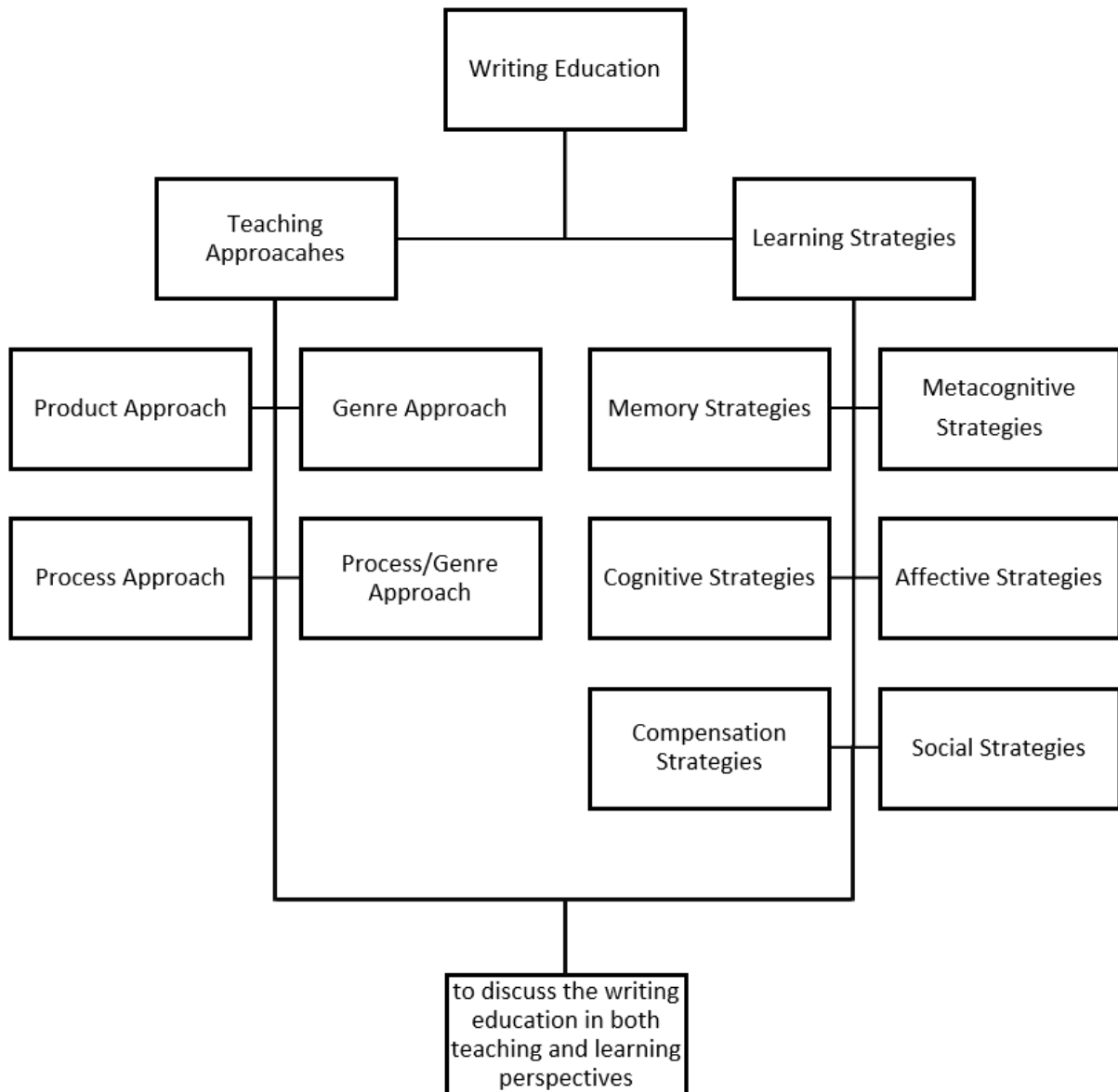


Figure 3. The Framework of Section 2.2

### 2.2.1 Teaching Approaches in Writing Classrooms

The complex concept of writing consumes time and effort in both teaching and learning perspectives (Suleiman, 2000), since it involves disparate dimensions, such as social, political, and ethical factors (Williams, 2003). As it is not a naturally picked-up ability, it should be learned and practised in formal learning contexts (Kitchakarn, 2012; Myles, 2002). Writing should be much more considered in language education since literacy does communicate and transmit knowledge, which is crucial to understand a FL (Harklau, 2002), and the numbers of studies with reference to writing education have been increasing (Nordin &

Mohammad, 2006). Writing involves many dimensions such as spelling and punctuation, differences in writing processes, analysis of writing contexts, and purposes of writing. Social and cognitive factors are also included in one's writing process, especially for FL writing (Myles, 2002). Writing theories and pedagogies that have been developed in English-speaking countries have influenced EFL writing education a great deal. (You, 2004). Several approaches in relation to writing instruction have been developed for decades (Yan, 2005). However, the product approach (hereafter cited as PDA), PCA, and GRA are the most recent and have been much emphasised and discussed in recent years (Nordin & Mohammad, 2006). In this section, these three approaches as well as an introduction of a new approach, the PGA, are presented separately.

### **2.2.1.1 Product Approach**

The PDA dominated between the 1960s and 1970s while it was based on behaviouristic theory. This approach focuses on linguistic forms, discrete linguistic skills, and habit formation. Students receive and follow teacher's instruction in PDA-based writing classrooms, which complies with the audiolingual method (Turuk, 2008). The PDA concerns what students write along with writing rules. It is teacher-centred because students follow teachers' instruction, and evaluation is according to students' final products assessed by teachers (Durako et al., 1996). The PDA emphasises imitation and error correction, so it lacks real language practice and neglects the factors of students' motivations and self-esteem (Yan, 2005). Also, it does not look after students' writing process skills, so students' writing knowledge and skills are usually ignored (Badger & White, 2000). Therefore, this approach is currently outdated since teachers spend a lot of time and energy marking students' written work, but it is not favourable for their writing development. However, the approach strengthens students' linguistic knowledge, which is required in texts, and it improves their learning through imitation (Badger & White, 2000).

Regarding the instructional procedures, there are different states including familiarisation, controlled writing, guided writing, and free writing. The initial familiarisation stage helps students understand the features of written texts, when teachers analyses linguistic usages and writing organisations with model texts to help students become familiar with specific language features. Students then practise writing skills during the controlled and guided

writing stages. In this stage, teachers enhance students' knowledge of sentence patterns for specific genres and forms of paragraph writing. During the guided writing, students produce essays based on given topics and model texts. In the second and third stages, teachers gradually extend the scope of allowing further independent practice until students are able to write freely, and finally students are expected to use the writing skills that they have learned in class in real life situations (Pincas, as cited in Badger & White, 2000; Han, 2001). Using language writing structures is the primary concern in PDA-based classrooms, and students' writing development mainly follows the imitation of input given by instructors (Badger & White, 2000).

### **2.2.1.2 Process Approach**

In order to successfully compose an essay, students have to undergo several processes, including brainstorming, writing, drafting, exchanging feedback, revising, and final editing (Paulus, 1999; Seow, 2002), so the PCA that emphasises the writing process instead of the final product has been developed (Caudery, 1995; Matsuda, 2003) since the 1970s (Han, 2001). The PCA focuses on students' creativity during the writing process. Students are able to realise writing is a process of self-development since they have to experience several stages, such as planning, revising, and editing (Tuffs, 1993). This approach is often utilised in EFL writing classrooms (Muncie, 2002) because it promotes students' learning strategies in terms of writing abilities (Wolff, 2000). It also helps students understand how important writing skills are and recognise how one's writing competence is developed through their own knowledge. The PCA is the opposite of the PDA (Coe, 1987; Turuk, 2008), which is more learner-centred (Matsuda, 2003; Nordin & Mohammad, 2006; Tuffs, 1993). It allows students to choose their topics, receive feedback from both teachers and peers, and revise essays. Students' written texts can also be used as teaching materials (Matsuda, 2003). Teachers in PCA-based classrooms are facilitators whose tasks are to develop students' writing skills and determine their writing potential (Nordin & Mohammad, 2006). Through this process, learners are able to acquire writing skills and use those skills in their writing (Harmer, 2007). Teachers can realise how effective their instruction is via the students' writing process since they can observe students' thoughts and behaviour through their writings (Tompkins, 1994). The purpose of the PCA is to educate students that generating, structuring, drafting, and revising are important aspects to compose written texts (Muncie,

2002). Unfortunately, its fixed process has been criticised, it does not give adequate knowledge of writing purposes to students, and input is insufficient in PCA-based writing classrooms (Badger & White, 2000). A comparison between the PCA and the PDA is shown in Table 2.

Table 2. *A Comparison between the PCA and PDA* (Steele, 2004, May 3<sup>rd</sup> ¶ 18)

Process writing	Product writing
<ul style="list-style-type: none"> <li>▪ text as a resource for comparison</li> <li>▪ ideas as starting point</li> <li>▪ more than one draft</li> <li>▪ more global, focus one purpose, theme, text type, i.e., reader is emphasised</li> <li>▪ collaborative</li> <li>▪ emphasis on creative process</li> </ul>	<ul style="list-style-type: none"> <li>▪ imitate model text</li> <li>▪ organisation of ideas more important than ideas themselves</li> <li>▪ one draft</li> <li>▪ features highlighted including controlled practice of those features</li> <li>▪ individual</li> <li>▪ emphasis on end product</li> </ul>

The writing process includes prewriting (planning), drafting, revising, editing, and publishing (Harmer, 2007; Seow, 2002; Tompkins, 1994). The process is recursive, so writers may return to the previous stages before the final stage (Badger & White, 2000). First, prewriting or planning takes place prior to the commencement of the first draft (Williams, 2003), which involves topic selection, idea organisation, reader identification, writing purpose identification as well as writing form decision (Tompkins, 1994). Second, students set about writing a preliminary draft by providing topic sentences and emphasising supporting contents. Mechanical errors, such as spelling or grammatical errors, can be dismissed during this stage (Tompkins, 1994) since a preliminary draft does not have to be flawless and well-organised (Williams, 2003). Third, revising includes reading, sharing, and revising drafts (Tompkins, 1994), which helps writers reflect whether their writing samples follow the ideas, as planned in the prewriting stage (Williams, 2003). In this phase, writers can clarify what have been written by checking the coherence of the writing, generating further ideas for writing, and detecting errors (Nation, 2009). Sharing contents with others to revise drafts is important since readers can provide helpful feedback to reflect readers' perspectives. Students should then revise their writings by adding, substituting, deleting, or removing words, sentences, phrases, or paragraphs based on feedback received in the revising process (Tompkins, 1994). Fourth, editing is considered as one of the most difficult tasks in writing process since writers should be very careful and conscientious about editing when

checking spellings, grammar, and word selections (Williams, 2003) in order to proofread writings as well as detect and correct errors (Tompkins, 1994). Editing can be implemented anytime during the writing process (Nation, 2009). However, clarifying the differences between revising and editing is indeed necessary. The former refers to enhancing writing organisation by moving paragraphs from one place to another, or deleting redundant contents, while the latter takes care of the surface level of written texts, such as errors regarding punctuations, spellings, or capitalisations (Williams, 2003). Finally, publishing is the last stage in the whole writing process. Students share their writing samples with appropriate readers, such as peers, parents, or a community (Tompkins, 1994). This is sharing with peers, or also posting contents in some public places, so people can read them (Williams, 2003). The whole process of the approach is demonstrated in Figure 4.

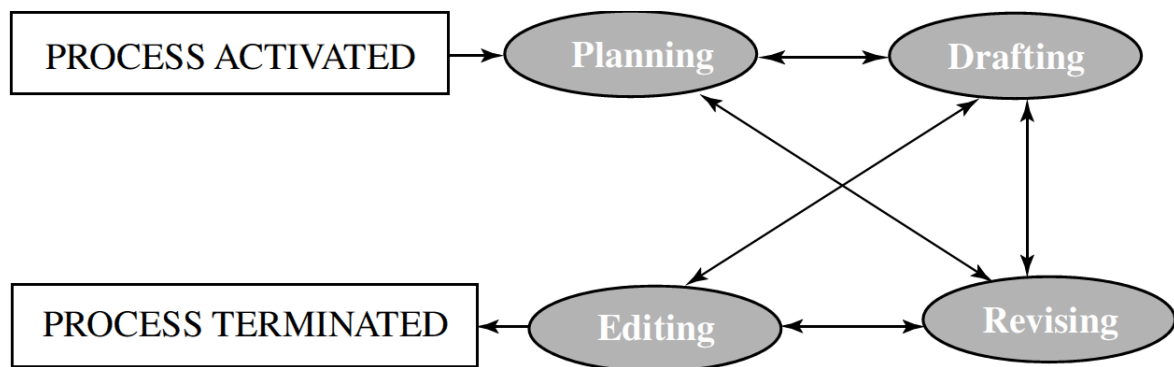


Figure 4. The Model of Process Approach (Seow, 2002, p. 315)

Lee (2006) conducted a study regarding process-oriented ESL writing assessment, the Computerised Enhanced ESL Placement Test (hereafter cited as CEEPT), which was designed for the international students whose TOEFL scores were lower than the admission requirements at the University of Illinois at Urbana-Champaign, USA. The researcher sought to determine whether there were any significant changes resulting from the peer feedback and revision in the CEEPT, and any differences between the first and second drafts in terms of the writing quality in the CEEPT. A total of 100 graduate students participated in this computer-based research, in which there were not spelling and grammar checkers in the computers, but the copy and paste functions were provided. Several different first-language participants took part in this research, and the first three majority groups were Chinese (32 subjects), Korean (31 subjects), and Spanish (10 subjects) nationals. In the first phase, the

students underwent several procedures including group brainstorming toward the writing topics, whole class discussion on the outcomes from the group brainstorming, video viewing relating to the writing topics, reading articles relating to the videos, group discussions relating to the videos and articles, and finally, essay writing. Before writing the second draft, three students formed a group in the class, and read the group members' first draft and offer comments to each other. They then commenced writing the second draft based on their peers' feedback. After the data analysis, the quantitative results showed that there were significant differences between the two drafts in terms of the holistic scores. As for the quality of the essays, the statistical results indicated that there were significant differences in terms of the organisation, content, grammar, use of sources, avoidance of plagiarism, and mechanics between the two drafts. The researcher found that the participants could produce a greater range of vocabulary and more complex sentences in the second drafts in which they were more organised than the first one. Therefore, it was concluded that the PCA was beneficial to the students' writing development because it not only allowed students to revise their writings, but students were also able to discuss their work and receive feedback from others.

Writing is complex, recursive, and creative according to the PCA (Silva, 1990). The activities in writing classes should be more elaborated for students to experience a complete real writing process and to enhance their writing skills in light of the knowledge of writing process. The PCA has been applied in language writing classrooms for decades because it is effective to develop students' writing competence. Above all, the PCA has changed the direction of writing instruction tremendously (Ryu, 2006).

### **2.2.1.3 Genre Approach**

The GRA which focuses on social situations in written texts, and helps students understand writing purposes (Badger & White, 2000) has appeared since the 1980s (Yan, 2005). The formation of the GRA is to respond to the limitations and disadvantages of the PCA (Ahn, 2012). Table 3 is a comparison between the PCA and the GRA.



Table 3. *A Comparison between the PCA and GRA* (Hyland, 2003b, p. 24)

<b>Attribute</b>	<b>Process</b>	<b>Genre</b>
<b>Main Idea</b>	Writing is a thinking process Concerned with the act of writing	Writing is a social activity Concerned with the final product
<b>Teaching Focus</b>	Emphasis on creative writer	Emphasis on reader expectations and product
<b>Advantages</b>	How to produce and link ideas Makes processes of writing transparent Provides basis for teaching	How to express social purposes effectively Makes textual conventions transparent Contextualizes writing for audience and purpose
<b>Disadvantages</b>	Assumes L1 and L2 writing similar Overlooks L2 language difficulties Insufficient attention to product Assumes all writing uses same processes	Requires rhetorical understanding of texts Can result in prescriptive teaching of texts Can lead to overattention to written products Undervalue skills needed to produce texts

“Genre refers to abstract, socially recognised ways of using language” (Hyland, 2007, p. 149). Martin (2009) mentioned that genre is “a stage goal-oriented social process” (p.10) because it needs to undergo several stages to achieve specified goals, and writers have to accomplish their goals and interact with others to achieve their goals (Martin, Christie, & Rothery, as cited in Riley & Reedy, 2000). In literacy pedagogy, genre is used to connect different types of texts regarding different kinds of social purposes because it emphasises how language is used in a real language world (Cope & Kalantzis, 1993). Writing, in genre aspect, is a means to connect people together by conveying certain social meanings, so writers should understand themselves and their readers as well as the writing purposes and situations. As a result, it builds up one’s relationship with others and widens one’s knowledge toward the world (Hyland, 2003a). The GRA is the extension of the PDA, and linguistic structures and imitative input are mainly provided by teachers in these two approaches. Different from the PDA, writing varies based on social contexts in the GRA (Badger & White, 2000), which helps writers understand that writing is composed according to their readers in order to achieve and satisfy the social requirements and goals (Yasuda, 2011). However, it has been criticised for having components in each genre that may not be similar to another, so it may be too complex for pedagogical implement (Tuffs, 1993). In addition, it requires a great number of skills to produce texts (Badger & White, 2000), and students’ creativity may be limited to certain genres (Yasuda, 2011). In spite of the criticisms, the GRA helps teachers structure more targeted, relevant, and supportive lectures. In GRA-based writing classrooms, students have to produce their written texts according to

teachers' instruction, so this is clearly a teacher-centred approach. It is important to make students understand what is learned and evaluated in classrooms. The greatest feature of the GRA is to help students realise how writers construct written texts, and why they write in this manner (Hyland, 2007). Figure 5 illustrates how each segment correlates with others in the GRA. Martin (1993) explained that text is situated in the centre of the model. The text is related to the context of situation; namely, the register including the mode, field, and tenor.<sup>1</sup> The register is also connected with the culture of the context, which refers to the genre.

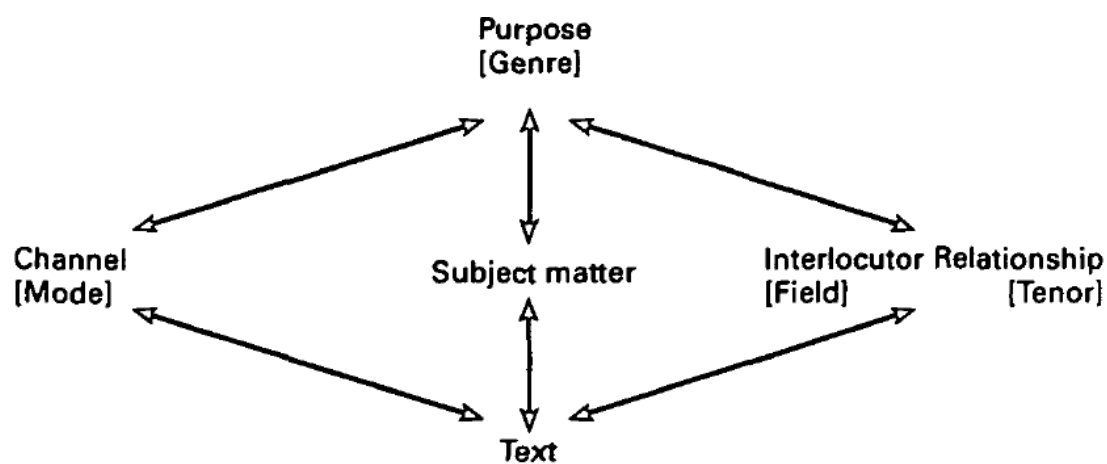


Figure 5. The Model of Genre Approach (Martin, as cited in Badger & White, 2000, p. 155)

In reference to the instructional procedures, modelling is the first step in GRA because understanding the purposes of the genre via examples is necessary. Language usage is ubiquitous in a social world, which determines the purposes of the language, so the social purposes, text structures, and language features can be demonstrated through a model text. Joint negotiation is the second step in which students need to collect and organise the information that they need for their writing samples. During the process, students need to take part in either individual or group activities, which helps them familiarise themselves with genres and develop their language competence. Thus, the more students understand the genre, the less they need from teachers. Then, several procedures occur in the next step that composes independent construction, including drafting, conferencing, editing, and

<sup>1</sup> Mode refers to description of the information. Field refers to information of the content. Tenor refers to readers.

<sup>2</sup> A set of scores includes five individual scores for the five components, and a final total score that

evaluating. Drafting refers to students' understanding toward the social purposes, text structures, and language features. Conferencing means teachers' and students' exchange ideas about the language and writing contents. Editing involves teachers' employment of activities to improve the students' content knowledge, and knowledge about language features. Evaluating is to assess the students' understanding of genres and realisation of the teaching and learning effectiveness. Exploring students' creativity is the final step, which is important for students' learning, and also helps them understand how a genre influences communication. Finally, it is worth noting that the whole procedure is dynamic, which allows teachers to adjust their instructional pedagogies and techniques according to students' assimilation in order to fulfil their requirements, while returning to the previous steps is also possible (Callaghan, Knapp, & Noble, 1993) when necessary to accomplish different purposes.

Yasuda (2011) investigated 70 non-English majors' writing performances based on the GRA at a Japanese university. This was a mixed-method study that integrated Email writing. The research mainly looked into how university EFL students developed their genre awareness and knowledge as well as linguistic knowledge and writing competence based on the GRA. This was a 15-week study in which the students submitted email samples concerning expressing gratitude, making an apology, making an appointment, dealing with problems, applying for a job, giving directions, among other subjects. The data was collected from a questionnaire, interviews, and students' written texts. After the investigation, the qualitative results showed that the students' genre awareness and knowledge were enriched via the Email writing. Specifically, it enhanced their knowledge toward language choices, awareness toward readers, and understanding of language usage in GRA-based writing tasks. The participants also revealed that both their English writing competence and confidence in writing English emails were improved and increased. The quantitative findings demonstrated that the students' writing performances as well as awareness and perceptions of genre knowledge had significantly changed. Their writing competence had also been developed after the 15-week instruction in terms of the task fulfilment and appropriateness, cohesion and organisation, and grammatical abilities. The researcher further found out that the students were more able to offer supporting ideas to underpin their writings, which clarified the contents of their writings to readers. Therefore, the study

proved that even novice EFL writers were able to convert genre knowledge from input to output.

The GRA is an ideal pedagogical approach for teachers' instruction in FL writing classrooms in terms of the theoretical and practical aspects, and it also satisfies students' needs in terms of social, political, and cultural dimensions (Hyland, 2007). It involves a triangular relationship among purposes of the writing, readers of the writing, and choices of words. All of these factors benefit both students' FL acquisition and writing development (Yasuda, 2011).

#### **2.2.1.4 Process/Genre Approach**

It is to be understood that every approach has its advantages and disadvantages (Tuffs, 1993). The PCA for writing as a natural process that emphasises students' creativity and effectiveness to produce a written text (Maybin, 1994) is more learner-centred (Matsuda, 2003; Nordin & Mohammad, 2006; Tuffs, 1993). In contrast, the GRA is more teacher-centred (Hyland, 2007), so teachers are responsible for students' writing development, and have to evaluate how successfully students have learned to achieve tasks toward a specific genre (Maybin, 1994). Despite the differences between the two approaches, they can complement each other because one motivates students' learning and provides learning opportunities through the writing process, while the other helps students understand what linguistic structures are required for a particular genre (Maybin, 1994). Hence, the consolidation of the PCA and the GRA becomes more effective as it helps students understand the writing process in a genre when constructing a text (Bijami & Raftari, 2013).

Therefore, the creation of the PGA helps students understand the writing process, and realise the writing purposes and contexts toward certain genres. It not only strengthens students' awareness of the writing process, but also develops their knowledge toward different types of genres (Yan, 2005). Some researchers (Badger & White, 2000; Nordin & Mohammad, 2006; Yan, 2005) have discussed the effects of the PGA that was proposed by Badger and White in 2000 (Gao, 2012). As demonstrated in Figure 6, the model of the PGA, displays how it is conducted. The approach connects writing tasks with social environments because it is believed that writing is a social activity that is carried out to accomplish a

specific purpose. Teachers have to be conscious of the situation to help students realise writing purposes and linguistic knowledge. For example, application letter writing decides the writer's purposes, the relationship with readers, and the linguistic usages. Therefore, students are able to use pertinent words, syntax, and organisations to compose their written texts (Han, 2001).

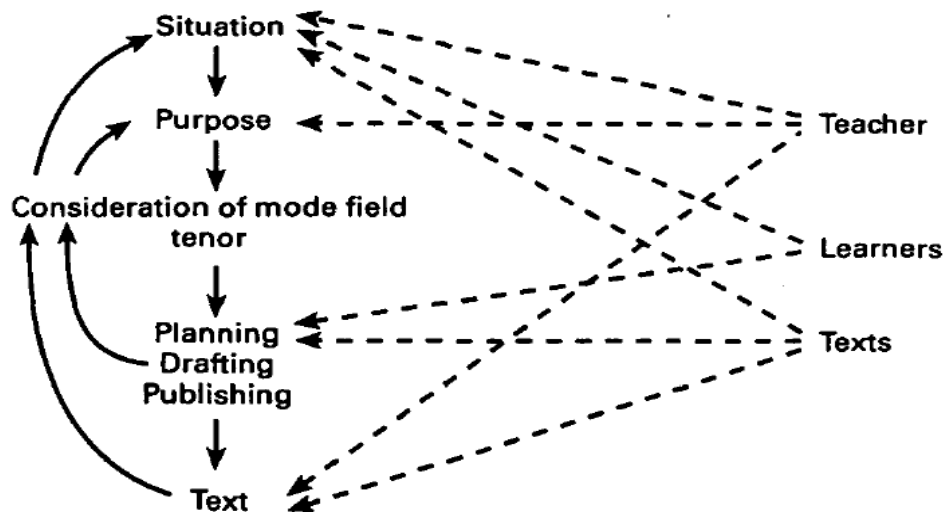


Figure 6. The Model of Process/Genre Approach (Badger & White, 2000, p. 159)

Since the PGA is comparatively new in writing education, its advantages and disadvantages have not been clearly demonstrated, so I intended to determine its benefits and drawbacks for future implications. According to the proponents, the PGA helps writers use writing skills (PCA), realise more linguistic knowledge (GRA), and understand writing purposes (GRA). Learners' writing competence might be developed when their potential is motivated (PCA) and language input is provided (GRA). In PGA writing classrooms, teachers have to provide as many similar social contexts as possible for learners, and offer sufficient information for them to compose writing samples (GRA). Students then use their language knowledge and skills to respond to writing tasks (PCA) (Badger & White, 2000). Learners who have adequate knowledge toward a genre may not need help from teachers because the more students understand the genre, the less they need from instructors, and vice versa (Callaghan et al., 1993; Nordin & Mohammad, 2006).

Yan (2005) offered three guidelines for teachers to implement the PGA in the writing classrooms. First, teachers should act as assistants to encourage students, and provide positive and constructive feedback as well as suggestions. Second, teachers have to demonstrate how to employ the writing skills, so students are more able to compose an essay. Finally, the integration of the four language skills is important. Coincidentally, the PGA improves students' reading competence during prewriting phase, enhances students' listening and speaking competence during teachers' lecturing, and facilitates students' writing competence by offering and receiving feedback.

Gao (2012) proposed five instructional steps including model paper analysis and demonstration, group discussion and imitation, individual imitation and writing, whole-class comment and modification, and final drafting and publication.

1. Model paper analysis and demonstration: this phase is similar to the pre-writing stage. Teachers provide model texts for students to analyse, and students understand the genres, writing structures, writing purposes, and linguistic features, among similar considerations. In addition, powerful and impressive arguments and expressions should be highlighted and demonstrated.
2. Group discussion and imitation: in this stage, three or four students form a small group to discuss the theme about their writing tasks, including the writing style, organisation, expression, grammar, and then discuss how they construct their writing frameworks, or how they perform their linguistic features for this theme.
3. Individual imitation and writing: students write essays practically in this phase in which they use the writing structures and linguistic features that they have learned from the previous stages into their writing samples. They have to compose an essay with introduction, body, and conclusion paragraphs.
4. Whole-class comment and modification: before a whole-class discussion, teachers have to categorise students' written work according to marking results, and then demonstrate students' written texts in class. Whole-class discussion is based on both the well-written and poorly-written essays so that students are able to compare and contrast their own writings with samples for correction.
5. Final drafting and publication: finally, students work on their final draft before submission. The previous four stages are involved in the final step in order to ensure

that they understand the genres, writing structures, writing purposes, and linguistic features, among similar considerations.

Babalola (2012) undertook research in a polytechnic in Nigeria to determine whether there were any significant differences in terms of the students' writing performances, writing skills, and basis of gender in PGA-based writing classrooms. Both the pre-test and the post-test were conducted in the control group (without treatment) and the experimental group (with treatment) in this quasi-experimental study. Two intact classes with forty students who were non-English majors were randomly chosen for this study, with twenty students in each group. The students received English writing instruction for four hours every week during the study that took place over six weeks. To realise statistical significance, the data was analysed by Analysis of Covariance (ANCOVA) at a .05 level of significance. After the data analysis, the researcher reported that there was a significant difference ( $p = .000 < .05$ ) on the students' English writing performances in the experimental group, and they also performed better in terms of the writing skills (organisation, content, expression, and mechanical accuracy) with  $p = .000 < .05$ . There was not significant difference ( $p = .479 > .05$ ) between the male and female students in terms of their writing performances. As a result, the researcher concluded that the students could perform better if they received the PGA in classrooms because their post-test scores in the experimental group were significantly higher than those who were in the control group. Moreover, both the male and female students could benefit from the PGA because there was not statistical difference in light of the research results.

Writing is a difficult task that is often treated as a tool to pass examinations or get higher scores, so students often lose writing interests in this decontextualised and artificial learning environment (Yan, 2005) where emphasises the accuracy of language forms instead of developing students' individual thoughts (You, 2004). However, the PGA is highly related to personal situations in one's real life, so it may stimulate students' writing motivations (Yan, 2005). The PGA makes students go through a series of a writing process to compose particular writing texts when teachers facilitate students' writing by giving adequate and appropriate linguistic knowledge and skills (Badger & White, 2000). Nevertheless, more research in reference to the PGA in language writing classes is needed in order to

disseminate this approach. Whereas this section emphasised the instructional approaches, how students could help themselves learn more effectively through applying learning strategies is examined in the forthcoming section.

### **2.2.2 Learning Strategies in Language Classrooms**

Learners' target language performances are always one of the primary concerns in FL education, as many FL teachers attempt to bring effective teaching and learning methods into FL classrooms while there are often students with slow learning efficiency. In order to help students be more proficient in FL classrooms, realising why and how competent learners learn a FL is a pivotal issue in FL education (Chang, 2007). Those who excel in a FL may use different ways to learn it, or they may use the same ways as the less proficient learners do, but they are more effective (Cook, 2008). However, so-called good FL learners may not consciously perceive what they do when they are learning a FL (Grenfell & Harris, 1999). It is sometimes difficult to observe what competent FL learners do because students' mental behaviour is visually unobservable. Therefore, the use of research tools such as self-report surveys seems helpful for researchers to investigate how students learn a FL indirectly (Olivares-Cuhat, 2002).

The use of learning strategies is conducive to improve less proficient FL learners' language performances (Chamot, 2004), while there are common language learning strategies among most language teaching and learning theories. For example, memory and cognitive strategies are used to develop students' abilities in vocabulary and grammar in the grammar-translation method. Memory and cognitive strategies are also applied to train students' abilities to language patterns for automatic responses, which are the features of audiolingual method. Compensation and social strategies involve applying the communicative competence theory and communicative language teaching approach. Cognitive and metacognitive strategies are utilised to account for the interlanguage theory, while suggestopedia involves applying affective strategies (Griffiths & Parr, 2001).

Nevertheless, it is very important to point out that it does not mean the more strategies learners employ, the better performance they have. Learning strategies can be performed effectively under learners' appropriate use according to their needs (Rost, 2001). Similarly,



one's success of FL learning is not directly related to the frequency of the use of learning strategies, but it correlates to how one properly uses the learning strategies (Macaro, 2006). The definitions of learning strategies are discussed subsequently in the following section.

### **2.2.2.1 Definitions of Learning Strategies**

The terms of strategy or learning strategy have been widely used in applied linguistics research to explain the roles of goal-oriented plans and behaviour in FL education, and how one's thoughts and actions facilitate FL learning (Rost, 2001). According to Oxford (1990), learning strategies which "make learning easier, faster, more enjoyable, more self-directed, more effective, and more transferrable to new situations" (p. 8) have become influential in the field of education because learners use learning strategies to enhance their learning. Through the use of learning strategies, students' learning autonomy is expected to be improved since they have to control their learning process (Hsiao & Oxford, 2002), and they may become more independent and responsible for their language learning (Shmais, 2003).

According to O'Malley and Chamot (1990), learning strategies are "the special thoughts or behaviours that individuals use to help them comprehend, learn, or retain new information" (p.1). Cohen (1998) also defined that learning strategies "are consciously selected by learners and which may result in action taken to enhance the learning or use of a second language or foreign language, through the storage, retention, recall, and application of information about that language" (p.4). In general, learning strategies relate to students' behaviour and techniques that they employ when learning a FL (Saville-Troike, 2006), which are utilised to process, storage, and retrieve input (Brown, 2000). Cook (1991) further explained that learning strategies are the choices that learners choose to affect their learning when they are learning or using a FL. Chamot (2004) summarised that "learning strategies are the conscious thoughts and actions that learners take in order to achieve a learning goal" (p. 14).

Learning strategies play vital roles no matter where students learn a FL (e.g. formal or informal learning contexts), and successful FL learners have applied learning strategies systematically during their learning process (Brown, 1994). Learning strategies are important for FL learners and essential for their communicative competence development

since proper use of learning strategies may enhance one's FL proficiency as well as learning confidence (Oxford, 1990). By applying learning strategies, both instructors and learners can be aware of the cognitive, metacognitive, affective, and social processes when teaching and learning a FL (Chamot, 2005).

#### **2.2.2.2 Cognitive Strategies**

Cognitive strategies, which refer to the use of conscious methods (e.g. note-taking) to enhance learning (Cook, 1991), are required and have been found to be the most common strategies that language learners apply (Oxford, 1990). Cognitive strategies explain learning a language through identifying, classifying, memorising, and storing input, and also explain using a language through retrieving, rehearsing, comprehending, or producing words, phrases, and other language forms (Cohen, 1998). The strategies comprise diverse sub-strategies, such as "practicing, receiving and sending messages, analysing and reasoning, and creating structure for input and output" (Oxford, 1990, p. 43). Practising is the most important one in this category, which encompasses "repeating, formally practising with sounds and writing systems, recognising and using formulas and patterns, recombining and practising naturalistically" (Oxford, 1990, p. 43). Receiving and sending messages develop learners' skimming and scanning strategies while students learn not need to focus on every single word. They guide learners to use various resources to comprehend and produce new language messages. Analysing and reasoning are often used by language learners, adult learners in particular, because they build up language models according to their analysis and comparison, constitute language rules in general, and revise those rules when they receive new language information. Finally, creating structure for input and output indicates learners' manipulating and transforming language input into understandable components through learning strategies (e.g. taking notes, summarising, and highlighting) (Oxford, 1990). In short, cognitive strategies directly relate to new language input that one receives and converts into comprehensible units to facilitate their language learning (O'Malley & Chamot, 1990).

#### **2.2.2.3 Metacognitive Strategies**

The term of metacognition refers to "beyond, beside, or with the cognitive" (Oxford, 1990, p. 136). Metacognitive strategies are used beyond cognitive behaviour. They help students monitor their learning process because metacognitive strategies are applied to centre,

arrange, and evaluate one's learning which are necessarily important for successful language learners (Oxford, 1990). Similarly, "metacognitive strategies involve thinking about the learning process, planning for learning, monitoring the learning task, and evaluating how well one has learned" (O'Malley & Chamot, 1990, p. 137). According to Oxford's (1990) definition, metacognitive strategies contain "centring your learning, arranging and planning your learning, and evaluating your learning" (p. 137). Too much new language input may distract language learners' concentration that can be compensated by using metacognitive strategies, such as paying attention or linking with already known information. There are many strategies in the group of arranging and planning learning such as organising, setting goals, thinking about the purposes, or planning for a task. However, seeking opportunities to practise language is the most important one because finding as many practice opportunities as possible is language learners' responsibility, especially in non-classroom contexts. Particularly, some metacognitive behaviours, such as planning and monitoring, are internalised through one's social interactions with some more proficient language users (Hsiao & Oxford, 2002). Errors may overwhelm learners' learning, so students may ignore the importance of learning from the errors, which may increasingly worsen their learning due to their confusion. However, one's learning can be facilitated through the use of self-monitoring and self-evaluating strategies (Chang, 2007). Briefly speaking, the concept of metacognitive strategies is strategies about how to learn, but not merely learning strategies (Cook, 1993).

#### **2.2.2.4 Affective Strategies**

Affection refers to emotions, attitudes, motivations, and values (Oxford, 1990) that are related to one's emotional status involving a wide range of personality factors (Brown, 2000). The affective domain is one of the most powerful factors to determine one's success of language learning because successful language learners are able to control their emotions and attitudes toward their learning (Oxford, 1990). For example, students learn strategies to decrease levels of anxiety and increase their confidence (Cohen, 1998), so they may feel they are able to complete learning tasks (O'Malley & Chamot, 1990). Furthermore, positive emotions and attitudes help one learn a language effectively and even pleasantly. Affective strategies encompass "lowering your anxiety, encouraging yourself, and taking your emotional temperature" (Oxford, 1990, p. 141). Having a reasonable amount of anxiety is

helpful to learners' language learning, but excessive levels of anxiety obstruct one's language learning. Using some strategies (e.g. laughing or deep breathing) is useful to reduce one's anxiety. It also reduces one's anxious feeling and attitudes through self-encouragement because positive emotions are likely to ease one's senses of tension. Knowing emotional temperature by listening to body signals becomes necessary to find and control anxiety levels (Oxford, 1990). O'Malley and Chamot (1990) suggested that students can be educated to not be afraid when errors occur, not feel frustrated when they do not understand contents, and not be depressed when they make wrong guesses.

#### **2.2.2.5 Social Strategies**

"Language is a form of social behaviour; it is communication, and communication occurs between and among people" (Oxford, 1990, p. 144). Social strategies refer to the behaviour of interacting with others (Cohen, 1998; Cook, 1993; O'Malley & Chamot, 1990), which comprise "asking questions, cooperating with others and empathising with others" (Oxford, 1990, p. 169). The strategies of asking question include asking for clarification or verification and asking for correction, which are used in different ways. The former is usually applied in receptive skills, while the latter is employed for productive purposes. Since language learning involves having social interactions, cooperating requires learners to interact with others and with more competent language users. Empathising with others refers to understanding the target culture and understanding the native speakers' thoughts and feelings. Due to language learning involving interacting with other people, social strategies are deemed important in language learning process (Oxford, 1990).

#### **2.2.2.6 Oxford's Strategy Inventory for Language Learning**

One of the most influential studies on language learning strategies is Rebecca Oxford's Strategy Inventory for Language Learning (hereafter cited as SILL), which was published in 1990 and has been used in many language learning contexts worldwide (Cook, 2008). Oxford has classified language learning strategies in detail (Chang, 2007), which are mainly grouped as direct and indirect strategies, as shown in Figure 7.

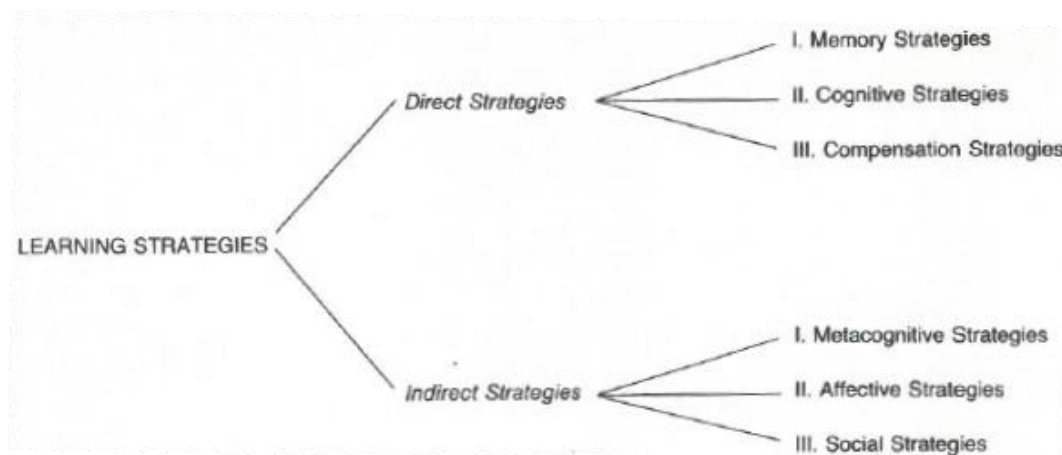


Figure 7. Oxford's Language Learning Strategy System (Oxford, 1990, p. 16)

Direct strategies help students remember target languages more effectively, use their cognitive processes, and compensate for missing knowledge, whereas indirect strategies organise and evaluate students' learning, control their emotions, and have them learn with others (Brown, 1994). Specifically, direct strategies include memory, cognitive, and compensation strategies, while the use of learning strategies links to the target language directly. Memory strategies help students store and retrieve input, cognitive strategies help students understand and produce new language through deductively learning, and compensation strategies help students use the language by guessing meanings or using synonyms. On the other hand, indirect strategies contain metacognitive, affective, and social strategies, and they do not involve the language itself directly when using these learning strategies. Metacognitive strategies help students control their cognition, affective strategies help students control their motivations, emotions, and attitudes, and social strategies help students learn a language via interaction with others (Oxford, 1990).

There are many ways to identify learners' learning styles, preferences, strengths, and weaknesses, but the most common one is the use of a self-check questionnaire, which helps learners answer various types of questions with scale items of agreement and disagreement (Oxford, 1990). SILL is a self-report evaluation checklist that is designed to understand how students use a variety of strategies to facilitate their language learning (Bot, Lowie, & Verspoor, 2005). Oxford has designed two versions of SILL. One is for native English speakers learning other target languages with eighty items, and the other one is for English

learners as a L2/FL with fifty items (Dörnyei, 2005). All of the questions are constructed by having five-point Likert-scale items, which range from “never or almost never true of me” (cited in 1), “usually not true of me” (cited in 2), “somewhat true of me” (cited in 3), “usually true of me” (cited in 4), and “always or almost always true of me” (cited in 5) (Brown, 2007; Oxford, 1990). SILL has also been considered as one of the most comprehensive instruments to gauge students’ preferences toward language learning strategies, and its reliability and validity has been confirmed consistently (Nisbet, Tindall, & Arroyo, 2005).

Although some criticisms have been made to argue against using Oxford’s SILL, considering its methodology, measurement, and classification (Macaro, 2006), the instrument is still widely used to collect a large amount of data regarding learning strategies in language education. It is a standardised measuring tool to collect and analyse a great deal of data with reference to various variables, such as learning style, the participants’ gender, language proficiency, as well as cultural factors in terms of language learning strategies (Chamot, 2004). The following section examines how researchers used SILL in their research to study language learners’ learning strategies.

#### **2.2.2.7 Empirical Research on Learning Strategies in Writing Classrooms**

FL writing is considered as one of the most difficult skills in one’s language learning process since language beginning learners often encounter the difficulties of grasping insufficient amounts of vocabulary and deficient knowledge of grammatical rules, while advanced students have difficulty with expressing their ideas coherently and producing appropriate written work in target language. Therefore, the use of learning strategies in FL writing classrooms seems important and necessary for FL writers (Chamot, 2005).

Khaldieh (2000) conducted a study to examine how FL learners implemented their writings in order to provide insights for FL instructors and researchers on FL learners’ writing difficulties during the process. The study focused on American learners who studied Arabic as a FL among a total of forty-three subjects including twenty-four male and nineteen female students. Before producing essays, the participants had to read authentic texts about factual, political, and social issues in Arabic. They then had to write persuasive essays, rather than descriptive and expressive written work, to compare, contrast, and present their

viewpoints. The data was based on the students' essays and self-reporting, self-observation, and self-revelation in written and verbal reports that were used to record the students' strategies, techniques, knowledge, and linguistic manipulation while they were writing. The essays were then assessed by two native Arabic speakers, and were used to classify the students as the proficient writers or the less proficient writers while written and verbal reports were analysed according to Oxford's (1990) SILL. The results revealed that some less proficient students also used as various kinds of learning strategies as proficient students did. Nevertheless, their written quality and quantity were not as satisfactory as the proficient students'. Specifically, their written texts were short, the sentences were simple, and the contents lacked coherence. This study determined that: (a) the students in both groups applied cognitive strategies, including circumlocution, translation, and imitation. It therefore disproved that less proficient learners do not use pertinent learning strategies; and (b) one's language proficiency related to anxiety and confidence levels. Hence, competent language learners usually had lower anxiety and higher confidence levels, and vice versa. In other words, affective factors have an influence on one's FL development and performances. The researcher concluded that relying on learning strategies to produce good written work was insufficient. Linguistic knowledge might be one of the major determinants, and some other affective factors, such as anxiety, frustration, and negative attitudes might hinder FL writers' written quality and quantity. Learners' confidence in FL writing might be developed through positive feedback and encouragement, which also reduced their learning anxiety.

Moreover, Olivares-Cuhat (2002) conducted a study regarding the relationships between the employment of L2/FL learning strategies and L2/FL writing achievement in a Spanish writing class at a university in the USA. The participants were twenty university students comprising of two males and eighteen females who were two native Spanish students and seven students with Spanish heritage (L1), three German-speaking students, and eight English-speaking students. The researcher used Oxford's SILL to measure the students' learning strategies because of its high reliability and universality, as well as its easy application. This was a two-hour class held twice a week, and the research was conducted for six weeks. All of the participants were divided into two groups according to their diagnostic assessment given by the researcher, and two different textbooks were assigned

to the two groups. During the process, all of the students had to submit two drafts and a final writing sample with 300 to 400 words, and peer reviewing was also conducted in class. The instructor did not teach how to use learning strategies, and did not give any written feedback when returning the assignments until the end of the research. The researcher and another Spanish instructor who specialised in Spanish linguistics marked all of the students' written work. The students' assignments were graded on a scale of 0 to 100 according to the content, organisation, grammar, vocabulary, and conventions. The data was analysed by the two-tailed *t*-tests to compare the sample means when different textbooks and language learning situations were applied. Furthermore, Pearson correlation coefficient and regression analysis were used to indicate the relationships between the students' learning strategies and their language achievements. The statistical results showed that there was not significant difference between the two groups in terms of the overall grades. Nevertheless, the *t*-test demonstrated that L1 learners who used more memory and affective strategies performed better than the L2/FL learners. The mean scores described that both the cognitive and compensation strategies had the highest scores in comparison with others. The Pearson correlation coefficient illustrated that all of the subcategories in SILL had significant correlations with other sub-strategies, except for the compensation strategies. There was also a significant correlation between the use of memory strategies and the students' overall performances. The regression analysis indicated that memory strategies were the primary strategies while the students were learning a L2/FL. The researcher pointed out that L1 students who used more memory and affective strategies performed better than L2/FL students. This could have been because L1 students learned a language based on their previous experiences when facing difficulties. To respond the significances found in the Pearson correlation coefficient, the use of learning strategies brought in the use of other learning strategies, which incurred interactive effects during the learning process. It is evident that language learners might not use unitary strategy when learning a L2/FL. The finding in the regression analysis was attributed to the need for a great number of memory abilities to remember the meanings of the target language. Finally, this study set forth a comparison in terms of the interaction of language learning and the use of learning strategies between L1 and L2/FL learners in order to provide directions to develop L2/FL students' writing abilities.



### **2.2.3 Concluding Remark for Teaching Approaches and Learning Strategies in Writing Education**

Writing is a complex process that is considered as one of the most difficult skills for teaching and learning in FL education since it involves the language itself, writer's feelings, personal experiences, and thoughts (Mazdayasna & Tahririan, 2001). In order to improve EFL learners' writing competence, understanding how writing is instructed and how to facilitate students' learning is important. This section was therefore divided into the teaching and learning perspectives. First, there are explanations regarding the instructional approaches, including the discussions of the writing approaches, instructional procedures, empirical studies, as well as their advantages and disadvantages. Second, learning strategies that account for both the theories and practice regarding FL learning strategies are examined.

In addition to the history and theory of CALL in language education as well as teaching approaches and learning strategies in writing education, one of the purposes of this research is to determine how computers, especially the utilisation of blogs, facilitated EFL students' writing abilities, which is detailed in the upcoming section.

### **2.3 Blogs in Writing Classrooms**

This section examines the effects of the affordance of blogs in FL writing classrooms. The concept of applying computer technology in writing education is firstly illustrated in section 2.3.1. In order to present detailed ideas about blogs, the nature of blogs is subsequently demonstrated in section 2.3.2. Then, the use of blogs in writing classrooms presented in section 2.3.3 depicts how blogs facilitated students' FL writing performances, followed by the empirical research on the use of blogs in writing classrooms (section 2.3.4). A concluding remark for this entire section is lastly provided in section 2.3.5.

#### **2.3.1 Computer Technology in Writing Education**

Because of the fast development of computer technology, there are increasingly greater numbers of researchers and instructors using computer technology in language classrooms, and the advent of computer technology has greatly changed writing instruction methods and research related to writing education (Fang, 2010). However, students' social interactions should be firstly addressed because computer technology fosters students'

collaborative learning (Stahl et al., 2006), and learning completely takes place in a social and cultural environment (Lehtinen, 2003).

Social and cultural factors influencing one's learning and cognitive developments has drawn many psychologists' attention because they believe learning is a social process in a socio-cultural environment. Vygotsky's sociocultural theory emphasises the importance of interaction to enhance one's cognitive activity and learning, and underpins the integrative CALL (see section 2.1.2). This is one of the most prominent tenets in this field. Sociocultural theorists advocated that less proficient learners can interact with more proficient learners in their socio-cultural environment, and therefore learning is considered as a social interaction that makes learning taken place in an authentic context (Selwyn, 2011). Also, Bandura's social learning theory, which is akin to Vygotsky's theory, states that learning is a participation in a social context, in which "learning is a relational activity, not an individual process of thought" (Elkjaer, 2006, ¶ 21). Both cognition and environment are important factors in social learning contexts where interaction is one of the most important vehicles in a learning environment (Tu, 2000).

It is therefore assumed that effective learning is implemented through collaboration. Collaboration is an important element leading to successful learning because one's effective learning may be due to the participation and interaction with others' modelling behaviour and thought (Pawan, Paulus, Yalcin, & Chang, 2003). The concept of collaborative learning in a social-cultural environment has also been researched in educational technology. It has been accepted that computer technology enriches social resources in one's learning process, and helps learners retrieve knowledge whenever and wherever there is this need. For example, the notion of computer supported collaborative learning enables learners to learn collaboratively in an Internet community, such as wikis or blogs (Selwyn, 2011). Computer technology provides communicative opportunities for both teachers and students to retrieve learning resources effectively, and required information and knowledge that is set up not only for the sake of learning, but also for social and interactive purposes. Consequently, one's learning commences in a social, cultural, and technological environment (Sharples, 2000).

How does computer technology incorporate learning theories to stimulate students' writing development? Computer technology has created a teaching and learning environment that is different from traditional language classrooms, so students can have convenient access to required information in different ways (Chin, 2004). The advent of computer technology has influenced how people use a language tremendously, particularly for written communication, such as for the purposes of writing, genres of written work, or nature of writers and readers (Warschauer, 2007). The use of computers in writing education has also changed the ways people write greatly. For example, the word processor allows writers to cut, copy, paste, and delete written words, or helps writers check the spelling and grammatical mistakes (Hyland, 2002). According to Warschauer (1996b), students may learn better and be more independent when writing by using computers because they could become more creative and have more opportunities to practise a language, and computers help both instructors and learners record learning performance and process (Chen, 2014).

Due to the rapid expansion of the Internet in cooperation with computers and other forms of digital technology (Gündüz, 2005), the Internet has led to computers being used as tools for instruction (Reiser, 2001). Writing via various forms of technology, such as word processors, WWW, or email, benefits students with varied learning styles, abilities, or interests, and offers different practices for students to enhance their writing skills, because the Internet is available to provide additional language information in writing education. Furthermore, students who receive web-based writing instruction along with traditional writing instruction may perform better than those who are only instructed in traditional writing classrooms since there are different forms of supplementary language input found online that have helped students write more effectively and perform better (Al-Jarf, 2004).

When writing in an Internet community, teachers may create a safe and accessible learning environment for FL learners, and encourage them to produce new types of genres in their compositions through a social and interactive process. Therefore, students are encouraged to exchange their ideas outside of classrooms with instructors or peers in order to not only encourage interactions among them, but also raise students' awareness of writing as a form of communication (Al-Jarf, 2004). Writing in an Internet community also benefits peers' reviewing process and increases learning flexibility. For example, students can provide

feedback regardless of whether their peers are online while reading peers' written work at their leisure. This allows them to offer feedback and reflect on feedback given by others, and also having more time to respond to those comments (Ho & Savignon, 2007). Additionally, immediate responses from readers have enhanced writers' awareness toward their audiences greatly, and have improved individuals' writing abilities in terms of thinking about their writing purposes. The peer-reviewing process has thus developed writer's awareness of social and interactive learning considerably when writing in an Internet community, because writers have to communicate with their readers synchronously and asynchronously (Black, 2005).

However, the use of computers in FL classrooms has also been disputed because of its disadvantages (Stahl et al., 2006). Computer technology opens the way to the problem of students' plagiarism due to convenience of cutting and pasting functions (Warschauer, 2007). Some other shortcomings have been discussed in section 2.1.5, Advantages and Disadvantages of CALL in Language Education. Although the drawbacks of computer technology have been raised, the greatest benefit that it brings is the possibility of learning taking place everywhere (e.g. in classrooms, online spaces, in public etc.) (Haythornthwaite & Andrews, 2011). The unique features of the feasibility and accessibility of the Internet also enable students to discuss what they have learned in an Internet community (Tsou et al., 2002), and writing by using computers helps students give comments and receive feedback to and from peers more frequently than before (Goldberg, Russell, & Cook, 2003). Therefore, computer-assisted writing not only motivates students to learn from peers, but also helps them reflect on their writing samples by themselves through the peer reviewing process (Zha et al., 2006), which may develop both their cognitive and metacognitive awareness.

Computer technology, especially the provision of the Internet, provides a number of technological means to develop students' language competence, such as by using Skype, Twitter, Google Talk, MSN Messenger, YouTube, My Space, Google Video, BBC, Blackboard, Blog, Facebook, and Wikis (Kervin & Derewianka, 2011). Nevertheless, because the practical employment of blogging in language writing classrooms remains uncommon (Golonka et al., 2014; Lin et al., 2013; Miyazoe & Anderson, 2010), and research on the investigation of the impacts of blogs in language writing classrooms is also recommended (Aljumah, 2012;

Habul-Šabanović, 2015), I have therefore taken advantages of there being user-friendly features (Fageeh, 2011; Noytim, 2010), as ease of use allows for collaborative learning (Habul-Šabanović, 2015) in blogs to investigate the impacts of blogs in EFL writing classrooms.

### **2.3.2 The Nature of Blogs**

The Internet contributes a great deal to education, such as providing means of seeking information and obtaining knowledge. The most powerful strength of the application of the Internet is for users to “perform and realise social interactions, self-presentation, public performance, social capital management, social monitoring, and the production, maintenance and furthering of social ties” (Tufekci, 2008, p. 548). These web-based applications are therefore defined as social media, such as, blogs, which are based on the interactive and participatory features, and thus allowing different groups of people together to communicate with one another (Selwyn, 2011). Hence, language learners have more opportunities to be exposed to target languages, communicate and interact with others, and learn collaboratively (Habul-Šabanović, 2015; Huang, 2015).

The emergence of blogs has also served pedagogical purposes with their user-friendly features having made them common (Habul-Šabanović, 2015), while they can display “up-to-the-minute posts, latest first” (Nardi et al., 2004, p. 42) electronic journals to record users’ written work in Internet communities (Johnson, 2004). In these online communities, users can use hypertexts to link written texts that have been entered by other users (Godwin-Jones, 2003), and blogs can be created and managed by either individuals or groups of people and linked or cross-linked easily to form greater online communities (Godwin-Jones, 2003; Kervin & Derewianka, 2011). Owing to the features of being user-friendly (Fageeh, 2011; Noytim, 2010), there being ease of use, and allowing for collaborative learning (Habul-Šabanović, 2015), blogs have been applied in different disciplines by educators as well (Blood, as cited in Armstrong & Retterer, 2008). For example, teachers use them to post syllabi, create portfolios, distribute group assignments, and develop collaborative writing (Armstrong & Retterer, 2008). Students blog users can post their written work and receive feedback from their readers immediately and easily (Chuang, 2008), which may increase their awareness toward their audiences (Black, 2005; Godwin-Jones, 2003). They can also

use blogs to monitor their learning progress (Murray & Hourigan, 2008), which serves as electronic portfolios to reflect on their learning (Armstrong & Retterer, 2008).

The teaching and learning on blogs thus help language learners explore and construct greater amounts of knowledge because students have to search for online information to complete their tasks, or they are able to learn new contents from peers' blogs. Therefore, their knowledge can be developed and constructed during the process. In addition, students are able to learn collaboratively and give comments to each other. For example, students can discuss topics of common interest with each other, or less proficient students can learn from more proficient ones. It has been pointed out that peer comments play important roles in blogging contexts because students are concerned about what other people think of their performances (Huang, 2015).

Similarly, Habul-Šabanović (2015) pointed out that blogs help students to expand their language learning and learning community, as students could be able to construct their own knowledge and also be more responsible for their own learning when using blogs. They are also allowed to exchange their ideas with their peers or learn from others, which generates the possibilities of enhancing their learning experience, increasing their senses of being a part in the community, and helping them enjoy learning. Therefore, blog learning conforms to Garrison, Anderson, and Archer's (2000) model of Community of Inquiry (hereafter cited as Col) (Figure 8), which maintained that "learning occurs within the Community through the interaction of three core elements" (Garrison et al., 2000, p. 88), including the elements of cognitive presence, social presence, and teaching presence.

First, the cognitive presence has been deemed the most basic element in higher education. Learners in any part of the Col are able to construct meanings via interaction and communication, so their cognitive ability, which is a requisite element to develop one's critical thinking abilities, could be enhanced through the interaction. The social presence in the Col also elucidates learners' abilities to perform in a community, or how one presents themselves to others. The importance of this element is to support cognitive presence that enhances critical thinking abilities through interaction and communication with others in the community. Finally, the teaching presence in an educational context is teachers'

responsibility, which consists of two functions. The first is to design and develop an educational experience that includes the tasks of selection, organisation, and presentation of the course contents, as well as learning activities and assessment. The second is to facilitate teaching and learning through sharing contents with teachers and learners. Both functions support and enhance the social presence and cognitive presence in order to improve the teaching and learning consequences (Garrison et al., 2000).

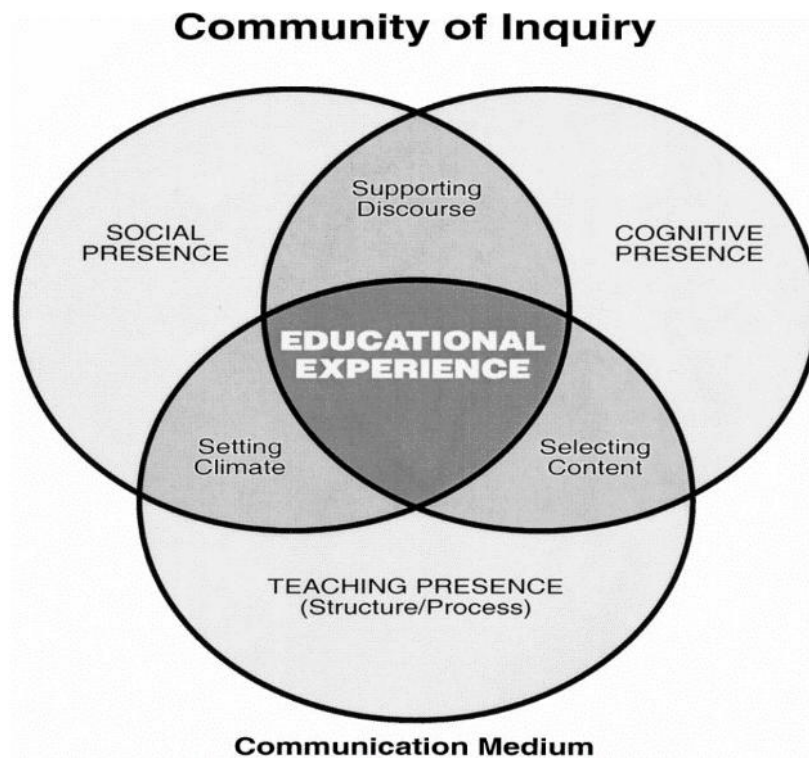


Figure 8. The Model of Community of Inquiry (Garrison et al., 2000, p. 88)

It has been found that blogs contribute to collaborative learning because their use motivates students to share their knowledge, negotiate with or support each other, consult with instructors or peers, and appreciate each other's contributions (Silviyanti & Yusuf, 2014). Collaborative learning, according to Dooly (2008), refers to students learn together for a common goal, and emphasises the whole process of learning in which students teach their peers or teachers and/or teachers teach students. Students would be more responsible for their own learning and/or for their peers' learning, so they are able to help other's learning. The statements in collaborative learning confirm Vygotsky's sociocultural theory, which states language learning involves taking part in a collaborative process in

which learners use the language for the purpose of interaction to gain grammatical, expressive, and cultural abilities (Ohta, 2000). Language learning is therefore a type of social interaction with others, and it is not an individual information process (Donato, 2000). Likewise, Bandura's social learning theory maintains that cognition and environment act vital roles in social learning contexts in which interaction is one of the most important vehicles in learning environments (Tu, 2000) because "most human behaviour is learned observationally through modelling: from observing others one forms an idea of how new behaviours are performed, and on later occasions this coded information serves as a guide for action" (Bandura, 1977, p.22). As a result, Top (2012) concluded that blogs are powerful and potential forms of social media to develop students' interactive connections in a learning community in higher education. Creating a learning community in classrooms and developing students' computer knowledge might also improve students' learning experiences.

Johnson (2004) synthesised the advantages of the employment of blogs in FL classrooms for both teachers and students. Teachers can use blogs to present instructional materials chronologically, which makes it convenient for them to prepare lessons, and they can easily edit those materials or add new contents for students. Since computers and the Internet are common and can be accessed easily nowadays, teachers are able to observe students' performances anytime and anywhere, as long as they have access to computers as well as the Internet. As a result, teacher's feedback can be conveyed through blogs conveniently. Because instructional materials are provided online, students are able to obtain those materials before and after classes for preview and review purposes. Some have also noted the advantages of blogs in writing classrooms for both teachers and students. In terms of the teachers' perspectives, blogs allow students to reflect what they have learned in class expressively and interactively. In terms of the students' perspectives, blogs help them share their thoughts and ideas with others, and they can also interact with many different types of people in an online community. Consequently, blogs create authentic and real language learning environments for students that stimulate and challenge their learning, and these creations are rarely found in traditional FL classrooms (Campbell, 2005).



On the other hand, blogs have certain disadvantages. First, using them is restricted to both writers and readers who are computer literate (Bach, 2008). Second, blogs cannot present complicated animated functions and rapid interactivities. Third, students may copy and paste others' work from the Internet resources without paraphrasing or citing the references. Finally, insufficient accessibility to computers and the Internet outside of classrooms may suspend students' learning (Tekinarslan, 2008). Although there are these potential drawbacks, they are effective tools for FL education because they provide the features of "social interaction, learning collaboration and negotiation of meaning" (Wu, 2006, p. 137).

### **2.3.3 The Use of Blogs in Writing Classrooms**

The utilisation of Internet-based collaborative learning is increasing on account of its convenience, ease of use, and rapid development. This kind of learning provides a great number of opportunities for learners to obtain information and learn collaboratively. Using blogs that provide users with abundant multimedia resources is one of the examples (Boulos, Maramba, & Wheeler, 2006).

Blogs are potential pedagogical alternatives in FL writing classrooms because they develop students' writing abilities in a collaborative manner effectively (Normand-Marconnet & Cordella, 2012; Silviyanti & Yusuf, 2014; Warschauer & Liaw, 2011), and serve a complement to traditional (face-to-face) classrooms for FL learning (Normand-Marconnet & Cordella, 2012). The application of blogs in FL writing classrooms would be very helpful to instructors. Not only can blogs improve students' writing contents and organisations of these contents, but also allow for students to easily receive and give feedback without there being restrictions of time and places. Some beneficially supplementary and auxiliary materials, such as pictures and sound or video files that convey meanings and inspire students' language learning could be uploaded to blogs as well (Armstrong & Retterer, 2008; Campbell, 2005; Torut, 2000). Hence, a teacher's instruction is not confined to face-to-face instruction, since instructors and learners can have contact with each other whenever and wherever necessary (Arslan & Şahin-Kızıl, 2010). Students can read others' writing samples, share their comments, and come to understand how to edit each other's contents. It is also convenient to correct and rewrite essays on blogs because they save writers' time by being

much faster than conventional writing, and therefore are more productive for writers to compose essays. Also, required information can be retrieved conveniently when contents are found online, and students are able to give anonymous feedback, which improves their writing abilities as well (Chen, Liu, Shih, Wu, & Yuan, 2011). As a result, blogging develops FL learners' writing competence, increases their writing motivations, and improves their learning autonomy (Sun, 2010). Students are able to gain more opportunities to learn FL writing through functioning on this user-friendly operating platform (Warschauer & Liaw, 2011).

Lin et al. (2014) pointed out that blog writing generated lower levels of anxiety and improved performance among EFL learners. They found that the students might be relieved of apprehension when blogging, which contrasted with another group of students who wrote with pen and paper. Moreover, the majority of the participants in Aljumah's (2012) study mentioned that they enjoyed the blogging programme in which they posted entries, read posts, and gave comments. The participants had very positive attitudes toward the use of blogs in English writing classrooms, so they believed that blogs were useful, motivational, and effective to develop their writing abilities. Armstrong & Retterer (2008) conducted a study on the use of blogs in Spanish writing classes, and found that more than 80% of the participants enjoyed blogging because they were easily accessible, and online references and dictionaries could be easily accessed. Similarly, a study conducted by Liu and Chang (2010), who demanded the participants to submit a 2000-word essay on blogs, pointed out that the subjects were very satisfied with the course according to both the qualitative consequences and the quantitative outcomes. The researchers explained that the students attained higher levels of self-efficacy while they were blogging because the teacher could respond to their questions on blogs instantly.

Finally, Bloch (as cited in Kitchakarn, 2012) demonstrated that blogs are effective to develop language learners' writing abilities, because they:

- are easy to create and maintain
- help students become productive writers
- allow for sharing writing samples easily
- accommodate to do group work, give feedback, and learn collaboratively

- allow writers to compose essays outside of classrooms
- support users to retrieve required information
- help foster relationships between readers and writers
- assist teachers to deliver courses in various ways

However, some opposing viewpoints have been posited about using blogs in writing classrooms. Less-proficient students might not feel sufficiently confident about posting their entries on blogs, which could result in negative affections about blogging, such as being concerned about the possibility of losing face among peers. In addition, the instructional method in a blog community is student-centred rather than teacher-directed, which might influence students' learning, including among Taiwanese students in particular. Because Taiwanese students have long learned to be dependent on teachers in classrooms, in which they expect to receive the "correct" or "the best" answers from their teachers, they might feel uncertain about or uncomfortable with their contents while they are writing in an open blogosphere (Lin, 2015). Peers' feedback only serves a pragmatic function with the possibility of there being extravagantly compliments, rather than a linguistic function through providing useful and constructive comments (Wu, 2006). Similarly, commenting on the peers' writings might make the students feel ashamed and embarrassed if they make mistakes, so they would rather leave encouraging messages for their peers to avoid making mistakes (Lin et al., 2013). Thus, Aljumah (2012) concluded that peers' feedback was neither helpful nor useful for students' writing development on blogs, especially when the students did not know how to comment or what to comment about on others' entries. In addition, students might also fail to respond to teacher's comments while revising their writing samples because of their insufficient English abilities (Wu, 2006).

#### **2.3.4 Empirical Research on the Use of Blogs in Writing Classrooms**

The impacts of blogs on the development of students' FL writing have been reported by many researchers, which are demonstrated as follows.

Silviyanti and Yusuf (2014) conducted a study on the effects of blogs on English writing at an Indonesian university, and tried to find out what the collaborative writing activities were when blogging, and what the students' perceptions of the use of blogs were. A total of thirty

students, aged ranging from 17 to 25, enrolled in a compulsory English writing class that was designed for second year students. The data was collected from entries posted on the blogs and interviews. In order to increase the students' confidence, the students had to work together as a group (three students in a group) to post their assignments with 250 to 300 words on the class blog that was managed by both the instructors and learners collaboratively. They were allowed to upload videos or pictures to support their writing samples, and any changes of the background colours or designs were encouraged to boost their creativity. The students were also sternly warned about the issue of plagiarism in advance, which could result in failing the course. During the process, the peers had to give their comments on the posts, and they could argue, propose, agree, or clarify their viewpoints on each post. In addition to the students' comments, the instructors also provided their own comments on the entries. The responses on both the students' and teachers' feedback were also welcome. This was to ensure that all of the students were involved in the process. As for the interview process, the researchers interviewed every student in order to understand their interests, objections, and problems they had during the process. It was encouraging for the researchers to find several positive results during this class-blog project, such as knowledge sharing, negotiation, support, consultation, and appreciation. The students were engaged in exploring and sharing their ideas with others, which was rarely seen in a traditional classroom setting. They provided their comments or corrections and asked for clarification in this online community. Furthermore, the researchers indicated that the less proficient students were willing to give their comments because they felt that they had more time to consult their peers before posting their feedback. Finally, the students were grateful for receiving feedback and comments from both the instructors and peers. These students' views regarding using blogs in a FL writing classroom was an additional matter for examination. The researchers presented that 87.5% of the participants enjoyed the programme because they had greater opportunities to read others' work, to give comments and feedback to each other, and to share ideas and learn from others. Therefore, the students' writing motivations had been increased after the instruction. The students also agreed that the class blog had developed their English writing competence because they could obtain knowledge from the comments, feedback, and others' written texts. However, the problem of the speed of the Internet was a shortcoming. The researchers thus concluded that blogs helped the students' writing abilities in a

collaborative manner in this programme, in which the mode of learning shifted from being teacher-centred to being student-centred. Also, the students' individual writing performances improved from the beginning to the end gradually, as was indicated according to their initial, midterm, and final written work.

Lin et al. (2013) carried out a qualitative study in which a total number of twenty-five first year students in a university in central Taiwan consented to participate in the study that took place for a full academic year for two eighteen-week semesters. Each student was allocated a computer in a computer laboratory, and they were required to hand in seventeen journals or assignments on blogs during the process in order to ensure the students' participation. The tutor blog was operated by the instructor to provide the students with the course information, teaching materials, and comments. Learner blogs were operated by the students themselves to post their assignments and give feedback to their fellow classmates on blogs. The data was collected through interviews that had an average length of twenty-six minutes. The interviews were conducted in Mandarin Chinese, the interview subjects' native language, in order to ensure that they were able to express themselves fully and accurately. After the data analysis, the positive findings indicated: (a) the students were satisfied with the convenience of the programme because they could submit assignments online, they did not worry about leaving materials at home, and they were able to review the teaching contents anytime; and (b) the students believed that the use of blogs improved their English writing abilities because they were able to have access to others' writing samples in which they could recall some words they had learned, they could learn some new words they did not know, they could learn language usages, or they could acquire writing ideas. However, some negative results were also reported. First, although commenting on the peers' writing samples was mandatory, the students sometimes did not know what to comment because they had to do it in English. They felt embarrassed about potentially making mistakes on the texts or giving feedback on blogs. In order to avoid making mistakes when giving comments, they would rather leave encouraging messages for their peers. Second, although the students perceived the use of blogs in the FL writing classrooms was innovative, convenient, and interesting, it did not make them have positive attitudes toward it. The researchers pointed out the students accepted blogs as a new technological tool to practise reading and writing, but not as a new

platform to improve their language abilities. Finally, the classroom setting was also a hindrance that undermined the interactions between the instructor and the students according to the responses provided by the interview subjects. There were also many distractions on the Internet, so the students did not focus on the course contents sufficiently. For example, some of the subjects admitted that they checked emails or did online shopping in class unless their computers were monitored and controlled by the instructor. Since the results were quite varied, the researchers summarised the results as the participants' superficial attitudes and true feelings. They determined that the participants were in favour of the utilisation of blogs in FL writing classrooms in principle, but they did not enjoy it in practice. The possible reasons were: (a) the students found blog writing is a burden when everything should be done in English, and (b) the students inhibited their feelings of anxiety and embarrassment when posting their own writing samples in a public online forum. The researchers thus concluded that blogs should not be taken as a panacea to stimulate FL writers' motivations, and FL instructors should be aware of modern technology and also understand how computer technology in particular affects students' learning.

Fageeh (2011) tried to find out the effects of blogs on the EFL students' writing progress and its relationship with their attitudes toward English learning among the fourth year English majors at a university in Saudi Arabia. In this sixteen-week research, there were two groups of participants, which were composed of the control group and the experimental group with twenty-five subjects in each one. The subjects in the control group received traditional instruction, while the students in the experimental group engaged in blog-based writing practice. The data came from the instructor's observations and students' reflective journals on blogs, questionnaires, assignments, and the writing assessment that included a pre-test and a post-test. At first, the students in the two groups were asked to produce an English essay that served as the pre-test to determine whether there were any differences in terms of the students' initial writing proficiency between the two groups. The results demonstrated that there was not significant difference between the two groups, which means the students' English writing proficiency was equivalent. Before giving the treatments, the students in the experimental group attended an introductory course that informed them about how to learn collaboratively and to increase their collaboration,

intimacy, amiability, and trust to each other. In the treatment phase, the students in the experimental group had to read others' written texts on blogs and give comments, respond to the comments, and write a reflective passage about the use of blogs. Finally, a writing assessment, which was identical to the one applied in the pre-test, was used in the post-test. The quantitative results in the *t*-test illustrated that the students' writing competence had been improved greatly in the experimental group. In contrast, no significant difference was found in the control group. In order to understand the differences between the two groups, the mean scores were 40.84 and 28.88 respectively in the experimental group and the control group, which demonstrates that the students in the experimental group improved significantly in terms of their English writing competence. The students also expressed positive attitudes toward exchanging ideas and receiving constructive feedback on blogs. The findings of the research further indicated that the students were more cautious about word choices, writing structures, and word spellings when blogging. This might be due to the fact that blogs did not provide spelling and grammar checkers, so the students paid more attention to them. The most prominent benefit was that blogs provided for interaction between the writers and the readers. The researcher concluded that blogs were able to improve the students' analytical and critical thinking abilities, provide social interactions among teachers, students, and global audiences because they offered exciting and motivating learning contexts in which students could perceive the senses of ownership and readership.

Arslan and Şahin-Kızıl (2010) conducted a study to explore whether the use of blogs in PCA-based writing classrooms enhanced the EFL students' writing performances in the School of Foreign Languages at a Turkish university. The researchers claimed that all of the participants received the same English instruction with the same total amount of class hours. The participants, aged ranging from of 18 to 21, were divided into the control group and the experimental group randomly. Twenty-three subjects (sixteen males and seven females) were in the control group, and received the PCA in a paper-pencil-based writing classroom. Twenty-seven subjects (twenty males and seven females) were in the experimental group, and accepted the PCA in a blog-based writing classroom. All of the course materials were uploaded to the blog for the subjects in the experimental group, so they had more opportunities to be exposed to the language input. Feedback sections were given during the

process, but the peers' feedback was very limited due to the insufficient amount of time. After receiving the written feedback from the instructor, the students had to revise their writing samples, and they all submitted their essays for a final score. The data was collected based on the students' pre-writing and post-writing tasks, which were the same before and after the treatments. Three experienced English writing instructors marked the participants' essays according to Hughey, Wormuth, Hartfiel, and Jacobs' (1983) English as a Second Language Composition Profile (hereafter cited as ESLCP), which is an analytic scale for writing. The marking scales included content (30 points), organisation (20 points), vocabulary (20 points), language use (25 points), and spelling, punctuation and capitalisation (5 points). Both the writing results collected from the pre-test and the post-test were analysed by the paired-sample *t*-test to determine whether there were any statistical differences between the two groups. ANCOVA was also used to determine whether the differences in the two groups were from the treatments or the pre-existing differences if there were any presence. After the data analysis in the paired-sample *t*-test, the researchers indicated that both groups had statistically significant differences. In other words, the instruction worked effectively to develop the students' writing abilities. However, the use of blogs in the writing classroom was more effective than the other one. The outcomes in the ANCOVA revealed that blog instruction had a statistically significant effect on the results of the post-test ( $F = 33.73, p = .001 < .05$ ), and the mean score of the post-test in the experimental group was greater than that for the other group with  $M = 72.29$  and  $M = 60.09$  respectively. The ANCOVA was further employed to analyse the five writing components in the post-test for the two groups. The researchers found out that the students' writing contents and organisations showed significant differences in the experimental group. This might be due to the fact that the students in the experimental group were able to share their writings and read others' work on the Internet without time and place restrictions, and they could receive more feedback focused on the contents and organisations, which could not be realised by the other group of students. The researchers concluded that the students who used blogs in the writing classrooms performed better than those who were in the paper-pencil-based writing classrooms because they could access the course materials and receive instruction anytime and anywhere. They therefore suggested that blogs should be widely used in FL education if students do not have other audiences, other than teachers.



In order to realise the students' perceptions and attitudes toward the use of blogs in FL classrooms, Noytim (2010) examined twenty English major undergraduate students at a Thai University. All of the subjects participated in the course entitled *Reading and Writing for Academic Purposes II*, which was to enhance the students' reading comprehension through a variety of written texts. This was a fifty-minute class with four classes a week on two different days. The researcher used a questionnaire to investigate how the students perceived the use of blogs and determine how they commented on its advantages and disadvantages. During this process, the participants had to summarise, discuss, give oral presentations, and write based on the readings. They then created an individual blog for the sake of instructional purposes and posted their essays on blogs as well as gave feedback to their peers. The researcher found that: (a) not every student could access the Internet at home; (b) thirteen of them had never used blogs before; (c) twelve of them did not use blogs in their daily lives; and (d) only eight of them used blogs to communicate or contact people once a while. However, due to the senses of ownership and readership, it was indicated that blogs allowed the students to practise their reading and writing skills, and to communicate with others. The students revealed that they could write more freely with lower levels of pressure and anxiety when blogging, which also increased their learning motivations and confidence. While learning with the use of media technology, the students became more creative since they were able to employ different types of fonts, colours, graphics, video, or audio clips to attract their readers. Furthermore, their analytical and critical thinking abilities were developed through expressing, sharing, and giving comments. By reading others' written texts, the students also perceived they could learn from their peers as well, and blogs expanded their social interactions and collaborative learning. Consequently, the results were quite positive in terms of the students' perspectives toward the use of blogs in FL classrooms. The features of blogs were highly appraised by the students, because of their contribution to their English learning, ease of use, choices of templates and media uploading, senses of real audience, constructive feedback given by both the peers and teacher, and being easy to use for interaction and communication. Nevertheless, the shortcomings of the Internet access, digital device, technology abilities, physical problems when using computers (e.g. sore eyes), insufficient knowledge of paraphrasing and giving citations, and issues of personal privacy were all raised when blogging. Despite of the disadvantages, the researcher concluded that blogs were helpful to

reinforce the students' English reading and writing performances. However, it is also suggested that the problems of its disadvantages should be taken into account before the formal utilisation.

### **2.3.5 Concluding Remark for Blogs in Writing Classrooms**

Although the effects of blogs in FL writing classrooms have been proved by many researchers (Aljumah, 2012; Armstrong & Retterer, 2008; Arslan & Şahin-Kızıl, 2010; Fageeh, 2011; Kitchakarn, 2012; Lin et al, 2013; Lin et al., 2014; Liu & Chang, 2010; Noytim, 2010; Silviyanti & Yusuf, 2014), the use of blogs in FL classrooms needs to be established (Miyazoe & Anderson, 2010). Blogs are increasingly deemed as a pedagogical means (Silviyanti & Yusuf, 2014), but the application of blogs in FL classrooms still remains uncommon (Golonka et al., 2014; Lin et al., 2013; Miyazoe & Anderson, 2010), and future research on the investigation of the impacts of blogs in FL classrooms is also recommended (Aljumah, 2012; Habul-Šabanović, 2015). Therefore, students' language competence can be developed in interactive learning contexts because learning completely takes place in a social and cultural environment (Lehtinen, 2003). This section mainly discussed both the perspectives on computer technology and language education, i.e. the use of blogs in FL writing classrooms, and its positive impacts have been proposed. However, research on the exploration of the PGA in blog-based writing classrooms has not been found, which provides a great opportunity for me to examine its effectiveness. Therefore, the study is expected to offer insightful viewpoints in terms of the integration of the PGA and blogs in EFL writing classrooms in both TESOL and CALL perspectives for future theoretical, methodological, and pedagogical implications.

### **2.4 Chapter Summary**

This chapter reviewed the extant literature sources dealing with both theoretical and practical perspectives concerning pedagogical methods in TESOL and CALL territories. First, the history and theory of CALL in language education demonstrated the development of CALL from the behaviouristic CALL to the communicative CALL and finally to the integrative CALL. Then, to address the use of computer technology in language classrooms as well as its current situation in the research context, the discussion has been extended to the issues in the Taiwanese educational system.

Second, the core of the current study is to determine whether the use of computer technology facilitates the EFL college students' FL writing performances, and the relationship with their writing strategies when the PGA is adopted. The introductions of the teaching approaches in writing education and learning strategies were therefore presented.

Finally, this chapter demonstrated the theories and practice of blogs in English writing classrooms to provide more understanding on its affordance in EFL learning contexts. Therefore, I would be able to integrate both computer technology and writing education in this study, which is the application of blogs in EFL writing classrooms.

The next chapter, Methodology, presents how I conducted the study by integrating computer technology and writing education in EFL writing classrooms at a university in central Taiwan.

## **CHAPTER THREE: METHODOLOGY**

This chapter demonstrates the methodology that was applied in this study. First, the research model design is presented in section 3.1, followed by an introduction of the research methods in section 3.2. The employed sampling technique as well as the introduction of the participants are detailed in section 3.3, followed by the introduction of the research instruments in section 3.4. Data collection and data analysis are explained in sections 3.5 and 3.6 respectively. Research validity and reliability are presented in section 3.7, while trustworthiness is explained in section 3.8. Research ethics are presented in section 3.9, followed by the chapter summary in section 3.10.

### **3.1 Research Design**

The primary purposes of this study are to examine whether the integration of the PGA and blog developed the EFL college students' writing performances, and to determine the use of their English writing strategies after the treatments by comparing the outcomes collected from the control group and the experimental group in both the pre-test and the post-test. To achieve the main purposes of this study, a quasi-experimental design was employed. A quasi-experimental design is quite akin to a true experiment in which manipulation of an independent variable is involved in the research process. However, random assignment of experimental participants is not administered in a quasi-experimental study (Ary, Jacobs, Sorensen, & Walker, 2014; Mertens, 2015). Conducting true experimental research, namely a random selection of participants to control and experimental groups, is very difficult in educational investigation (Cohen, Manion, & Morrison, 2011) because randomly selecting students or classrooms for research purposes may disarrange regular routines in schools. For this reason, the employment of a random assignment of students is very likely to be rejected by school gatekeepers or students' parents (Gall, Gall, & Borg, 2010). Alternatively, researchers have to select assembled classes, such as intact classes as participants, which is called a quasi-experimental design (Ary et al., 2014). The purpose of a quasi-experimental study is to understand the impact of curricular materials or teaching methods (McMillan & Schumacher, 2010), and this kind of research design is able to produce useful knowledge and find reasonable outcomes and conclusions (Ary et al., 2014; Gall et al., 2010). Nunan (1992) summarised that quasi-experimental research involves there both being a pre-test and a post-test as well as a control group and an experimental group, but there is not

random assignment of participants. Table 4 demonstrates the concept of a quasi-experimental design.

Table 4. *The Quasi-Experimental Design: Pre-test and Post-test Design* (Creswell, 2012, p. 310)

Time			
Select Control Group	Pre-test	No Treatment	Post-test
Select Experimental Group	Pre-test	Experimental Treatment	Post-test

As a result, the participants in this study were labelled as the control group and the experimental group randomly, and there were the same instruments in the pre-test including, the application of the English essays and the questionnaires. During the treatment phase, the participants in the control group received paper-pencil instruction, while blog instruction was introduced into the experimental group. The students in both groups accepted the same materials given by the same instructor with the same length of instructional periods. Both of them received the PGA-based instruction, and the difference between the two groups was the instructional means. At the same time, I observed the classes while I was delivering the teaching contents. After the eight-week instruction, the identical instruments that were administered in the pre-test were employed to all of the participants again in the post-test. Finally, seven interview subjects were randomly selected in each group for the retrospective semi-structured interviews. Table 5 details how the quasi-experimental design was employed in this study according to Creswell’s (2012) model shown in Table 4.

Table 5. *The Employed Quasi-Experimental Design: Pre-test and Post-test Design*

Time			
Groups	Pre-test	Treatment	Post-test
Control Group	English Essays + Questionnaires	Traditional Writing Class (no treatment): Paper-pencil-based Instruction + Observations	English Essays + Questionnaires + Interviews
Experimental Group	English Essays + Questionnaires	Technology Writing Class (with treatment): Computer (Blog)-based Instruction + Observations	English Essays + Questionnaires + Interviews

Therefore, a triangular data collection, known as the triangulation, was applied. Triangulation, according to Cohen et al. (2011), refers to the use of two or more methods to collect data in a study in order to enhance the research because one's data sources, data collection strategies, time periods, or theoretical schemes can be cross-validated (McMillan & Schumacher, 2006), and therefore researchers can be more confident to compare and contrast with each other (Cohen et al., 2011). Figure 9 demonstrates the interrelationships among the research instruments in this study in which they were used to compare and contrast with each other.

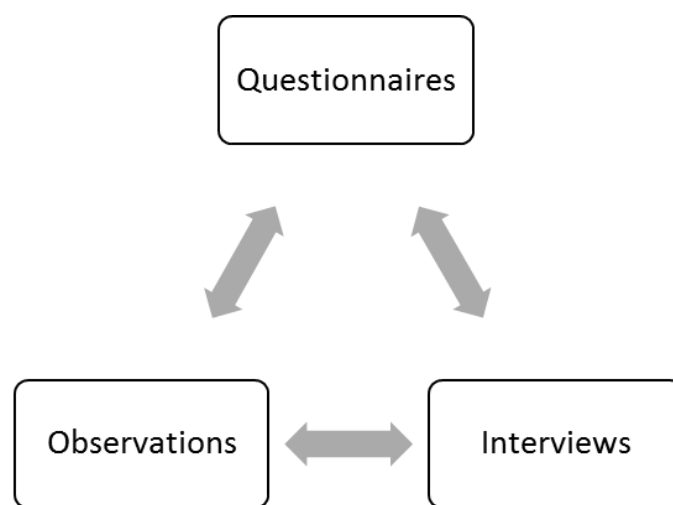


Figure 9. The Triangulation of Data Collection in this Study

### 3.2 Introduction of the Research Methods in this Study

Quantitative and qualitative methods are the most commonly used research methods in educational studies (Muijs, 2011). The former deals with numerical data that is analysed by using statistical software, such as SPSS, and the latter involves open-ended and non-numerical data that is analysed by using non-statistical methods (Dörnyei, 2007). Quantitative research methods examine research contents in a wider scope among a larger population, whereas qualitative research methods gauge research results in a more in-depth manner with a smaller group of participants. Quantitative research can generally explain the relationships among variables, but it is not advisable when attempting to establish a more specific understanding of a matter that can be offset by qualitative research (Creswell & Clark, 2011).

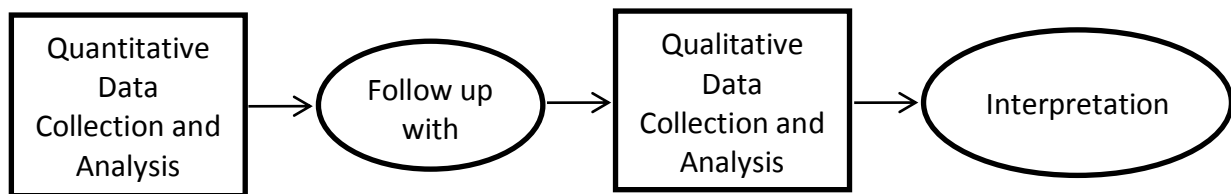
The use of the combination of the quantitative and qualitative research methods is known as mixed-method research, and has been widely applied in educational studies (Punch, 2009). This is because mixed methods are applicable to a wide range of studies in social science, can supply more persuasive and conscientious research consequences (Creswell & Clark, 2011), and provide more representative findings (Ahmed, 2011). The reason of using a mixed method in this study is that it is the best way to answer the RQs (McMillan & Schumacher, 2006). In this study, the participants' English writing performances could be evaluated by numerical data, such as numerical scores, but some data (i.e. students' perceptions) that could not be assessed numerically was to be collected through qualitative research methods, such as interviews and observations.

In mixed-method research, the weaknesses of one method can be compensated by the strengths of the other one. For instance, numbers in quantitative data can be more meaningful when descriptions from qualitative data have been added, and qualitative results can be more precise when quantitative numbers have been supplemented. As a result, a complex phenomenon can be interpreted with a more understandable manner (Dörnyei, 2007). Having research as comprehensive and complete as possible is the major strength of mix-method research because it is less likely to be constrained by the applied research methods. However, the strength of comprehensiveness would be possibly considered as a weakness because it may be criticised as less rigorous. If a multi-method is used in a study, the supplementary data may not be trustworthy and may appear suspect. Therefore, researchers have to describe both the methods carefully and confirm the complementary relationships between the research methods (Morse, 2003).

According to Creswell (2012), there are five types of mixed-method design, which are the convergent parallel design, exploratory sequential design, embedded design, transformative design, and multiphase design. After considering the research needs and research purposes of this study, the explanatory sequential design was employed.

In the explanatory sequential design (Figure 10), either the quantitative or qualitative data is firstly collected as the source of primary data. The other type of data is then gathered as the secondary data. In this study, the research instruments consisted of the students' writing

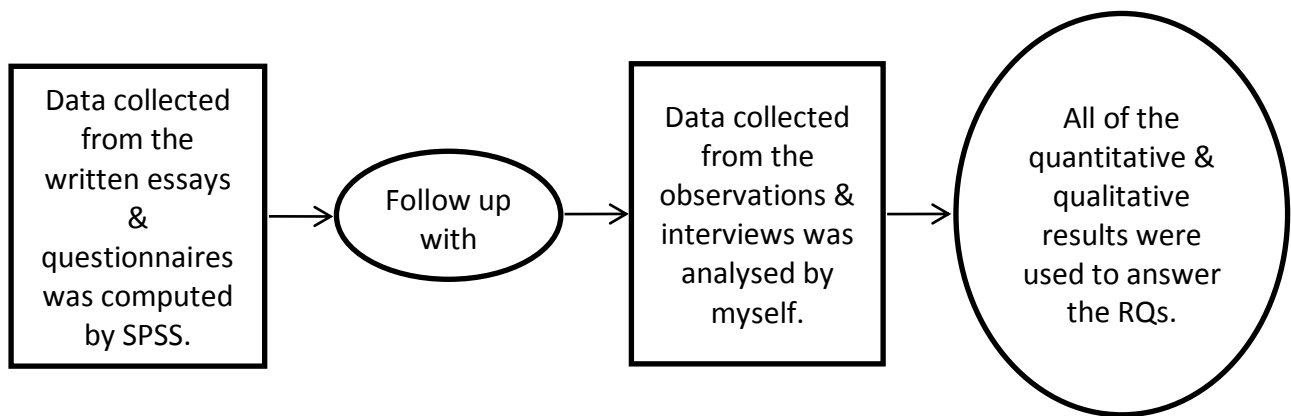
samples, questionnaires, observations, and interviews. Both the quantitative research instruments, namely the writing samples and questionnaires, were firstly administered to the participants, and the observations and interviews data was collected afterwards. The research design of this kind is the most prevalent one in educational research because the quantitative data can generalise a picture of a study, and the qualitative data can be used to specify the research. Accordingly, the qualitative data can provide more details to the results calculated from the quantitative data. Researchers who apply this kind of research can benefit the advantages from both of the quantitative and qualitative research methods. However, the processes of data collection and analysis are energy and time consuming (Creswell, 2012; Creswell & Clark, 2011).



*Figure 10.* The Explanatory Sequential Design (Creswell, 2012, p. 541)

The quantitative data was firstly collected in the pre-test that was administered in the first week of the programme, which included using the English written essays and the questionnaires. The same instructor with identical materials and identical lengths of instructional time then implemented to both groups for eight weeks. I, as the instructor of the programme and the researcher of this study, also acted as an observer to collect non-verbal and authentic data during the treatment phase. In the last week, the same writing topic and questionnaires used in the pre-test were applied again in the post-test, and finally seven students were selected randomly in each group for the retrospective semi-structured interviews in the following weeks. The collected quantitative research data was computed by SPSS, while the qualitative data was analysed by myself. Figure 11 demonstrates how I applied the explanatory sequential design in this study.





*Figure 11. The Employed Explanatory Sequential Design*

### **3.3 Sampling Technique and the Participants**

The following sections explained how the sampling technique was used to recruit the subjects, and the demographic information as well as the reasons for choosing college students as the participants were reported sequentially.

#### **3.3.1 Sampling Technique**

There are two types of sampling techniques: probability and non-probability. If subjects are selected randomly, that is a probability sampling and vice versa (Gay & Airasian, 2000). Probability sampling technique, selecting participants randomly, is used to make generalisations and to seek representativeness from a large population in a research study (Cohen et al., 2011). Due to the difficulty of drawing a random sample of students in a school, the non-probability sampling technique that does not select participants randomly is usually utilised in many educational studies (Ary et al., 2014). Although non-probability sampling, a small-scale study, cannot represent a wider population (Cohen et al., 2011), it is often used in educational research. The accessibility of subjects and features of certain types of characteristics in subjects are the primary considerations for researchers who use this type of technique, and probability sampling techniques are not necessarily needed or appropriate in quasi-experimental studies (McMillan & Schumacher, 2010).

There are three types of sampling techniques in non-probability, which are convenience sampling, purposive sampling, and quota sampling. The technique employed in this study was convenience sampling because researchers who use this technique try to find subjects

more easily (Johnson & Christensen, 2012). However, researchers cannot indicate the representativeness of the population because they are not selected systematically (Creswell, 2002). If the principal purpose of a study is to understand the relationships between variables instead to generalise the findings, convenience sampling may be the best choice for researchers to overcome research limitations and achieve research efficiency and feasibility (McMillan & Schumacher, 2010).

The non-probability sampling technique was thus used along with convenience sampling. In order to access a group of participants, I contacted a writing instructor who allowed me to conduct the pilot study in separate classes, and explained the purposes of this research to him. Fortunately, he was very willing to provide assistance, so I was capable of having access to two classes of students to implement the formal study. Following section details the participants' information.

### **3.3.2 The Participants**

Due to the time constraints and financial restrictions, a non-probability sampling technique and convenience sampling, which were discussed in section 3.3.1, were consequently employed among a limited number of participants due to the difficulties of the impossibility and unfeasibility of a large number of participants' recruitment, which made this study feasible with there being the possibility of extrapolating results for wider numbers of students.

However, there were two difficulties in recruiting the participants. One was the difficulty of requesting all of the participants to consistently attending every class. In other words, some of them skipped the classes regularly. Another was the students' anticipation of failing at the end of the semester due to their unsatisfactory mid-term exam results, and therefore some students dropped out halfway through the course, because they could decide whether to drop out after the mid-term exam according to the university regulations. However, in order to ensure the attendance rate and participation among the selected participants, standards were established to filter the valid participant samples: (a) the selected participants were to have an attendance rate of at least 90%; (b) their assignment

submission rate was to be at least 90%; and (c) they had to take part in both the pre-test and the post-test.

Finally, a total of thirty-four second year English major undergraduates were recruited for this study while they were taking a required English writing course in the autumn/winter of the 2014 academic year. The two classes of subjects were labelled as the control group and the experimental group randomly. In the control group, there were sixteen female students, aged ranging from 18 to 20 with an average age of 19.12. In contrast, there were eighteen students, including four males and fourteen females, in the experimental group, aged ranging from 19 to 20 with an average age of 19.05. The participants' English proficiency in these two groups were quite similar according to their university entrance exam results provided by the Testing Centre for Technological and Vocational Education, which is the most authoritative testing centre for technological and vocational education in Taiwan, since all of the students who finish their study at technological and vocational high schools have to take a test designed by the centre to study at universities in Taiwan. Unfortunately, it was impossible to have more students to enrol in this study because writing classes usually have lower number of students due to the practical concerns, which could be an acceptable reason for research purposes (Lin, 2014, 2015). Followings are the reasons for choosing college students as the participants in this study:

1. College students' cognitions and behaviour would be considered sufficiently mature to understand and analyse complex input, in contrast to young learners (e.g. children). For example, in order to have the students understand the PGA fully, some abstract concepts such as readers' requirements or writing styles should be delivered to the students, and college students would be better able to understand the ideas.
2. College students could carry out individual and group activities either in class or after class, as the programme required. For example, the participants needed to submit weekly English essays, have oral discussions in class, and give feedback to each other after class. This is more feasible for college students than for young learners.
3. Based on the research design, part of the participants had to have certain basic computer skills without an instructor's supervision to implement the project, so college students would be more suitable as the target sample. Also, they would be able to have access to computers easily, while young learners were sometimes

subject to restrictions about using computers in homes. For example, the participants in the experimental group would have to use computers to carry out the programme to fulfil the research requirements.

4. According to the research design, three questionnaires contained 61 items that were to be completed individually, so the respondents' patience while answering the questionnaires and understanding toward the questions would be highly demanded. College students would be more able to satisfy the requirements than young learners for this reason.
5. At the last stage of the data collection phase, several students would be required to participate in the retrospective semi-structured interviews in which they would have to recall what they did, explain what they did, and express what they learned. College students' cognitions and behaviour would be more able to achieve the purposes.

As a result, I decided to choose college-level students as the formal participants. The next section accounted for what and how the research instruments were formed and employed.

### **3.4 Research Instruments**

The research instruments included the students' English writing essays presented in section 3.4.1, the questionnaires presented in section 3.4.2, observations presented in section 3.4.3, and interviews presented in section 3.4.4.

#### **3.4.1 English Writing Samples**

One of the RQs in this study was to examine whether applying the PGA in EFL writing classrooms could contribute to developing college students' writing performances. In order to determine the potential answers for this RQ, English writing essays written by the students were required. The topic of the English writing essay was chosen from the teaching material, which will be discussed later in section 3.5.2. All of the materials were prepared and provided by myself, as the instructor of the programme and the researcher of the study. In order to make the students connect the writing tasks with their daily lives, the topic of "Low Birth Rate in Taiwan" was used as the writing question in the pre-test and the post-test because the Taiwanese birth rate has recently been low in comparison to world

rankings. The problem of the low birth rate has seriously affected many industries in Taiwan. Many schools or universities are facing the possibilities of being merged or closed down because increasingly fewer new students have registered at schools or universities year by year. By writing essays on this topic, the students were expected to reflect on this serious problem that they had never thought about before participating in this study.

In order to prevent any bias while marking the participants' essays, the students' essays were evaluated by myself and someone possessing an Ed.D. who has been teaching English at universities in Taiwan for several years. The essays were assessed based on Hughey's et al. (1983) ESLCP (Appendix A), which is an analytic writing scale that consists of five components, including content for a total of 30 points, organisation for a total of 20 points, vocabulary for a total of 20 points, language use for a total of 25 points, and spelling, punctuation, and capitalisation for a total of 5 points. This scale has been employed in writing education for over thirty years, and it is one of the best-known scales in the field (Lin et al., 2014). All of the participants' English writing essays collected from the pre-test and the post-test had two sets of scores,<sup>2</sup> respectively given by the two test markers. Microsoft Office Excel software was then used to calculate an average score for the five individual components as well as the final score for each essay, which were utilised in the later quantitative data analysis (see section 3.6).

However, the writing essays were not anonymous because I had to choose essays that were completed by the same subjects in both the pre-test and the post-test. Nevertheless, before taking the written essays, the participants were guaranteed that the writing tests were not related at all to the requirements for the course they were taking, they were to be used for the research purposes only, and would be secured confidentially.

### **3.4.2 Questionnaires**

Questionnaires are written sets of questions (McMillan & Schumacher, 2010), which are self-report forms to understand participants' attitudes, beliefs, and feelings toward a study (Teddle & Tashakkori, 2009). Questionnaires are also widely used in educational research

---

<sup>2</sup> A set of scores includes five individual scores for the five components, and a final total score that was acquired by adding up the five individual scores.

because a great amount of data can be gathered in a short period of time (Dörnyei, 2007; McMillan, 2012).

The forms of a questionnaire can be closed-ended, open-ended, or both (Teddlie & Tashakkori, 2009). Considering the use of three questionnaires in this study, all of the questionnaires were closed-ended because the participants could have thought writing the open questions would be tiresome while they were answering the total of 61 items in the three questionnaires. They would also withdraw from the participation in the research since it could take too much time and energy to finish both closed-ended and open-ended questions. For the purpose of the participants' fully understanding the items, all of the questionnaires were written in Traditional Mandarin Chinese, the participants' native language.

The layout of the cover letter consisted of three parts on the first page of the questionnaire booklet. First, there was instruction about how to respond to the questionnaires. Second, there were a list of some questions about demographic information. Finally, my contact information together with the invitation for contact were also provided in case of any need of queries regarding the research. All of the questionnaires were designed with the Likert-scale format with 5 responding degrees, ranging from strongly disagree represented by 1, disagree represented by 2, neither agree nor disagree represented by 3, agree represented by 4, and strongly agree represented by 5. The reasons of using the Likert-scale format are: (a) it is appropriate for a variety of sets of questions (Ary et al., 2014), and (b) it helps researchers to conduct statistical analysis (Newby, 2014). At the end of each section, an acknowledgement for the participation and cooperation was offered along with guidance for the succeeding section. Finally, the questionnaire booklet was composed of four pages, including the cover letter, so it conformed to the suggestion of a well-constructed questionnaire with there being a total of three to four pages (Dörnyei, 2003; Dörnyei & Taguchi, 2010). However, due to the difficulty of confirming the participants' attendance rate, anonymity was not employed because I had to select questionnaires that were completed by the same participants who attended both the pre-test and the post-test in order for later statistical data analysis. Nevertheless, before the participants filled in the questionnaires, they were guaranteed that their responses were not at all related to the

course they were taking, all of the information they provided was for the research purposes only, and this would be kept in confidentiality to avoid any potential risks.

Because the use of the closed-ended questionnaires might not be able to detect the participants' true feelings and obtain their genuine opinions, the observations and interviews were executed to gather more in-depth data to explore the reasons behind the participants' responses in the questionnaires. The following sections explain how each questionnaire was constructed.

#### **3.4.2.1 Questionnaire for Process/Genre Approach**

The Questionnaire for Process/Genre Approach (hereafter cited as QPGA) was developed by myself since the PGA is relatively new in language writing education, and a proper ready-made questionnaire could not be found. The self-made QPGA was formed according to the previous studies (Badger & White, 2000; Gao, 2012; Nordin & Mohammad, 2006; Yan, 2005) that thoroughly examined the plausibility of the PGA. During the questionnaire developing process, I considered the notion of English writing should be added to each item since the study was in relation to English writing, and the participants might have clearer concepts toward the research purposes. To confirm the validity and reliability of the QPGA, the initial QPGA was piloted before its formal utilisation, and the results of the pilot test are presented in the next chapter.

After piloting the QPGA, the factor analysis extracted fourteen items in four constructs in the final QPGA (Appendix B). The constructs were named as "teacher's facilitation," "learning with peers," "understanding for writing," and "model article enhanced writing." To further reinforce the accuracy of the labelling, two experts possessing a Ph.D. in Education and an Ed. D., who have been teaching English in EFL contexts for several years were invited to review the labels, because having additional experts to check the labelling of the constructs is a feasible method to decrease the amounts of potential errors (Dörnyei, 2007).

#### **3.4.2.2 Questionnaire for Writing Strategies**

Questionnaires are commonly used as a relatively efficient means to identify students' learning strategies, although there are some potential disadvantages. For example, students

may not reflect their true situations in questionnaires, or may not understand the questions completely (Chamot, 2004). However, it is the only method to elicit students' unobservable mental aspects in terms of their language learning strategies (Chamot, 2005). Rebecca Oxford's (1990) SILL was adapted for the Questionnaire for Writing Strategies (hereafter cited as QWS) because SILL is a standardised measuring tool to collect and analyse a great amount of data with reference to language learning strategies among various variables (Chamot, 2004), has been deemed as one of the most comprehensive instruments to gauge students' preference toward language learning strategies, and has been greatly evaluated in terms of its reliability and validity (Nisbet et al., 2005) in which the Cronbach  $\alpha$  was .93 - .98 (Green & Oxford, 1995). Therefore, it has been widely used in many language learning contexts (Cook, 2008).

SILL was applicable to this study, for it was designed for learners of English as a L2/FL. However, the original SILL was mainly developed for general English learning rather than specifically for English writing, so many items were changed to conform to the research purposes of this study, which might decrease the validity and reliability of the questionnaire. In order to confirm the validity and reliability of the QWS, it had been implemented in a pilot test before its formal application in the research, and the results are detailed in the next chapter. However, an irrelevant question (When I can't think of a word during a conversation in English, I use gestures.) in SILL was eliminated during the constructing process, since English writers generally do not use gestures to help them write contents. In addition, the third responding degree (somewhat true of me) in the original SILL was changed to a neutral one (neither agree nor disagree), because an impartial option might be essential to the participants' selection, and it might be easier for the respondents to answer all of the questionnaires as a whole.

After the pilot test, the factor analysis extracted twenty-two items in four constructs, which were named as "cognition," "known-knowledge using," "pressure reducing," and "self-enhancement" in the final version of the QWS (Appendix B). The labels were also reviewed by the same experts (as mentioned above) to ensure the suitability of the labelling.



### 3.4.2.3 Questionnaire for Blog Writing

The Questionnaire for Blog Writing (hereafter cited as QBW) was developed based on Aljumah's (2012) questionnaire. Aljumah (2012) claimed that the questionnaire was reliable and validated as it was piloted on a group of students, and was modified based on the participants' feedback before its formal employment. Aljumah's study was akin to the current study in some ways: (a) all of the participants were English majors at the university level; (b) they all learned English in EFL contexts; (c) the study was related to English writing; and (d) blogs were the teaching and learning means in the research. However, the questionnaire was amended moderately to fulfil the participants' understanding and to suit the purposes of this study. For example, the item: *"Reading the comments and entries of my peers on the blog helped me to learn and improve my own writing"* was modified to *"Reading the entries on my classmates' English blogs improves my English writing abilities"* in the QBW. The item: *"I don't like to check my writing when I write on paper"* in Aljumah's questionnaire was thought to be irrelevant to this study, so this question was removed from the QBW.

In order to emphasise the utilisation of blogs in English writing, the terms of "blog" and "English writing" were added to the questions, so the respondents could have clearer perceptions about the research purposes. There were only two responding scales of agree and disagree in the original one. This could have been insufficient to assess the participants' true feelings because there might be a grey area that offers neither complete agreement nor complete disagreement for the respondents. Therefore, further responding scales to get precise answers are recommended (Johnson & Christensen, 2014). I therefore modified the questionnaire as a five-point Likert-scale format.

After having the QBW piloted, the factor analysis extracted twenty-five items in five constructs in the final version, which were "blog vs. paper-pencil writing," "blog enhanced writing," "blog for socialisation," "attitudes toward blog writing," and "affections toward blog writing" (Appendix B). The labels were again reviewed by the same experts (as mentioned above) to ensure the suitability of the labelling.

Finally, the Research Randomizer (Urbaniak & Scott, 1997) was used to re-arrange the items in the three employed questionnaires in order to avoid any existing themes/categories in the original questionnaires, which might affect the participants' responses. Having presented the constructions of the quantitative instruments, I now elaborate the qualitative ones, observations and interviews.

### **3.4.3 Observations**

Observations that are used to collect open-ended and first-hand data by observing people (Creswell, 2012) help researchers record situations they see and hear instead of collecting data from participants' self-reporting answers to a series of questions, such as interviews or questionnaires (McMillan & Schumacher, 2010). Muijs (2011) explained the employment of observations helps researchers obtain genuine social interaction in a setting, rather than what is given to researchers by participants, so the main purpose of observations is to understand interactions in natural settings (Ary et al., 2014). This technique assists researchers perceive participants' real behaviour, and observe those who are silent in classroom settings (Creswell, 2012), so it is often used in classroom-based research (Ary et al., 2014). Authentic data collected from observations can be compared to participants' self-reporting data (Gay, Mills, & Airasian, 2009). However, observations are really time-consuming and intrusive (Ary et al., 2014), and cannot provide information that happened in the past (Gay et al., 2009). To compensate for the drawbacks of the use of the observations in this study, questionnaires and retrospective semi-structured interviews were conducted as well.

There are two sorts of observation: participant observation and non-participant observation. This is researchers observe classes without interacting with participants, so it is a less intrusive way to observe students. However, the collected data may be less reliable in terms of participants' opinions, attitudes, and emotional status. That is researchers take part in settings where they are observing. It helps researchers obtain insights, and build up relationships with participants, but they may find it difficult to participate and collect data at the same time (Gay et al., 2009).

In this study, I acted as a participant observer because I was the course instructor during the research process. I interacted with the participants to convey the teaching contents and carry out the research, so I could observe the participants without their vigilance. The principal advantages of being a course instructor were that I could confirm all of the instructional procedures had been administered, and I was able to develop rapport with the participants to gather much more information in the later interview phase. By doing so, not only could the authentic and non-verbal data be collected, but it could be also used to supplement the participants' self-reporting data collected from the questionnaires and interviews. However, due to the ethical issues (Marshall & Rossman, 2016) and difficulty of setting up a video recorder in the scene, video recording was not used to supplement the data. Without the video recording, the students could have been less self-conscious about concentrating their attention to the classroom settings, and their responses would be more naturalistic, which were important for me to collect authentic data. To gather observational data systematically as I was delivering the course contents, an observational checklist (Appendix C) was constructed.

The observational checklist, which was developed on the basis of sources found in the literature, the questionnaires, and the interview questions, was divided into two parts. One was in relation to the instructor's instruction, and the other was in regard to the learners' learning. The checklist served as a self-evaluation form for me to confirm whether all of the teaching procedures were executed duly during the treatment phase. Except for the Yes/No questions which were used to ensure whether the tasks had been done, I could jot down anything on the checklist to supply further information for data collection and for later data analysis. The other part of the observational checklist was made to examine the students' participation and interaction, so more authentic and first-hand data could be gathered to compare and contrast with the participants' self-reporting data, which was namely the data gathered from the questionnaires and the interviews. Finally, in order to corroborate the validity of the observational checklist, two experts were invited to review the form, which is detailed in section 4.2.2.

#### **3.4.4 Interviews**

The interview technique is a means of obtaining information about participants' beliefs, perspectives, thoughts, ideas, reasons, feelings, motivations, or views toward a topic (Boudah, 2011; Johnson & Christensen, 2012), which have been broadly employed as a research instrument in applied linguistics research (Nunan, 1992). Interviews help researchers gather useful information that cannot be observed visually and directly, and participants are allowed to express personal ideas in detail regarding the questions (Creswell, 2002, 2012). Also, any questions can be clarified by interviewers, and unclear as well as incomplete answers can be supplemented by those who are interviewed (Fraenkel, Wallen, & Hyun, 2012; Gay & Airasian, 2000). Researchers are able to understand why participants have certain responses that they react, or are able to evaluate the participants' learning process when they perform a specific skill. Interviews can also be used to gain information in relation to students' learning strategies, so they can explain why students' performances are different from what had been expected (Boudah, 2011). However, interviews are time-consuming, so the number of interviews is greatly fewer than the number of questionnaires (Gay & Airasian, 2000; McMillan, 2012). The information provided by interview subjects may not be true. In other words, interview subjects may tell what interviewers want to hear (Creswell, 2012). In order to compensate for the potential disadvantages resulting from the employment of interviews, questionnaires and observations were also used to collect a great deal of real data in authentic occasions.

According to Fraenkel et al. (2012), there are four main types of interviews, which are structured, semi-structured, informal, and retrospective interviews. Structured and semi-structured are formal interviews that are designed to be composed of a series of predetermined questions to obtain specific answers from interview subjects, which then compared and contrasted. Nevertheless, there are not specific questions or sequences of questions, and they are mainly used to elicit what people think and how their views differentiate from those of another in informal interviews. Structured, semi-structured, or informal interviews can serve as retrospective interviews. Interviewers ask interview subjects to recall from their memory, and to reorganise what had happened before the questions were posed. Then, respondents provide what they have reconstructed verbally.

The retrospective semi-structured interview was therefore employed in this study because the participants needed to reflect on past events while they were writing, and what happened while they were in class in order to complete the interview questions that were designed to follow the contents of the questionnaires. The reasons for using the interview technique were to contribute to: (a) maximising understanding of the participants' perceptions of the questionnaires; (b) compensating for the disadvantages of the utilisation of the closed-ended questionnaires; (c) collecting unobservable phenomena; and (d) observing the participants' in-class reactions. The interview questions (Appendix D) were produced based on the questionnaires and observational checklist. There were seven questions relating to the PGA, nine questions relating to writing strategies, and seven questions relating to blog writing. In order to ensure the validity of the interview questions, two experts were invited to review the interview questions, which is elaborated in section 4.2.3, and five students were invited for the pilot test, which is reported in section 4.4.

### **3.5 Data Collection**

This section reports how the data was collected. First, the blog that was used as the instructional platform in the experimental group is introduced in section 3.5.1. The application of the materials that were provided to the two groups of the participants is explained in section 3.5.2. The course that accounts for the curriculum design is then explained in section 3.5.3. Finally, the procedures of the data collection are demonstrated in the last sub-section, 3.5.4.

#### **3.5.1 The Blog**

All of the participants in the experimental group were asked to register an account on [www.pixnet.net](http://www.pixnet.net), which is free of charge and easy for users to manipulate, to help fulfil the research requirements. The *PIXNET* was launched in 2003 and offers blogs, online albums, guest books, and web communities. The reasons for selecting the PIXNET were: (a) it is a Taiwanese website, so the participants might have been familiar with its interface; (b) and as a result, some difficulties could have been avoided while the participants were using it; and (c) it saved time on introducing how to use the blogs. Thanks to the features of being free of charge and having easy manipulation, it would not be my burdens to conduct the research, and for the participants to create a personal blog account because creating,

designing, and maintaining blogs require very little technical knowledge (Habul-Šabanović, 2015).

However, this study was not conducted in a computer lab because the policies and regulations at the target university did not allow students to use a computer lab for other than computer related courses, such as webpage design. Moreover, Lin et al. (2013) pointed out that conducting an English writing course in a computer lab decreased the possible interaction between teachers and students because of classroom settings, and students were easily distracted in class, such as checking emails or doing online shopping. It was therefore difficult to have students concentrate on the online teaching when every one of them had been allocated a computer. Therefore, I decided to deliver the courses by using the instructor's computer and project the instructional contents on the projection screen, which were equipped in a non-computer classroom, for the students in the experimental group.

After the students registered on the PIXNET with a personal account, the students were asked to provide their account identifications in order to publicise them for the other students for their future needs. I therefore compiled the students' blog account IDs, and announced all of them on the tutor blog so that the students were able to link or cross-link to the peers' blogs during the experimental period. The tutor blog (Appendix E) served the functions of making course announcements, distributing teaching materials, and providing feedback. Therefore, it served as an online notice board for the participants because some reminders were necessarily made in order to have the students submit their essays on time, and receive the class announcements duly. All of the teaching materials were distributed before the classes started, so the participants could preview the teaching contents in advance. I was also able to conveniently provide feedback on the subjects' writing samples at different times from various locations. The students used their blogs (the learner blog) (Appendix F) to receive course announcements, preview and review teaching materials, upload their assignments, and give feedback to each other.

Since all of the course information was made on the tutor blog, the students would not miss out on any announcements no matter whether they were present or absent from the class.

The students were able to preview and review the teaching materials other than the regular class time. The students were permitted to submit their assignments anytime and anywhere before the deadline when they were ready. Reading the peers' entries and giving comments or ideas on their peers' blogs were compulsory every week during the research period. This helped me understand whether the students read the peers' posts, and control their attendance and participation because the students had to log in their own accounts before leaving messages that had their account IDs recorded on their comments.

### **3.5.2 Materials**

The material used in this study was *全民英檢一路通: 中級寫作能力測驗* (A Pathway to the General English Proficiency Test: Writing Proficiency Test for the Intermediate Level) (Appendix G) written by Chen (2013). Dr. Chen was awarded a Ph.D. in Learning Technologies at the University of Wollongong, Australia in 2010, and she has been teaching English to high school students and university-level learners in Taiwan for several years.

The reason for using this book as the primary material was its appropriateness, as the contents of this book suited the course requirements and the students' needs. Considering the participants' English abilities, the materials were appropriate for their needs because the textbook is designed for those who are preparing for the intermediate level (equivalent to CEFR B1) in the General English Proficiency Test (hereafter cited as GEPT). The GEPT, which is set up by the Language Training and Testing Centre, Taiwan, is one of the accredited indices for admission to or graduation from universities and graduate schools in Taiwan. Many universities and graduate schools in Taiwan require candidates to prove their English abilities with an authoritative test while they are applying for an admission, and require students to pass a certain level of an English test to achieve one of the regulated graduation thresholds. The GEPT is also widely accepted by many governmental institutions or private organisations for recruitment or promotion in Taiwan. Every year, hundreds of thousands of candidates take the test, with ages ranging from junior high school students to the elderly, so this test is very common and important to Taiwanese students in particular. In order to prepare the students to pass the GEPT, the textbook was therefore employed.

In light of the research design, the two groups of the participants received identical teaching and learning contents in this eight-week programme, but they used different kinds of instructional means, namely being the paper-pencil instruction and blog instruction. In the control group, all of the paper handouts (Appendix H) were prepared by myself in advance, and provided to the students in class. In the experimental group, in contrast, all of the teaching contents were uploaded to the PIXNET for the students before the class started. The major instructional materials and the model articles were from the primary textbook, *全民英檢一路通: 中級寫作能力測驗* (A Pathway to the General English Proficiency Test: Writing Proficiency Test for the Intermediate Level). In order to connect the writing samples to the students' daily lives and thereby provide relevance, the issues of global warming and the world's low birth rate were selected, since global warming has been one of the most commonly discussed issues worldwide in recent years, while the world's low birth rate is also one of the biggest problems that many countries are currently facing, including Taiwan.

### **3.5.3 The Course**

The data collection took place at a university in central Taiwan in the autumn/winter of the 2014 academic year. In order to prepare the students to cope with functioning in competitive workplaces or further studies after the completion of their university studies, writing courses were designed as required ones throughout the students' four-year course of university study. On account of the accessibility and availability of the classes, the study was applied to second-year undergraduates who had a year of writing training at university before taking part in this research study. This was a weekly two-hour writing class with a total of eighteen weeks in a semester. The course was devised to enable the students to write paragraphs with different types of subjects through planning, outlining, drafting and then completing draft. This was delivered by an Associate Professor, a native English speaker, who has been teaching English in Taiwan for several years.

Although it was very encouraging to have two classes for this study, only one hour could be allocated every week. This study took place over ten weeks including the pre-test and the post-test, but excluding the interviews, in both groups, and an essay assignment was given to the students in the two groups at the end of class every week. Therefore, the students in the control group submitted their essays every week, and I handed out the students' writing



samples with markings during the following week after the students' assignment submission. However, the students in the experimental group handed in their assignments by posting on their blogs before the deadlines, so I could update and mark their writing samples anytime and anywhere once they uploaded their entries. The students could also track their written work synchronously or asynchronously for my markings or provide their peers with feedback on blogs.

Because of the limited available time that was allocated to conduct the study every week, the teaching progress was comparatively slow. I could merely convey a brief writing lecture to the students during each session so that the students would have enough time to carry out other in-class activities with their peers. Owing to the time constraints, only two model essays were used in the experimental period of this study. The instructional procedures and approaches for the two model essays were quite similar in the two groups. The only difference was the instructional vehicle, which means the paper-pencil instruction was implemented in the control group, while the blog teaching was employed for the experimental group.

Since only one paragraph was discussed per week, I could explain the model articles and construct the paragraphs with the students. The students could discuss their writing ideas in groups, and then provide their ideas after their discussion in class. Their writing samples also served as teaching materials, so they could have clearer pictures toward the differences between the well-written and poorly-written essays. The first week and the last week in the experimental period were used for the pre-test and the post-test respectively, so there was not any instruction in these two weeks. The implementation of a new model article was initiated in week 2 and week 6, so the discussions on the introduction paragraph were conducted during this time. The body paragraphs for each individual model article were analysed during week 3 and week 7, and the conclusion paragraphs were completed during week 4 and week 8. Weeks of 5 and 9 were utilised to summarise the instruction and talk about the students' essays in class. Finally, the students were asked to submit complete essays for the two writing topics after the instruction was completed. Finally, Table 6 explains the weekly course objectives, teaching contents, as well as the assignments.

Table 6. *The Instructional Objectives and Contents in this Study*

Week	Course Objectives	Teaching Contents	Assignments
1	to collect the pre-test data	completed the English writing essay and the questionnaires	
2	to help the students understand how to start an essay	<ul style="list-style-type: none"> <li>a. talked about the introduction paragraph of the model article 1 with the students</li> <li>b. asked the students to discuss the introduction paragraph with their peers</li> <li>c. asked the students to provide their ideas after their discussion</li> </ul>	writing an introduction paragraph
3	to help the students understand how to generate ideas and make them as useful supporting ideas	<ul style="list-style-type: none"> <li>a. talked about the body paragraph of the model article 1 with the students</li> <li>b. asked the students to discuss the body paragraph with their peers</li> <li>c. asked the students to provide their ideas after their discussion</li> <li>d. talked about the students' writing samples (the introduction paragraph)</li> </ul>	revising the introduction paragraph and writing a body paragraph
4	to help the students understand how to end an essay	<ul style="list-style-type: none"> <li>a. talked about the conclusion paragraph of the model article 1 with the students</li> <li>b. asked the students to discuss the conclusion paragraph with their peers</li> <li>c. asked the students to provide their ideas after their discussion</li> <li>d. talked about the students' writing samples (the introduction and body paragraphs)</li> </ul>	revising the introduction and body paragraphs and writing a conclusion paragraph
5	to help the students differentiate the well-written and poorly-written writing samples	<ul style="list-style-type: none"> <li>a. discussed the selected writing samples in class in order to make the students understand the well-written and poorly-written essays</li> <li>b. helped the students modify their essays through the group discussion</li> <li>c. helped the students modify their essays through the whole class discussion</li> </ul>	revising essay 1 (introduction, body, and conclusion paragraphs)
6	to help the students understand how to start an essay	<ul style="list-style-type: none"> <li>a. talked about the introduction paragraph of the model article 2 with the students</li> <li>b. asked the students to discuss the introduction paragraph with their peers</li> <li>c. asked the students to provide their ideas after their discussion</li> </ul>	writing an introduction paragraph
7	to help the students understand how to generate ideas and make them as useful supporting ideas	<ul style="list-style-type: none"> <li>a. talked about the body paragraph of the model article 2 with the students</li> <li>b. asked the students to discuss the body paragraph with their peers</li> <li>c. asked the students to provide their ideas after their discussion</li> <li>d. talked about the students' writing samples (the introduction paragraph)</li> </ul>	revising the introduction paragraph and writing a body paragraph

8	to help the students understand how to end an essay	<ul style="list-style-type: none"> <li>a. talked about the conclusion paragraph of the model article 2 with the students</li> <li>b. asked the students to discuss the conclusion paragraph with their peers</li> <li>c. asked the students to provide their ideas after their discussion</li> <li>d. talked about the students' writing samples (the introduction and body paragraphs)</li> </ul>	revising the introduction and body paragraphs and writing a conclusion paragraph
9	to help the students differentiate the well-written and poorly-written writing samples	<ul style="list-style-type: none"> <li>a. discussed the selected writing samples in class in order to make the students understand the well-written and poorly-written essays</li> <li>b. helped the students modify their essays through the group discussion</li> <li>c. helped the students modify their essays through the whole class discussion</li> </ul>	revising essay 2 (introduction, body, and conclusion paragraphs)
10	to collect the post-test data	completed the English writing essay and the questionnaires	

However, there was difficulty in conducting more model articles during the process. As can be seen in Table 6, four weeks were needed to complete the whole instructional procedures for a model essay. There are only eighteen weeks in a semester in the Taiwanese university system, but two weeks were used for the university's midterm and final exams in which I was not allowed to execute this study. Also, several weeks were needed to administer the retrospective semi-structured interviews after the post-test, since it would otherwise be very difficult to find an interview subject after the semester finished and the holiday started. The students could also forget what they had done when questioned in the interviews after time had elapsed, which was likely to influence the data collection. Thus, only two model articles were used for an eight-week study.

### 3.5.4 Procedures

The research procedures included the pre-test, treatment, post-test, and interview. In the pre-test, all of the students in the two groups were informed the purposes of this study verbally prior to delivering any documents in the first week. After explaining to the participants, a consent form (Appendix I) in relation to the agreement to participate in this study was provided firstly, but I also explained the contents of the consent form again before the students signed it. After confirming their participatory willingness, I handed out the essay topic (Appendix J) to the students, and thirty minutes were given to complete the

essay. Questionnaire booklets were then dispatched to the participants. The answering instruction was verbally made as well, although the printed instruction was provided on the cover page in the questionnaire booklets. I maintained that this study was not intrusive in any way, as their rights, privacy, and willingness were all guaranteed and enquired in both verbal and written forms prior to the commencement of the pre-test. Finally, the subjects spent about ten to fifteen minutes to finish the questionnaires, which conformed to Dörnyei's (2007) recommendation that a well-constructed questionnaire should be completed within thirty minutes.

Between the second and ninth weeks, the treatments were given to the two groups of the participants respectively. In the control group, all of the teaching materials were printed in advance and were handed out to the students in class. The students' assignments were also handed in on paper. In contrast, all of the instructional materials were uploaded to the tutor blog before class began, and the students in the experimental group had to post their assignments on their own blogs before the deadlines. Apart from the teaching tools, the teaching procedures and approaches were very similar in the two groups in which I explained the model articles and elicited the students' ideas. The students discussed the ideas with their peers and provided their outcomes after their discussion in class. They then wrote an essay that was turned in every week. The students' writing samples were also used as the teaching materials after marking. The students had to modify their essays based on the comments given by either their peers or me, and handed in their new writing essays together with the modified one every week. During the treatment phase, I also acted as a participant observer to collect non-verbal phenomenon concurrently, but I found it difficult to deliver the lectures and note down the observational data at the same time. Also, the participants in this study were prone to be reticent and passive during the process, so it was not easy to obtain an abundant amount of observational data. In fact, there was not a great deal of observational data compared to the interview process.

The last week was used for the post-test whose procedures were quite akin to those in the pre-test. In the post-test, the writing essay question, which was the same with the one used in the pre-test, was distributed to the subjects again, with thirty minutes being allocated to the participants to complete the essay. Finally, the instruction of the questionnaires

completion was clarified again in both written and verbal forms before the students began completing the questionnaires, which took the participants about ten to fifteen minutes.

Lastly, the interviews were conducted in the weeks following the post-test. Before conducting the interviews, an announcement about the interview was made to the class, so the students might prepare themselves for interviews. The interview subjects were selected in the two groups randomly, and they were all informed that the interview process would be audio recorded before the commencement of the interviews, as the use of electronic recordings helps researchers preserve and reproduce the data (Hammersley, 2010). Therefore, I could be more confident about analysing the interview data and providing more insightful findings.

Before the interviews began, all of the interview subjects were asked to sign the consent form (Appendix K) in order to ensure they understood their rights and privacy before, during, and after the interviews. The students' native language, Mandarin Chinese, was used in the interviews to reduce the interview subjects' anxiety and motivate their willingness to participate, so much more information could be expected to be collected during these interviews. In the formal interviews, there were fourteen interview subjects from the two groups, and most of them finished the interviews in thirty minutes. After the interviews, I transcribed all of the interview data in Microsoft Office Word software, and translated them into English. Then, someone who has a MA in Translation Studies was invited to examine the accuracy and appropriateness of the translation, and some minor translation work was modified afterwards. The interview transcription and translation are displayed in Appendix M. Table 7 explains how the data was collected over these experimental weeks based on the explanatory sequential design.

Table 7. *The Employed Instruments and My Role in the Data Collection Process*

<b>Week</b>	<b>Instruments for Data Collection</b>	<b>My Role in the Process</b>
1	Pre-test: Essays & Questionnaires	Test Administrator
2	Model Article 1 & Observation	Course Instructor & Observer
3	Model Article 1 & Observation	Course Instructor & Observer
4	Model Article 1 & Observation	Course Instructor & Observer
5	Model Article 1 & Observation	Course Instructor & Observer
6	Model Article 2 & Observation	Course Instructor & Observer
7	Model Article 2 & Observation	Course Instructor & Observer
8	Model Article 2 & Observation	Course Instructor & Observer
9	Model Article 2 & Observation	Course Instructor & Observer
10	Post-test: Essays & Questionnaires	Test Administrator
After Week 10	Interviews	Interviewer & Translator

### **3.6 Data Analysis**

Both quantitative and qualitative data was collected from the students' writing essays, questionnaires, observations, as well as interviews. The quantitative data was computed by IBM SPSS Statistics version 22 to determine the statistical differences, and the qualitative data was analysed by myself to examine possible reasons and explanations to support the quantitative findings. The following sub-sections detailed how the data was analysed quantitatively and qualitatively.

#### **3.6.1 Quantitative Data Analysis**

The quantitative data comprised the students' writing essays as well as the three employed questionnaires, and all were involved in both the pre-test and the post-test. IBM SPSS Statistics version 22, a renowned statistical tool, was used to calculate a considerable amount of numbers in which both the descriptive and inferential statistics contributed to the quantitative results. In order to compile all of the numerical data logically, the Microsoft

Office Excel software served its function to save the data. I initially created two different sheets in Excel for the two groups. In each sheet, the students' writing scores that were collected from the pre-test and post-test given by the two evaluators were separately displayed together with average scores that were calculated by using Excel. With reference to the three questionnaires, Excel was again utilised to assemble the students' responses. The Likert-scale format was administered in the questionnaires so that I could integrate the responses easily. The numerical data was then copied from the Excel and pasted to SPSS in order to proceed to the statistical data analysis.

For the statistical analysing tools, the inter-rater reliability concerning writing essays was established as an initial stage because there were two sets of scores given by two different evaluators on the students' writing essays. Inter-rater reliability is also called inter-scorer reliability, which is "the degree of agreement or consistency between two or more scorers, judges, or raters" (Johnson & Christensen, 2014, p. 171). Therefore, in order to determine the inter-rater reliability, Pearson correlation coefficient was applied. Pearson correlation coefficient  $r$  was utilised to explain the relationships between two continuous variables (Dörnyei, 2007). Correlation coefficients are from the highest value of 1.00 to the lowest value of .00. The value of 1.00 indicates the perfect correlation between two variables and vice versa (Howitt & Cramer, 2014). The results of the inter-rater reliability for the writing scores between the pre-test and the post-test in the two groups are demonstrated in section 5.1.

Due to the involvement of two groups, it was necessary to determine whether there were any significant differences in terms of the participants' initial English writing proficiency between the two groups before continuing to the next stage, which assured whether the participants conformed to the same variance when several groups of subjects are taking part in a study (Field, 2013). If the variances among the groups to be computed are significantly different, it may influence the results in a  $t$  test. Therefore, the Levene's test helps researchers check the equality/homogeneity of variances (Morgan, Leech, Gloeckner, & Barrett, 2013). If the  $F$  value is not significant, indicating  $p$  greater than .05, the variances can be assumed as homogenous, and the  $t$  test is appropriate for use in a study. The results of the Levene's test are presented in section 5.2.

A paired-sample *t*-test was then applied to determine whether there were any significant differences between the pre-test and the post-test in the two groups in terms of their overall English writing performances, as well as the sub-categories of the five grading components (content, organisation, vocabulary, language use, and mechanics) based on Hughey's et al. (1983) ESLCP. The paired-sample *t*-test is usually used to compare two sets of scores collected from a pre-test and a post-test completed by the same group of participants (Brace, Kemp, & Snelgar, 2012; Dörnyei, 2007; McMillan & Schumacher, 2006), so it was deemed appropriate for this study. The results of the paired-sample *t*-test are reported in sections 5.3 and 5.4.

As mentioned earlier, a *t* test is usually used when there are two samples to be compared. However, a *t* test is a parametric test in which the collected data should be an interval or a ratio. Due to the use of the format of Likert-scale questionnaires, a *t* test is not suitable because Likert-type questionnaire follows an ordinal scale.<sup>3</sup> Consequently, a nonparametric test,<sup>4</sup> Mann-Whitney *U*-test, was manipulated to determine whether the two groups of the participants were homogenous in terms of their perceptions of the PGA and the use of the writing strategies because it is often employed when the data is in an ordinal form, and it is equivalent to the independent *t*-test (Hinton, McMurray, & Brownlow, 2014). The results of the Mann-Whitney *U*-test are demonstrated in section 5.5.

Then, the Wilcoxon signed-rank test was used to compare the data collected from the three questionnaires to determine whether there were any significant differences between the two sets of data gathered from the pre-test and the post-test, to which the same group of participants made contributions. The Wilcoxon signed-rank test, a nonparametric test, is equivalent to the paired-sample *t*-test (Field, 2013). The results of the Wilcoxon signed-rank test are presented in section 5.6.

---

<sup>3</sup> It is "a natural ordering of categories....These values can clearly be ordered....What you cannot do is 'measure' exactly the distance between the scale points....Agree-disagree type rating variables are therefore ordinal" (Tolmie, Muijs, & McAteer, 2011, p. 8).

<sup>4</sup> "Statistical techniques used when the assumption of normality cannot be met, with small sample sizes, and with ordinal (rank) or nominal (categorical) data" (Mertens, 2015, p. 421).



Finally, after determining the differences of the participants' perceptions of the PGA, the use of the writing strategies, and their perceptions of blog writing between the pre-test and the post-test in the two groups, I further attempted to determine the relationships in terms of the students' perceptions of the PGA, the use of the writing strategies, as well as their perceptions of blog writing after the treatments in the two groups. In order to demonstrate the relationships, Spearman's correlation coefficient  $r_s$  was applied because it is usually used to measure the correlations between variables that are an ordinal level, such as the Likert scale (Brace et al., 2012). Spearman's correlation coefficient is deemed as an alternative to Pearson correlation coefficient when the assumptions in the Pearson correlation coefficient cannot be achieved such as continuous types of data (Howitt & Cramer, 2014). The results of the Spearman's correlation coefficient are reported in section 5.7.

### **3.6.2 Qualitative Data Analysis**

This study involved both the quantitative and qualitative research methods in order to provide more convincing and conscientious research consequences (Creswell & Clark, 2011), and offer more insightful results, findings, suggestions, and implications to address a research gap found in the extant literature on the application of blogs in PGA-based writing classrooms. After explaining how the quantitative data was treated and analysed in the preceding section, the techniques of qualitative data analysis are discussed hereafter.

Thematic analysis, one of the most common methods to analyse qualitative data (Bryman, 2012), is a "method for identifying, analysing and reporting patterns (themes) within data" (Braun & Clarke, 2006, p. 79). This approach was used in this study because "qualitative researchers make sense of their data by identifying and studying the categories that appear in their data.....rather than having to think about each sentence or each word in the data" (Johnson & Christensen, 2014, p. 600). In this case, thematic analysis helped me understand how the participants perceived the use of the PGA, writing strategies, as well as the blogs in their writing classrooms, so much more in-depth information could be extracted and gathered to explain the quantitative research outcomes. In addition, both the control group and the experimental group were involved in this study, so it was expected to provide the similarities and differences about the students' perceptions of the employment of the PGA

and writing strategies between the two groups because thematic analysis approach reports participants' experiences, meanings, and reality (Braun & Clarke, 2006).

To analyse the data, I followed Braun and Clarke's (2006) guidance of thematic analysis to analyse the qualitative data. First, I familiarised myself with the data by reading and re-reading as well as writing down the preliminary ideas so as to find out the initial codes. Second, I identified the codes by categorising them into the appropriate pre-determined themes. Due to the application of the explanatory sequential design in this study, the qualitative results were used to explain the possible phenomena in the quantitative results, so the extracted factors in the employed questionnaires were adopted as the themes to analyse the qualitative data. As a result, I would be able to analyse both the quantitative and qualitative data throughout this study systematically and logically. Third, I checked if the codes were classified into the pre-determined themes correctly so that I could ensure the themes would be analysed accurately in the later discussions. Finally, I overlooked the themes and codes to ensure their feasibility and comprehensibility so as to answer the RQs.

Owing to the manageability of the observational data, I simply used the Microsoft Office Word software to help with noting, editing, storing, retrieving, linking, and highlighting the observational data. I thus initially input all of the raw data collected from the observations in a Word file, which was then reviewed repeatedly to establish the connections and the relationships. After having the preliminary ideas toward the observational data, I then categorised the data and labelled the categories according to the features in each one of them. Next, I conducted a further analysis to discern the possible answers for the observed phenomenon. It was therefore made possible to provide more accurate and robust research findings, and then compare and contrast them with the interview results in the succeeding discussions. Finally, the results of the observational data are presented in section 6.1.

For the interview data analysis, all of the interview processes were audio recorded and were conducted in the participants' native language, Mandarin Chinese, so the interview responses were then transcribed and translated into English by myself. Considering the manageability of the interview data, I used Microsoft Office Word software to note, edit, store, retrieve, link, and highlight the interview data for data analysis. During the

transcribing process, I also deliberated the meanings of the given information since transcribing is a construction process of construction, rather than merely recording what was said (Hammersley, 2010). The interview transcriptions were then reviewed by the interview subjects to corroborate the accuracy after transcribing, as McMillan and Schumacher (2006) recommended for reviewing participants' input, and therefore the accuracy of the transcribing could be confirmed.

After confirming the correctness of the transcriptions, I could set about translating the transcriptions into English, the written language used in this thesis work. Hennink, Hutter, and Bailey (2011) suggested transcribing interview language verbatim and then translating the language into researchers' language help researchers have a transcript in interview subject's language for later reference while analysing data, although it is time-consuming. The translated transcriptions were also confirmed by someone with a MA in Translation Studies in order to check the accuracy and appropriateness of the translation. Some slight revisions were made during the reviewing process, such as typo problems. The results of the interview data are presented in section 6.2.

### **3.7 Research Validity and Reliability**

Validity and reliability are two inseparable concepts in educational research. It is crucial to report them because they are two major standardised criteria to evaluate the quality of a study (Lodico, Spaulding, & Voegtle, 2010).

Validity refers to "the degree to which scientific explanations of phenomena match reality" (McMillan & Schumacher, 2010, p.104), or "the extent to which an instrument measured what it claimed to measure" (Ary et al., 2014, p. 242). In other words, validity judges the appropriateness and meaningfulness of an instrument that is used to collect sets of scores for specific inferences, and it is also used to determine whether the inferences are valid or invalid, and not the instrument itself (McMillan, 2012).

In this study, both content validity and face validity were confirmed. Content validity is to evaluate the applicability of the items in instruments. In other words, it establishes whether the test represents what it claims to evaluate, so what should be included or not in

instruments can be certified (Fraenkel et al., 2012; Johnson & Christensen, 2014; Litwin, 1995). Face validity is less scientific and has less systematic validity than other approaches, which is simply judged by untrained subjects, such as students. It is similar to content validity and ensures whether the instrument is measuring what it intends to measure, but the evaluation of face validity is much more casual. Although many researchers do not take face validity into account in research, it is very important in a study because it confirms if participants understand questions (Ary et al., 2014; Litwin, 1995; McMillan & Schumacher, 2010).

By doing so, all of the employed questionnaires, the QPGA, QWS, and QBW, were reviewed by two experts who specialise in TESOL and applied linguistics to confirm the content validity. The discussions of the issue are presented in section 4.2.1. I also interviewed eight students whose characteristics were akin to the intended subjects. Therefore, the face validity of the questionnaires was verified, and the details were reported in section 4.4. As regards the observational checklist and interview questions, they were all examined by two experts who are skilled in educational studies and applied linguistics to assure the content validity (see sections 4.2.2 and 4.2.3). In addition, the interview questions were piloted before their application in the formal study to ensure the students' comprehensibility toward the questions (see section 4.4).

Noar (2003) mentioned that after verifying the content validity and face validity, it is also important to satisfy the construct validity. Construct validity "concerns the extent to which a particular measure or instrument for data collection conforms to the theoretical context in which it is located" (Cohen et al., 2011, p. 188) or "refers to inferences that are made from the nature of the measurement and interventions used to the constructs they purportedly represent" (McMillan & Schumacher, 2006, p. 140). In order to realise the construct validity of the questionnaires that were used, the test of factor analysis was consequently applied, as is presented in section 4.3.1.

After discussing the issue of research validity, another important criterion for research quality, reliability, was also taken into account. Reliability is "the extent to which our measurement instruments and procedures produce consistent results in a given population

in different circumstances” (Dörnyei, 2007, p.50), or “the consistency or stability of a set of test scores” (Johnson & Christensen, 2014, p. 166). To measure the reliability of this study, both the test-retest reliability and Cronbach’s  $\alpha$  were used. Test-retest reliability is to determine whether the participants’ responses are consistent toward instruments if they take the instruments more than once (Lodico et al., 2010; Mertens, 2010). It is often applied in high-quality journal reports (Johnson & Christensen, 2014), so I assumed that it is able to provide persuasive results for this study. As for Cronbach’s  $\alpha$ , it determines the internal consistency reliability by checking whether all of the items correlate with others in a test (Gay et al., 2009). The result of Cronbach’s  $\alpha$  is between 0 and 1, which means there is not relationship among the variables if the Cronbach’s  $\alpha$  coefficient is 0. On the other hand, if the Cronbach’s  $\alpha$  coefficient is 1, the variables are correlated perfectly, and the tests are absolutely reliable. Therefore, all of the questionnaires underwent both the test-retest reliability test and Cronbach’s  $\alpha$  test to confirm their reliability. The details are reported in section 4.3.2.

### **3.8 Trustworthiness**

Discussing research validity and reliability is necessary in any quantitative research (Dörnyei, 2007; Golafshani, 2003; Johnson & Christensen, 2012). However, given that both the quantitative and qualitative research methods were used, the issue of trustworthiness, the criteria to assess the quality in qualitative research (Bryman, 2012), is explained in this section. The concept of trustworthiness was proposed by Lincoln and Guba (1985) to replace the terms of validity and reliability in qualitative research, and four criteria, credibility, transferability, dependability, and confirmability, compose the trustworthiness (Bryman, 2012).

#### **3.8.1 Credibility**

According to Bryman (2012), credibility is parallel to internal validity, which is defined as “the methodological procedures and sources used to establish a high level of harmony between the participants’ expressions and the researcher’s interpretations of them” (Given, as cited in Ahmed, 2011, p. 117). In this study, several techniques were carried out to ensure the credibility of the results. First, the interviews were audio recorded because mechanically recorded data is able to establish accurate and complete records (McMillan &

Schumacher, 2006). I therefore could fully transcribe the interview contents to obtain sound information for the research. Then, to corroborate the accuracy of the interview transcriptions, the technique of participant reviewing was used because asking the same interview subjects to review the transcripts or to modify any incorrect information is suggested in order to get comprehensive and integrative research findings (McMillan & Schumacher, 2006). Hence, after transcribing the interview transcripts, I had the interview subjects to confirm whether the transcriptions and descriptions were in accord with their given information. On account of the use of the interview subjects' native language, Mandarin Chinese, in the interviews, the translation of the transcripts between Chinese and English was also affirmed. After translating the interview transcription into English, I had a translator to check the English translation in order to ensure the accuracy of the interpretation. As for the observations, I, as the instructor of the programme and the researcher of this study, was able to observe the participants directly while interacting with them.

### **3.8.2 Transferability**

Transferability, parallel to external validity (Bryman, 2012), explains how usefulness of findings in a study is applicable to other similar research contexts or to other similar research questions, so other researchers are able to transfer the research to other situations (Marshall & Rossman, 2016). To ensure the transferability, the technique of triangulation, which is "the act of bringing more than one source of data to bear on a single point" (Marshall & Rossman, 2016, p. 262), was applied through the observations and interviews, because different types of data enable corroborating, elaborating, and clarifying a study (Rossman & Wilson, 1994). Interviews help researchers gather useful information that cannot be observed visually and directly, and participants are allowed to express personal ideas in detail about questions during the interviews (Creswell, 2002, 2012). Observation helps researchers obtain genuine social interaction in a live setting, rather than what is given to researchers by participants (Muijs, 2011), so the main purpose of an observation is to examine interactions in natural settings (Ary et al., 2014). Therefore, these two techniques for data collection helped me gather data with more dimensions in order to provide more persuasive and confident research findings. Because transferability in a qualitative study is determined by the readers of the research, the researchers'

responsibility is to provide sufficient and detailed information for the readers to judge the adequacy and appropriateness of the transferability (Mertens, 2015). As a result, the transferability could be confirmed by the aforementioned elaborated explanations and descriptions in this chapter.

### **3.8.3 Dependability**

Dependability is also parallel to reliability (Bryman, 2012), but unlike this concept in quantitative research, dependability refers to how researchers explain the changing phenomenon in a scene and the changes in a study due to the increasingly understandings of the scene (Marshall & Rossman, 2016). Qualitative researchers believe that changing is to be expected and accepted, and it should be trackable and observable (Mertens, 2015). Dependability in qualitative research perspective is to ensure the completeness of the records in the whole research process including the formation of the RQs, selection of participants, observational data, interview transcripts, and data analysis (Bryman, 2012). In order to ensure the dependability of the current study to the widest possible extent, I used mixed research methods to carry out this study. Mixed-method research refers to the combination of the quantitative and qualitative research techniques in a study, which has been widely applied in educational research nowadays (Punch, 2009). Quantitative research methods examine research contents in a wider scope among a larger population, while qualitative research methods gauge research results in a more in-depth manner with a smaller group of participants. Quantitative research can generally explain the relationships among variables, but it is not advisable when attempting to prove more specific understandings of a matter that can be offset by qualitative research (Creswell & Clark, 2011). In this study, the English writing essays, questionnaires, observations as well as interviews were applied to understand whether there were any changes in terms of the participants' English writing abilities, perceptions of the PGA, the use of the writing strategies, and perceptions of blog writing in Taiwanese college students' English writing classrooms.

### **3.8.4 Confirmability**

Finally, confirmability parallels to objectivity (Bryman, 2012), which concerns whether the research findings in a study can be confirmed with evidence from other sources of research

or other studies (Marshall & Rossman, 2016), and therefore demonstrate the research is not a fabricated story of a researcher's imagination (Mertens, 2015). However, it is impossible to achieve complete objectivity in social studies, but what researchers can do is to confirm how they avoid adding bias in terms of personal values or tendencies in a study (Bryman, 2012). By doing so, I had consulted with several experts whose background knowledge is closely related to the current study when developing the research instruments to ensure their appropriateness and accuracy. Another experienced English instructor was invited to evaluate the participants' writing samples. As for the data analysis, the interview transcripts were reviewed by the interview subjects, and the translation of the transcriptions was corroborated by another translator who is fluent in both Chinese and English. Furthermore, the data was analysed based on the literature sources in order to make the research more theoretical, practical, and methodological. Finally, all of the processes were also re-confirmed by my supervisors to increase the extent of confirming the findings of this study.

### **3.9 Research Ethics**

There are ethical issues concerning human-based research (Walliman, 2011) that involve researchers having to be responsible for protecting participants' rights, in terms of both physical and mental aspects (McMillan & Schumacher, 2006). Some moral considerations, approval from a departmental committee, a consent form, confidentiality, and gaining access were taken into account in the research process.

Before the data collection, it was required to obtain the approval from the School of Education Ethics Committee, Durham University, UK, as according to the departmental regulations. I therefore filled out the Research Ethics and Data Protection Monitoring Form provided by the School of Education, and then submitted it to the Committee in order to receive the approval letter (Appendix L). After obtaining the authorisation, I then contacted the chairperson of the department in which the participants were to be located in order to have contact with the participants.

Another related matter is a consent form, part of the core in an ethical study (Lindsay, 2010). The advantages of using consent forms are: (a) participants have an opportunity to understand the purposes of a study as well as their participation; and (b) the researchers



have a signed consent in case there is any concern raised subsequently (Bryman, 2012). The consent form (Appendix I) was distributed in the pre-test phase. The participants read and signed the informed consent forms before writing the English essay, filling out the questionnaires, and processing the interviews. In the consent forms, the purposes of this study were firstly explained, and the participants' rights as well as privacy were then presented and guaranteed. Finally, my email and mobile phone number along with a contact invitation were also provided in case of there being any need for queries regarding the research. The consent form was written in traditional Mandarin Chinese, the participants' native language, in order to ensure that they understood the contents fully.

Many experts (Basit, 2010; Bell, 2005; Cohen et al., 2011; Dörnyei, 2007; McMillan & Schumacher, 2006) have maintained that keeping collected data in a safe place that could only be accessed by researchers is important, and it is researchers' responsibility. In order to protect the participants' privacy and rights, the participants were informed and guaranteed in both written and verbal forms that all of the collected data would be kept confidentially and secured in a safe place where I was the only person who knew these contents.

Lastly, the current study aimed at college students as the target subject samples in an EFL context. In other words, I needed to obtain approval from a university in my home country, Taiwan. I then contacted the chairperson of the Department of Applied English at a university in central Taiwan. I explained the purposes of this research and asked about the possibility of conducting the research in the department. A verbal consent given by the chairperson was received. Next, I contacted the course instructor and explained the purposes of this research again. Fortunately, he expressed willingness to provide assistance and cooperation, which led me to being able to locate participants for this current study.

Ethical issues were thus considered carefully and elaborately before taking any further steps in this study.

### **3.10 Chapter Summary**

The current chapter mainly presented the implemented methodology, which was a mixed-method research. As a result, both quantitative and qualitative data was collected in this

quasi-experimental research. In order to clarify the research methods of this study, the followings were sections served different purposes: research design (section 3.1); an introduction of the research methods (section 3.2); the sampling technique and the introduction of the participants (section 3.3); the research instruments including the English writing essays, questionnaires, observations, and interviews (section 3.4); data collection (section 3.5); data analysis (section 3.6); justifying research validity and reliability (section 3.7); trustworthiness of this study (section 3.8); ethical issues (section 3.9), followed by the summary (section 3.10).

In order to summarise the data collection process, a flow chart is demonstrated in Figure 12. All of the participants were college-level students who were divided into the control group and the experimental group randomly. The traditional teaching method, the paper-pencil instruction, was applied in the control group, while the computer-based teaching method, the blog instruction, was employed in the other group (see section 3.3). At the very beginning of the research process, all of the participants were asked to finish a writing essay (see section 3.4.1) and to fill in the questionnaires (see section 3.4.2), which served as the pre-test (see section 3.5.4). The experimental instruction was then carried out for eight weeks (see section 3.5) while the observations were conducted concurrently (see section 3.4.3). Then, a post-test (see section 3.5.4), the procedures of which were quite akin to the procedures executed in the pre-test, was conducted again. Finally, fourteen students were selected from the two groups randomly to proceed with the retrospective semi-structured interviews (see section 3.4.4) after the post-test. Both the quantitative and qualitative data was analysed (see section 3.6) to determine the statistical differences and correlations to find the possible answers for the RQs, which are reported in Chapters 5 and 6. The next chapter presents the theoretical basis as well as the outcomes of the pilot test.

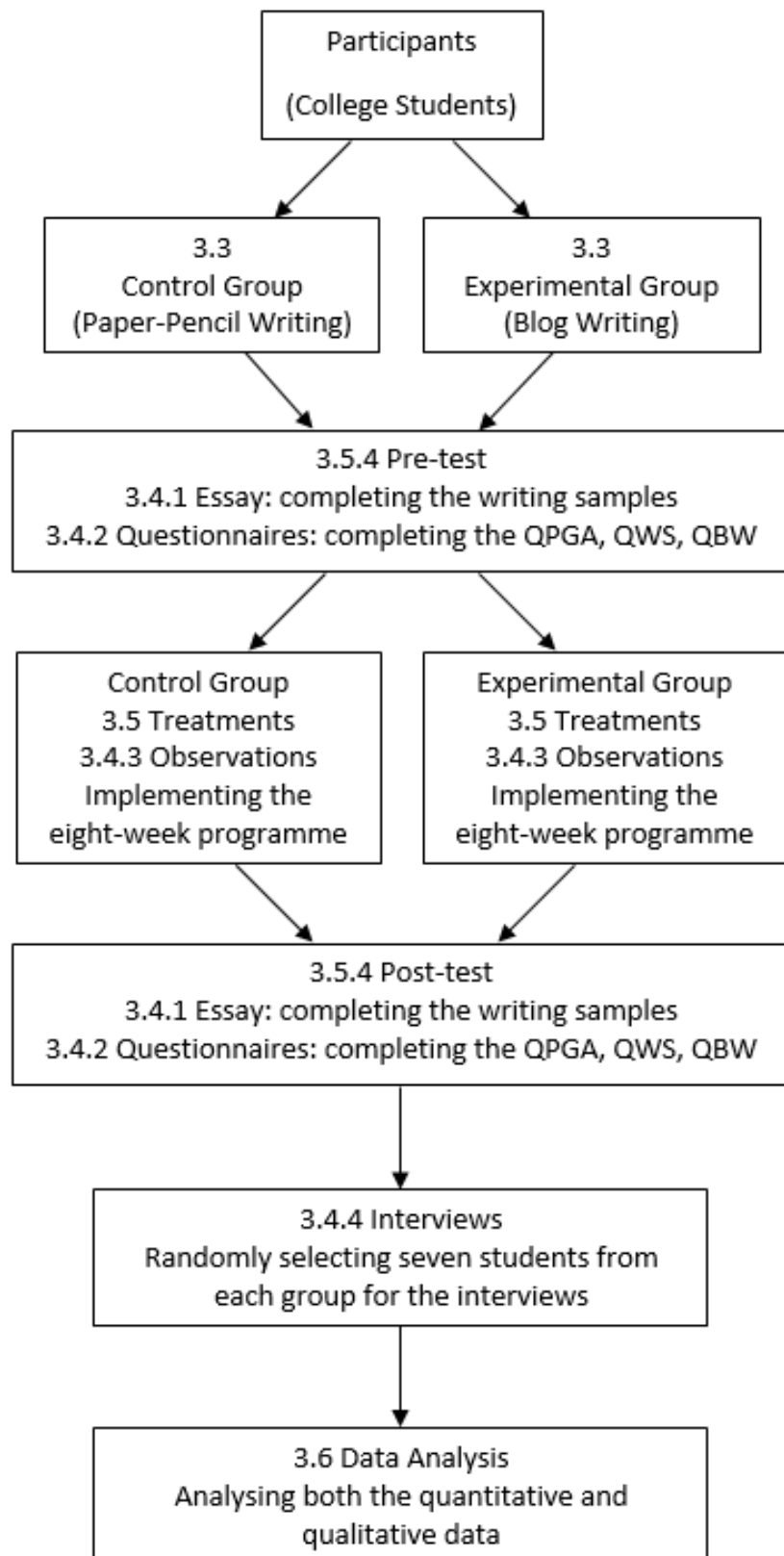


Figure 12. The Flow Chart of Data Collection Process

## **CHAPTER FOUR: PILOT STUDY**

In order to ensure the feasibility and usability of the research instruments, a series of techniques was conducted in the pilot study, which is detailed in the current chapter. These techniques are elucidated as follows: the employment of back translation (section 4.1); the use of expert judgement (section 4.2); the statistical analysis on the questionnaires (section 4.3); presentation of the interviews (section 4.4); a chapter summary and a flow chart of the pilot study (section 4.5).

### **4.1 Back Translation**

The employment of back translation with native speakers is recommended when two different languages are involved in research instruments. The purpose of back translation is to have native speakers to translate the instruments, and re-translate them into the original language used in the source documents to confirm the initial meanings (Mertens, 2015).

There were three questionnaires: the QPGA, QWS, and QBW. The original questionnaires for the QWS and QBW were written in English, but they were revised and translated into traditional Mandarin Chinese, the participants' native language, by myself in order to satisfy the research needs and avoid the respondents' misunderstanding and misinterpreting the questions while they were filling in the questionnaires. As for the QPGA, it was developed in traditional Mandarin Chinese, and was translated into English by myself. However, the QWS and QBW were then back translated into English, and the QPGA was back translated into Mandarin Chinese by another translator who confirmed the contents of my interview transcriptions to ensure the accuracy of the translated contents.

After the process of back translation, an Assistant Professor at Department of Applied Foreign Languages at a university in northern Taiwan who specialises in Education and CALL and has been teaching English in EFL contexts for several years, was invited to verify the accuracy of the translation between the back translated questionnaires and the original ones. Finally, the accuracy of the translation was confirmed although some suggestions with reference to the wordings were given by the reviewer. One example was an item in the QPGA: "During English writing, I examine the contents timely in order to confirm if the thought that I have written meet the readers' demands," was modified to: "During English

writing, I examine the contents duly in order to confirm if they meet the readers' demands." Finally, it was claimed that the meanings in the employed questionnaires were quite similar to the meanings in the original ones, so the translation did not influence the validity and reliability of the employed questionnaires to any great extent.

## **4.2 Expert Judgement**

Submitting research instruments to professionals in the field for critical feedback in terms of the wordings of items or validity of the questions that researchers intend to look into after the construction is suggested (Boudah, 2011), so the content validity of the research instruments could be verified (Creswell, 2002; Fraenkel et al., 2012). In order to ensure whether the instruments were appropriate for its application, the three employed questionnaires, the observational checklist, and the interview questions were reviewed by the experts whose professional specialties are related to the current study. The valuable feedback was received and presented in the following sections.

### **4.2.1 Questionnaires**

All of the employed questionnaires were examined by two experts. One is a professor who specialises in TESOL and is teaching at the Department of Applied English at a university in southern Taiwan, and the other is an assistant professor who specialises in Applied Linguistics and is teaching at the Department of Linguistics and Modern Language Studies at a university in Hong Kong. Both of them have been teaching English in EFL contexts for several years. Hence, their considerable teaching experience and research backgrounds allowed for providing valuable suggestions on the questionnaires.

After their reviews, some comments on the questionnaires were received in order to make the questionnaires more feasible, acceptable, and understandable. First, they suggested the use of the word "and" to connect sub-ideas in a unitary item should be avoided, and these items should be divided into different questions, so the respondents might consider it easier to understand and answer. For example, a question regarding to the examination of several aspects during the writing process was separated into different items in the QPGA. Moreover, some wordings were also varied to make the questionnaires more understandable and readable to the target subjects, which have been discussed in section

3.4.2. The experts further advised that the questionnaires should focus on “writing” itself in the QWS, since Oxford’s (1990) SILL was designed for general English learning, rather than for English writing specifically. As a result, the QWS was modified in order to gratify the research purposes. I then tried to connect the items with English writing by adding or deleting some words in the QWS to help associate them with the current study. For example, the question: “I try to learn about the culture of English speakers,” was modified to “I try to learn the native English speakers’ culture to help my English writing samples be closer to articles written by native English speakers.”

After my amendments according to the experts’ opinions, all of the questionnaires were re-confirmed by my supervisors again before they were formally applied in the pilot study.

#### **4.2.2 Observational Checklist**

For the observational checklist, processing a pilot test is recommended to ensure its appropriateness, unambiguousness, and effectiveness (Cohen et al., 2011), so the employed checklist was reviewed by two experts. One is an assistant professor who specialises in Applied Linguistics, and is teaching at the Department of Linguistics and Modern Language Studies at a university in Hong Kong, and the other is an Ed.D. who is teaching at universities in Taiwan. Both of them have been teaching English in EFL contexts for several years. Hence, their extensive teaching experiences and research backgrounds allowed for providing precious suggestions on the observational checklist.

The results of the reviews on the observational checklist were provided as follows. First, a bigger space for the observer’s comments was suggested, so it could be more convenient to jot down notes during the observation process. Second, there were too many tasks in some unitary items, which could have made it difficult to be completed during the observation process, so those kinds of items were modified. For example: “Did the instructor make the students have a group discussion regarding the writing styles, organisation, expression, and grammar?” was changed to: “Did the teacher make the students have a group discussion regarding the writing?” Third, some cognitive behaviour could not be observed visually, so the tasks of this kind were eliminated from the checklist. For example, the item: “Did the students think about the connections between the new curriculum and the courses they

have already learned while they were writing?” was therefore excluded from the list. Finally, some descriptions in the items were not possible clear enough, which could lead to confusion while filling in the checklist, so the wordings were varied in order to avoid any misunderstandings.

After making the revision based on the experts’ comments, the checklist was re-confirmed by my supervisors again before its formal utilisation in the main study.

#### **4.2.3 Interview Questions**

Finally, all of the interview questions were checked by the same experts who reviewed the observational checklist, so valuable suggestions for the interview questions could be expected.

After having the interview questions reviewed, the reviewers suggested that there were too many questions in the first version of the interview questions, in which there were thirty-six questions. It could be difficult and even not plausible to present all of them because the interview subjects could feel tired and lose patience during long interviews, which could influence their willingness to participate and further influence the data collection. Therefore, some items were modified, merged, or deleted according to their suggestions, and twenty-three questions were listed in the final version. There were seven questions pertaining to the PGA, nine questions pertaining to the writing strategies, and seven questions pertaining to blog writing. Some wordings were also amended because they might confuse the interview subjects’ understanding toward the question contents. They also mentioned that open-ended questions should be provided at the end of each section in order to allow for the interview subjects to raise any issues regarding the research, so open-ended questions were added to the list. I finally interviewed several students whose characteristics were similar to the formal participants to determine whether the questions were understandable, which is reported in section 4.4.

In addition, all of the interview questions were re-confirmed by my supervisors again before the formal interviews.

### **4.3 The Statistical Analysis on the Questionnaires**

A pilot test is usually performed in a small group of participants whose characteristics are similar to participants in a formal study (Mertens, 2010). It helps researchers collect feedback to understand the appropriateness of research instruments (Dörnyei & Taguchi, 2010), and confirm whether respondents are able to understand questions in questionnaires (Creswell, 2002), so any problems can be detected and remedied before a formal study is undertaken (Fraenkel et al., 2012).

In order to access a group of participants taking part in the pilot study, I contacted the chairperson of the Department of Applied English at a university in central Taiwan. I explained the purposes of this research, and asked about the possibility to conduct the pilot study in the department. Fortunately, a verbal consent was given by the chairperson. He also suggested a list of contacts so that I was able to contact instructors whose courses were related to English writing. Therefore, I sent emails to those course instructors and explained the purposes of this research again. However, only one reply was received, stating that he was very willing to help, and expressed that he was able to cooperate in any way. Finally, I had access to three classes of students to carry out the pilot study.

The pilot study was conducted in a five-year junior college, which includes three-year senior high school education (equivalent to GCSE and A-level school) and two-year college education (equivalent to the first-year and second-year undergraduate). The participants in the three classes were in the third, fourth, and fifth year students who were all English majors, and took English writing as a required course. Dörnyei and Taguchi (2010) recommended that an ideal sample size for a pilot test be above eighty students or no less than fifty students. Finally, a total of eighty questionnaires were chosen in this pilot study, which were completed by ten males and seventy females, with ages ranging from 17 to 20 and with an average age of 18.31. All of the participants had been learning English more than seven years, and their characteristics were akin to the formal participants because they all studied at the same university, but in different classes.



In the pilot study, there were three questionnaires, the QPGA, QWS, and QBW, which were compiled into a booklet. Before distributing the questionnaire booklets, I explained the purposes of this study verbally. The participants were also informed that: (a) they could withdraw from the study anytime if they did not want to participate in the research; (b) this research was not related to the course they were taking in any way; and (c) all of the responses and information they provided would be kept confidential. After confirming their willingness to take part in the pilot study, they were asked to sign the consent document, which explained the purposes of this study and detailed their rights in written form. Then, the instruction for answering questions was given in both verbal and written forms before the subjects started to fill in the questionnaires. However, the students might be absent from the class in the latter test, so the participants might be different between the pre-test and the post-test, which could influence the results of the pilot study. Consequently, the subjects were asked to provide their names on the questionnaires in order to select valid questionnaires, which were completed by the same ones in both the pre-test and the post-test. Meanwhile, their privacy and rights were secured and informed. The time interval between the two tests was two weeks, and the procedures were quite similar in the two tests, in which both verbal and written instruction was given prior to the commencement. The participants spent about twenty to twenty-five minutes to answer the questionnaires, and the results of the pilot study are presented in the subsequent sections.

#### **4.3.1 Factor Analysis on the Questionnaires**

Because factor analysis reduces the number of variables by putting high correlated variables together (Mertens, 2015), it is commonly used to measure the construct validity in which the data was collected from questionnaires, and therefore researchers could understand the interrelationship among the variables in the same dimension (Chang, 2007). Specifically, the main purposes of the factor analysis are to discover the structure of a set of variables, to measure the latent variables, and to decrease datasets to be a more manageable instrument while containing as many of the original messages as possible (Field, 2013). As a result, factor analysis was used to examine the construct validity of the employed questionnaires, the QPGA, QWS, and QBW, because they were either revised to fit in with the research purposes, or constructed by myself in view of the deficiency of having an appropriate one.

Before going further, it is necessary to understand how the factor analysis was applied in this research. First, in order to confirm whether the sample was appropriate for a factor analysis, the Kaiser-Meyer-Olkin (hereafter cited as KMO) measure of sampling adequacy was established (Kaiser, 1970). The KMO value is between 0 and 1. 0 indicates that the sum of the partial correlations is closely related to the sum of the correlations, which in turn is not appropriate for a factor analysis; on the other hand, 1 represents that the sum of the partial correlations is low among variables, and is therefore appropriate for a factor analysis (Field, 2013; Wang, 2006). Kaiser (1974) further suggested the values lower than .5 are not acceptable for a factor analysis. The criteria for the KMO values is detailed in Table 8. In addition to the KMO test, Bartlett's Test of Sphericity is usually used to confirm whether the data is suitable for a factor analysis. If a result in a Bartlett's test is significant ( $p < .05$ ), it is appropriate because there are relationships among the variables (Hinton et al., 2014).

Table 8. *The Criteria for the KMO Values (Kaiser, 1974)*

<b>KMO Values</b>	<b>Criteria</b>
in the .90s	Marvellous
in the .80s	Meritorious
in the .70s	Middling
in the .60s	Mediocre
in the .50s	Miserable
below .50	Unacceptable

After verifying the appropriateness of the data for the factor analysis, the selected statistical tools are then used to explain how I applied the factor analysis to analyse the questionnaires. The Principal Component Analysis Method, which analyses the total variances, and explains the largest amount of variances with the smallest numbers of latent factors, was applied. The eigenvalue and scree plot were utilised to decide the number of the factors. The eigenvalue refers to "the amount of variation explained by a factor" (Field, 2013, p. 677), and "the bigger the eigenvalue is, the greater is the capability of the underlying factor to 'account for' the correlations of the observed variables" (Bollen, 1989, p. 229). The rule to decide whether a factor is important is based on the eigenvalue of 1 or larger, because it indicates that the factor is able to explain the maximum of the variability in the data as a single factor. However, there is a risk involved in determining the numbers of factors by using eigenvalue 1 only, since it sometimes overestimates the exact numbers

of factors. Therefore, the other method, the scree plot, helped me decide the numbers of factors. A scree plot is a graph shown with a factor analysis (X-axis) against the eigenvalue (Y-axis). In a scree plot, where the line levels out determines the numbers of factors. Then, the rotation method of Varimax with Kaiser Normalization was chosen to discriminate factors because the final extracted factors in the rotation method of this kind are not correlated with each other, and it can explain the largest variances. Finally, a common practice to extract common factors is based on the factor loadings greater than .4 (Brace et al., 2012), so the value is usually used to select the numbers of factors (Chang, 2007; Field, 2013; Hinton et al., 2014; Wang, 2006).

Furthermore, the data was computed for several times in order to extract the most correlated variances in factors. By doing so, those smaller factor loadings lying in two or more components were crossed out, and the data was analysed and re-analysed when an inappropriate variable was eliminated. I repeated the analytical procedures until all of the items belonged to only one component. After deciding the numbers of the factors, I re-named each component by scrutinising the features of the items belonging to the same component. Therefore, all of the employed questionnaires were treated with the tests mentioned above in order to confirm their construct validity. The results of the factor analysis for each questionnaire were respectively presented in the following sections.

Finally, the sample size of the factor analysis should be noted. An ideal sample size for a factor analysis is the larger sample size the greater results, but it is very difficult to gather a considerable number of participants whose characteristics are in common with formal subjects in educational research (Chang, 2007; Field, 2013; Hinton et al., 2014; Wang, 2006). I attempted to find as many participants in the pilot study as possible, until eighty participants were found for the pilot study of this research. As Dörnyei and Taguchi (2010) recommended an ideal sample size for a pilot test is more than eighty students or no less than fifty students, I could maintained that the sample size in the pilot study would be sufficient for the research purposes of this study.

#### 4.3.1.1 Questionnaire for Process/Genre Approach

The QPGA was a self-constructed questionnaire because a ready-made one that suited the current study was unavailable (see section 3.4.2.1). In order to ensure the validity of the QPGA, the data collected from the pilot study was calculated by the factor analysis according to the procedures stated above. The results are shown below.

After the data analysis, both the KMO value and Bartlett's test of Sphericity confirmed that the QPGA was suitable for a factor analysis. The result in the former test was .720, which was at the third level of middling according to Kaiser's (1974) criteria shown in Table 8, and a significance ( $p = .000 < .05$ ) was found in the latter test. Both the results, which are shown in Table 9, explained its appropriateness for a factor analysis, so further steps were conducted to see the validity of the QPGA. The results in the eigenvalue greater than 1 (Table 10) pointed out that six factors could be extracted, and the scree plot (Figure 13) indicated that there were five factors in the QPGA. However, the last two factors in the former test contained two items only, which were difficult to explain as separate components because having at least three variables in a component is recommended (Bollen, 1989). Consequently, fourteen items in four components were finally determined, which accounted for 51.315% of the total variance that is demonstrated in Table 11. These components were named as follows: first, "teacher's facilitation;" second, "learning with peers;" third, "understanding for writing;" lastly, "model article enhanced writing."

Table 9. *The KMO and Bartlett's Test for the QPGA*

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.720
Bartlett's Test of Sphericity	Approx. Chi-Square	534.259
	Df	153
	Sig.	.000

Table 10. *The Rotated Component Matrix for the QPGA*

Items	Component					
	1	2	3	4	5	6
The teacher generates writing ideas with us, which reinforces my writing abilities.	.867					
The teacher writes the drafts with us, which reinforces my writing abilities.	.833					
The teacher usually provides model articles and discusses them with us before my commencing English writing and that help me understand writing purposes.	.759					
The teacher's provision of model articles enhances my English writing abilities.	.462					
Discussing with my classmates not only builds up our peer relationships, but also helps me get further ideas about English writing.		.817				
After writing my samples, I read my classmates' samples and discuss them with each other.		.793				
I learn my classmates' strengths and weaknesses by reading their samples.		.760				
I understand readers' demands before commencing English writing.			.887			
During English writing, I examine the contents duly in order to confirm if they meet readers' demands.			.775			
I understand writing purposes before commencing English writing.			.676			
The teacher's guidance on model articles develops my writing abilities.				.787		
Reading and discussing model articles increase my interests in English writing.				.646		
Reading and discussing model articles improve my understandings toward English writing topics.				.636		
The teacher usually explains model articles before my commencing English writing and that helps me understand writing topics.				.421		
During English writing, I examine the contents duly in order to confirm if they express my thoughts.					.856	
During English writing, I examine the contents duly in order to confirm if they conform to the writing styles.					.778	
I do not like the current writing programme, because I spend more time on English writing.						.810
My classmates' opinions and ideas about my samples do not improve my English writing abilities.						.804

Extraction Method: Principal Component Analysis.

Rotation Method: Varimax with Kaiser Normalization.

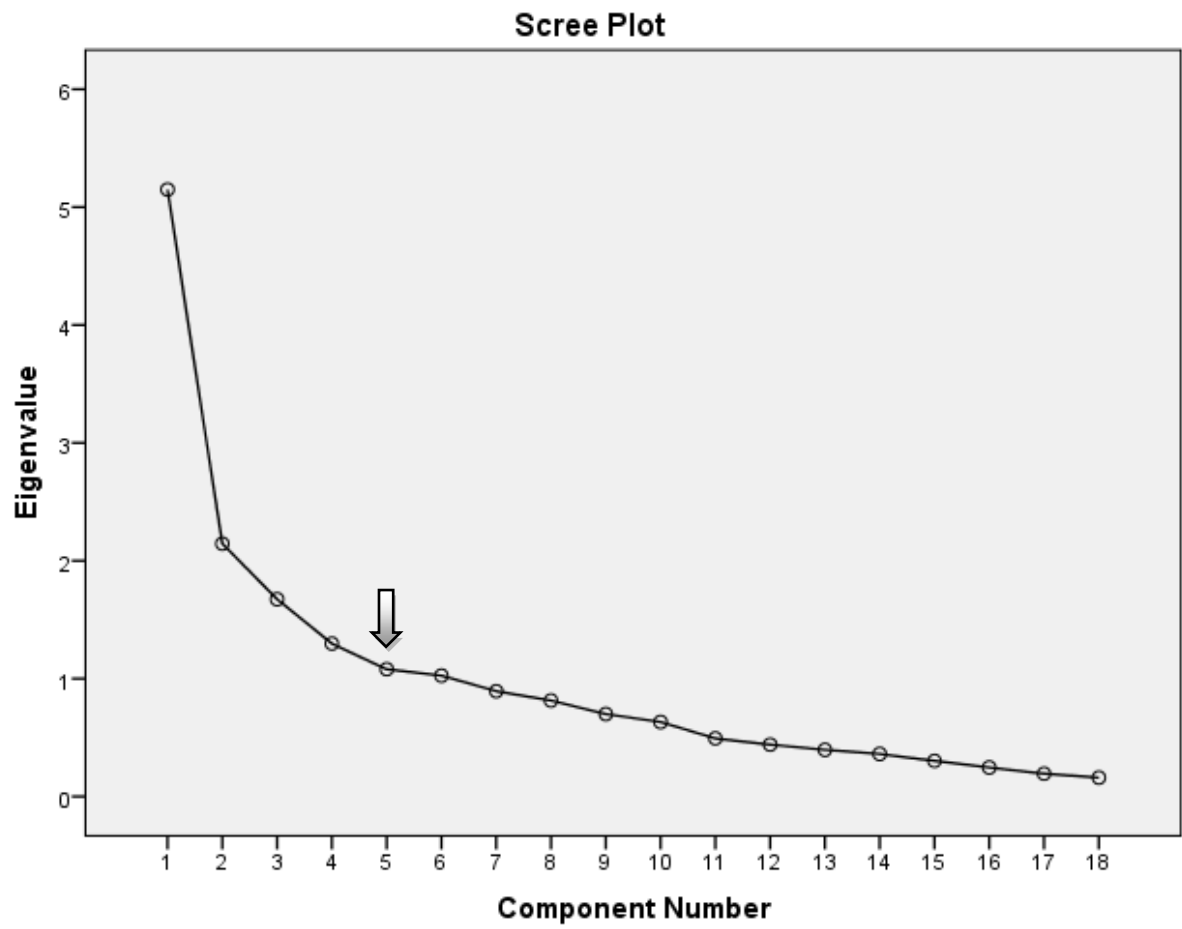


Figure 13. The Scree Plot for the QPGA

Table 11. *The Total Variance Explained for the QPGA*

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of		Total	% of		Total	% of	
		Variance	Cumulative %		Variance	Cumulative %		Variance	Cumulative %
1	5.149	28.606	28.606	5.149	28.606	28.606	2.663	14.796	14.796
2	2.145	11.916	40.522	2.145	11.916	40.522	2.347	13.038	27.833
3	1.673	9.296	49.818	1.673	9.296	49.818	2.134	11.857	39.690
4	1.297	7.206	57.024	1.297	7.206	57.024	2.093	11.625	51.315
5	1.079	5.996	63.020	1.079	5.996	63.020	1.734	9.636	60.951
6	1.026	5.697	68.718	1.026	5.697	68.718	1.398	7.767	68.718
7	.893	4.964	73.681						
8	.814	4.524	78.205						
9	.700	3.887	82.093						
10	.632	3.509	85.601						
11	.493	2.738	88.339						
12	.440	2.446	90.785						
13	.396	2.199	92.984						
14	.361	2.004	94.989						
15	.302	1.680	96.669						
16	.246	1.366	98.035						
17	.194	1.076	99.111						
18	.160	.889	100.000						

Extraction Method: Principal Component Analysis.

#### 4.3.1.2 Questionnaire for Writing Strategies

Although the reliability and validity of Oxford's (1990) SILL has been corroborated greatly in different sources (see section 3.4.2.2), it was revised to adapt it to the research requirements of this study, which might influence the validity. Consequently, the validity of the QWS was computed again by the factor analysis in light of the procedures mentioned earlier in order to confirm its validity. The results are as follows.

The results of the factor analysis indicated that the QWS was appropriate for a factor analysis because the KMO value was .821 which was at the second level of being meritorious according to Kaiser's (1974) criteria shown in Table 8, and there was a significant difference ( $p = .000 < .05$ ) in Bartlett's test of Sphericity. The consequences of both tests are shown in Table 12, so further actions were carried out to determine the

validity of the QWS. The outcomes of the eigenvalue greater than 1 (Table 13) indicated that there were four factors in the QWS. Then, the scree plot demonstrated there were five factors in the QWS, as demonstrated in Figure 14. However, Table 14 explains the four factors with the eigenvalue greater than 1 explained 61.288% of the total variance, and therefore twenty-two items in four dimensions were determined. These components were named as follows: first, “cognition;” second, “known-knowledge using;” third, “pressure reducing;” lastly, “self-enhancement.”

**Table 12. *The KMO and Bartlett's Test for the QWS***

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.821
Bartlett's Test of Sphericity	Approx. Chi-Square	957.926
	Df	231
	Sig.	.000



Table 13. *The Rotated Component Matrix for the QWS*

Items	Component			
	1	2	3	4
In daily life, I write in English (e.g. memos, comments, and messages...etc.).	.842			
I improve my English writing abilities through reading English novels, magazines, or newspapers.	.828			
I take notes, write messages, letters, or reports in English.	.818			
I look for as many opportunities as possible to write in English.	.783			
I imitate articles written by native English speakers to improve my English writing abilities.	.771			
I try to learn native English speakers' culture to help my English writing samples be closer to articles written by native English speakers.	.770			
For English writing, I think about the connections between the new curriculum and the courses I have already learned.	.602			
I try to be an excellent English writing learner.	.404			
I use already-known writing skills with different ways in my English writing samples.		.773		
I use writing skills I newly learn in my English writing samples.		.745		
I try to use as many different writing skills as possible.		.738		
I use other ways to express my thoughts that I do not know how to write in English.		.733		
I pay attention to the mistakes I have made to improve my English writing abilities.		.652		
When someone writes in English, I pay more attention to it.		.472		
I look for partners who can practise English writing with me.			.744	
When I do not know how to write in English, I seek helps from my classmates.			.730	
I start with a quick outline and then write the samples elaborately, which make me feel better when doing English writing.			.688	
I practise English writing to make me accustomed to it.			.635	
When I am afraid of writing English, I try to relax.			.406	
I try to learn as much writing knowledge as possible.				.818
I try to write in English as often as possible.				.616
When I do well on English writing, I reward myself.				.559

Extraction Method: Principal Component Analysis.

Rotation Method: Varimax with Kaiser Normalization.

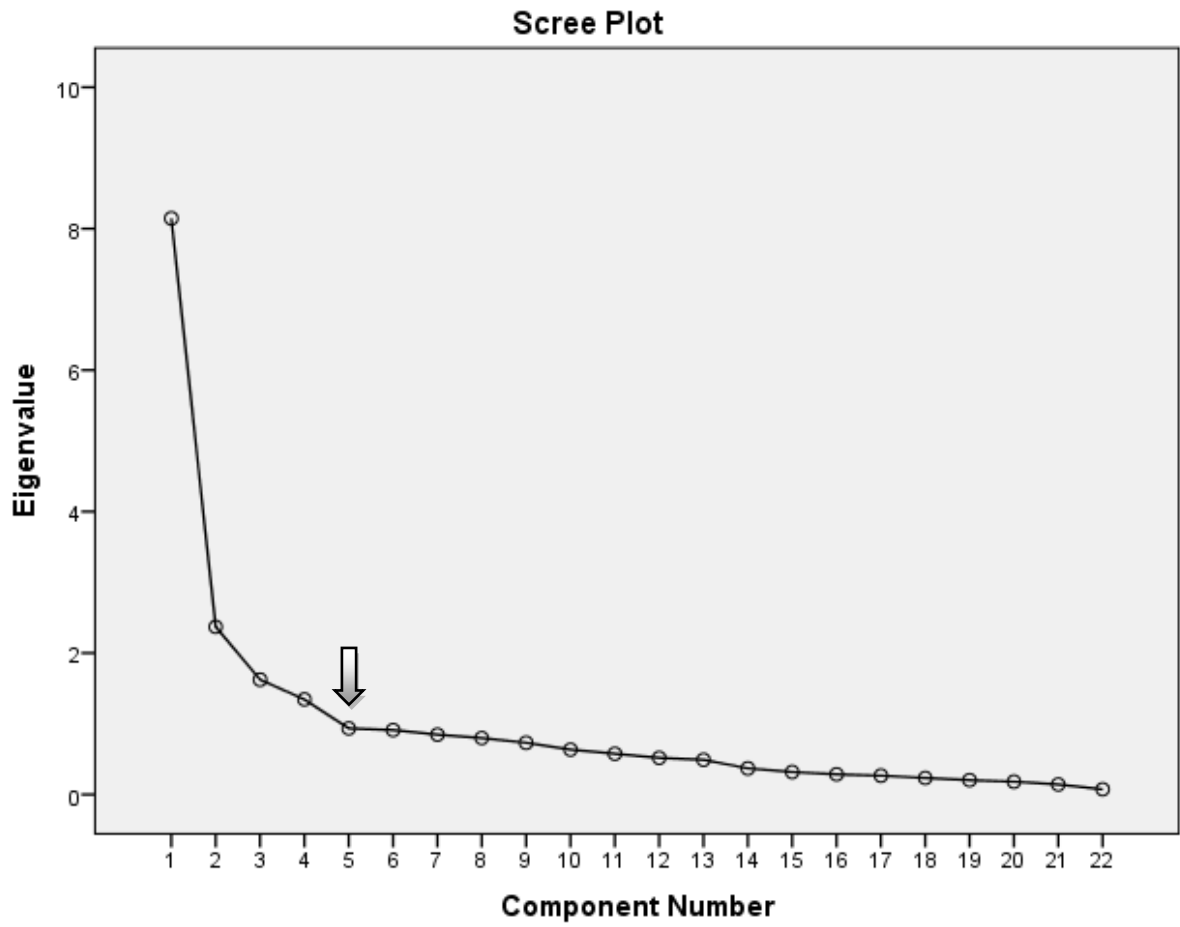


Figure 14. The Scree Plot for the QWS

Table 14. *The Total Variance Explained for the QWS*

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of		Total	% of		Total	% of	
		Variance	Cumulative %		Variance	Cumulative %		Variance	Cumulative %
1	8.146	37.026	37.026	8.146	37.026	37.026	5.101	23.186	23.186
2	2.370	10.772	47.798	2.370	10.772	47.798	3.468	15.765	38.951
3	1.624	7.381	55.179	1.624	7.381	55.179	2.841	12.912	51.863
4	1.344	6.109	61.288	1.344	6.109	61.288	2.073	9.425	61.288
5	.934	4.246	65.533						
6	.912	4.145	69.678						
7	.847	3.849	73.527						
8	.798	3.628	77.155						
9	.731	3.324	80.479						
10	.635	2.886	83.365						
11	.577	2.621	85.986						
12	.518	2.355	88.341						
13	.491	2.232	90.574						
14	.370	1.680	92.254						
15	.318	1.446	93.700						
16	.285	1.294	94.994						
17	.267	1.213	96.207						
18	.233	1.061	97.268						
19	.203	.925	98.193						
20	.181	.822	99.015						
21	.143	.649	99.664						
22	.074	.336	100.000						

Extraction Method: Principal Component Analysis.

#### 4.3.1.3 Questionnaire for Blog Writing

The QBW was adopted and revised based on Aljumah's (2012) questionnaire, the validity and reliability of which has been confirmed (see section 3.4.2.3). However, the QBW was adapted to the research needs in the current study, so it was requisite to ensure its construct validity. All of the data collected from the pilot study were analysed based on the abovementioned tests and criteria to decide the number of factors, which are detailed hereafter.

As is indicated in Table 15, the data was appropriate for a factor analysis because the KMO value was .784 at the third level of middling according to Kaiser's (1974) criteria shown in Table 8, and the result in Bartlett's test was significant ( $p = .000 < .05$ ). After confirming the appropriateness of the data for a factor analysis, further steps were conducted to compute the subsequent tests. The rotated extraction demonstrated that there were seven components in the QBW (Table 16), but the scree plot (Figure 15) pointed out that six components could be extracted. However, the last two components in the former test consisted of two variables only, which were deemed to be unapparent to form a major component because it is recommended to have at least three variables in a component (Bollen, 1989). Thus, twenty-five items in five components were finally determined in the QBW, and they explained 55.175% of the total variance (Table 17). These components were named as follows: first, "blog vs. paper-pencil writing;" second, "blog enhanced writing;" third, "blog for socialisation;" fourth, "attitudes toward blog writing;" lastly "affections toward blog writing."

Table 15. *The KMO and Bartlett's Test for the QBW*

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.784
Bartlett's Test of Sphericity	Approx. Chi-Square	1231.259
	Df	406
	Sig.	.000

Table 16. *The Rotated Component Matrix for the QBW*

Items	Component						
	1	2	3	4	5	6	7
I am more creative when writing on my English blog than on paper.	.816						
I like to hand in assignments through blogs instead of paper.	.782						
I think I write more contents on my English blog than my paper-pencil writing.	.730						
English blog writing expresses my thoughts better than paper-pencil writing.	.710						
I like to practise writing on English blogs more than in class.	.662						
I think I am more confident when writing on blogs than on paper.	.633						
It is convenient and fast to update my English blog.	.445						
I learn more new words when I read the entries on my classmates' English blogs.		.729					
Reading entries on my classmates' English blogs improves my English writing abilities.		.705					
Responding to comments on my English blog improves my English writing abilities.		.664					
When using English blogs, I look up difficult words more actively.		.661					
My English grammatical abilities have been improved since I have used English blogs.		.633					
When writing on my English blog, I use different forms of English words (e.g. Tense: eat, ate, eaten).		.589					
I think English blog writing enhances my organising abilities.		.500					
I like to leave messages on my classmates' English blogs.			.801				
I like to post many entries, photos, or clips on my English blog.			.723				
I like my classmates commenting on my English blog.			.643				
I enjoy communicating with my classmates through English blogs.			.611				
I will keep using my English blog after the programme is completed.			.571				
I always examine sentences carefully before posting entries on my English blog.				.792			
I am more careful with my writing samples when using English blogs.				.704			
I think using English blogs to practise English writing is a good idea.				.462			
When I post entries in English on my blog, I do not worry about how the classmates think of my English abilities.					.788		
I like my teachers' commenting on my English blog entries.					.689		
I do not worry about making mistakes when I write on my English blog.					.689		
I feel uncomfortable with my classmates' comments on my English blog.						.825	
I think learning through English blogs is a waste of time.						.787	
I think using English blogs is not difficult for me.							.809
I think it is comfortable for me to use English blogs.							.643

Extraction Method: Principal Component Analysis.

Rotation Method: Varimax with Kaiser Normalization.

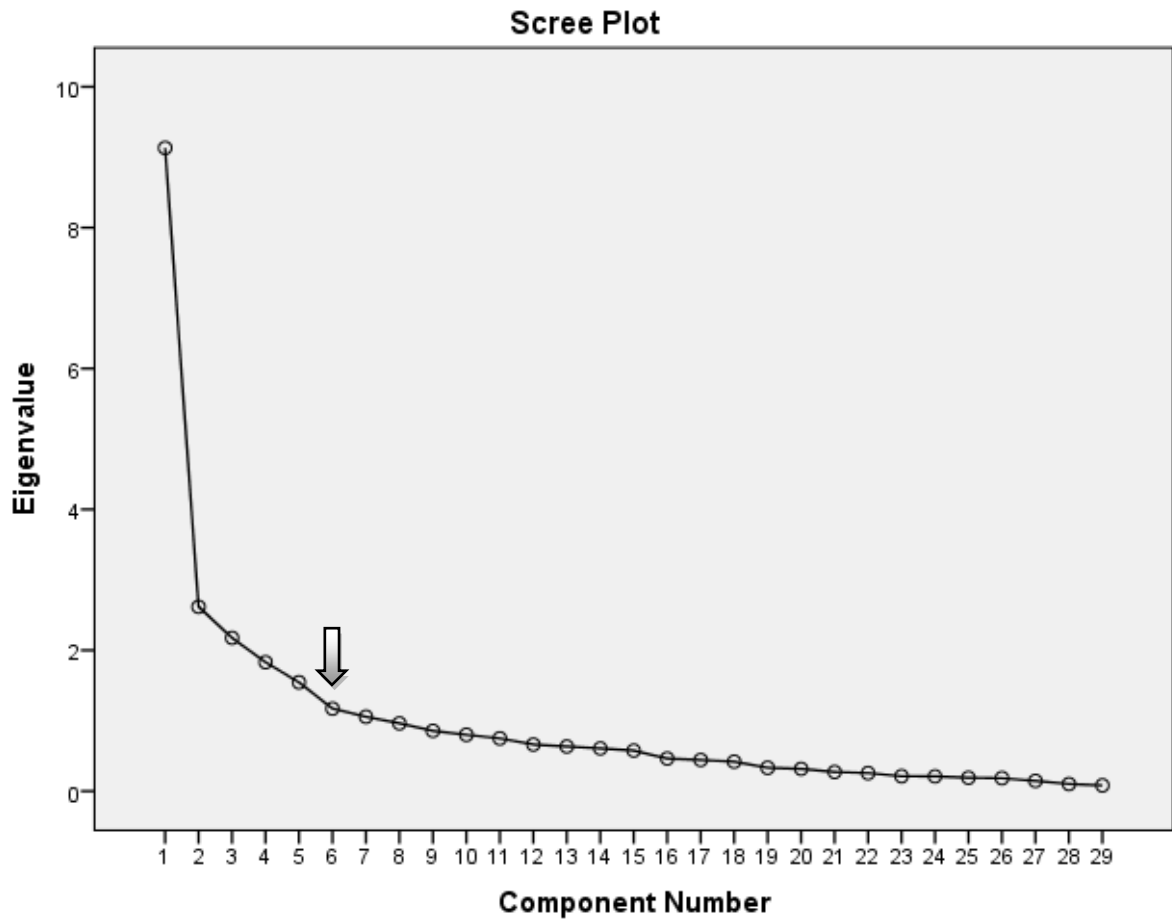


Figure 15. The Scree Plot for the QBW

Table 17. *The Total Variance Explained for the QBW*

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of		Total	% of		Total	% of	
		Variance	Cumulative %		Variance	Cumulative %		Variance	Cumulative %
1	9.132	31.490	31.490	9.132	31.490	31.490	4.018	13.856	13.856
2	2.617	9.025	40.515	2.617	9.025	40.515	3.781	13.039	26.895
3	2.176	7.502	48.017	2.176	7.502	48.017	3.584	12.358	39.253
4	1.831	6.314	54.331	1.831	6.314	54.331	2.460	8.483	47.736
5	1.545	5.326	59.658	1.545	5.326	59.658	2.157	7.439	55.175
6	1.172	4.040	63.697	1.172	4.040	63.697	1.775	6.120	61.296
7	1.056	3.640	67.338	1.056	3.640	67.338	1.752	6.042	67.338
8	.963	3.320	70.658						
9	.856	2.952	73.610						
10	.799	2.756	76.366						
11	.749	2.583	78.949						
12	.662	2.284	81.233						
13	.634	2.185	83.418						
14	.606	2.091	85.509						
15	.575	1.984	87.493						
16	.463	1.597	89.091						
17	.444	1.530	90.620						
18	.418	1.441	92.062						
19	.332	1.143	93.205						
20	.317	1.093	94.298						
21	.272	.938	95.236						
22	.257	.885	96.121						
23	.212	.731	96.852						
24	.209	.722	97.574						
25	.190	.654	98.228						
26	.185	.637	98.866						
27	.145	.501	99.366						
28	.102	.351	99.718						
29	.082	.282	100.000						

Extraction Method: Principal Component Analysis.

#### 4.3.2 Test-Retest Reliability and Internal Consistency Reliability for the Questionnaires

In addition to the validity of the questionnaires, the reliability should be considered as well before the formal application because instruments must first be found to be reliable in order to be valid (Field, 2013). Due to there being cultural differences, changes of language,

different subjects, or different experimental backgrounds, confirming the reliability of the instruments is necessary, whether an adopted questionnaire is either self-constructed or it is an existing one (Brace et al., 2012). The reliability of the employed questionnaires was therefore clarified by the test-retest reliability and Cronbach's alpha ( $\alpha$ ), which are deemed as two important norms for reliability (Noar, 2003).

The test-retest reliability was applied to indicate "the consistency or stability of test scores over time" (Johnson & Christensen, 2014, p. 167). This technique is to manipulate the same test in the same group of participants between two periods of time (Fraenkel et al., 2012), which is used to compare the results that are extracted from the two tests to determine whether the participants' responses are consistent toward the instruments (Mertens, 2010). A reliable instrument should produce similar results in both tests (Field, 2013), and therefore the stability of the instruments can thus be confirmed. In order to understand the test-retest reliability, a nonparametric test of correlation, Spearman's correlation coefficient  $r_s$ , was used because it is used to measure correlations between variables, which are ordinal level, such as the Likert scale (Brace et al., 2012).

However, the time interval between the two tests should be considered when conducting the test-retest method (Mertens, 2010). Johnson and Christensen (2012, 2014) stated that if the time interval is too short, the participants may remember how they answer the questions in the first test in which the reliability is manipulated artificially. In contrast, if the time interval is too long, the participants may change their answers to the questions because they may learn new things and skills or forget something as time elapses. There is not suggested standard time interval between the two tests, but the longer the time interval is, the weaker the correlation is. Nevertheless, less than one week is too short for the test-retest reliability. Therefore, a two-week intermission was conducted in this pilot study.

Furthermore, the Cronbach's alpha ( $\alpha$ ) was also utilised because it proves the internal consistency reliability, multi-item subscales, or the variables extracted from a factor analysis, and an alpha explains the correlation of each item with other items when a Likert-scale questionnaire is used to calculate the total composite scores (Morgan et al., 2013). A



Cronbach’s  $\alpha$ , which only needs a set of a test completed by a group of participants to calculate the results (Johnson & Christensen, 2014), determines the internal consistency<sup>5</sup> reliability by verifying whether all of the items correlate with all of the others in a test (Gay et al., 2009), and it is commonly used to measure the reliability (Field, 2013). Therefore, it was applied to see whether the employed questionnaires were reliable. The result of a Cronbach’s  $\alpha$  is between 0 and 1, which means there is not relationship among the variables if the Cronbach’s  $\alpha$  coefficient is 0; on the other hand, if the Cronbach’s  $\alpha$  coefficient is 1, the variables are highly correlated, and the tests are reliable absolutely (Boudah, 2011). Table 18 depicts how reliable the Cronbach’s  $\alpha$  coefficients are.

Table 18. *The Criteria for the Cronbach’s  $\alpha$  coefficients* (Cohen et al., 2011)

<b>Cronbach’s <math>\alpha</math> Coefficients</b>	<b>Criteria</b>
> 0.90	very highly reliable
0.80-0.90	highly reliable
0.70-0.79	Reliable
0.60-0.69	marginally/minimally reliable
<0.60	unacceptably low reliability

The reliability of the three employed questionnaires was confirmed by the tests stated above, and the outcomes of them are reported in the subsequent sections.

---

<sup>5</sup> “Internal consistency refers to how consistently the items on a test measure a single construct or concept” (Johnson & Christensen, 2014, p. 169).

#### 4.3.2.1 Questionnaire for Process/Genre Approach

Both the test-retest reliability and the internal consistency reliability were used to corroborate the reliability of the QPGA, which are presented in Tables 19, 20, and 21.

Table 19 presents the outcomes of the test-retest reliability for each individual item in the QPGA, and all of the items were significantly correlated at  $p = .000 < .01$  in terms of the Spearman's correlation coefficient  $r_s$ , except for one at  $p = .001 < .01$ . As a result, the consequences indicated that the QPGA was stable between the two tests, and the test was proven to be reliable.

Table 19. *The Test-Retest Reliability for the QPGA (Individual Item)*

Items	Spearman's Correlation Coefficient <i>R<sub>s</sub></i>	Sig.	N
The teacher usually explains model articles before my commencing English writing and that helps me understand writing topics.	.567**	.000	80
The teacher usually provides model articles and discusses them with us before my commencing English writing and that help me understand writing purposes.	.473**	.000	80
Reading and discussing model articles improve my understandings toward English writing topics.	.569**	.000	80
Reading and discussing model articles increase my interests in English writing.	.435**	.000	80
The teacher's provision of model articles enhances my English writing abilities.	.445**	.000	80
The teacher generates writing ideas with us, which reinforces my writing abilities.	.373**	.001	80
The teacher writes the drafts with us, which reinforces my writing abilities.	.585**	.000	80
I understand readers' demands before commencing English writing.	.420**	.000	80
I understand writing purposes before commencing English writing.	.443**	.000	80
The teacher's guidance on model articles develops my writing abilities.	.513**	.000	80
During English writing, I examine the contents duly in order to confirm if they meet readers' demands.	.572**	.000	80
After writing my samples, I read my classmates' samples and discuss them with each other.	.703**	.000	80
Discussing with my classmates not only builds up our peer relationships, but also helps me get further ideas about English writing.	.505**	.000	80
I learn my classmates' strengths and weaknesses by reading their samples.	.560**	.000	80

\*\* Correlation is significant at the 0.01 level (2-tailed).

In addition, Table 20 demonstrates the test-retest reliability for the subcategories in the QPGA. The results showed that all of the  $p$  values were smaller than .01, which explained all of them were significantly correlated, so the questionnaire was reliable in terms of the subcategories in the QPGA.

**Table 20. *The Test-Retest Reliability for the QPGA (Subcategory)***

	Teacher's Facilitation	Learning with Peers	Understanding for Writing	Model Article Enhanced Writing
Spearman's Correlation Coefficient $r_s$	.657**	.719**	.599**	.702**
Sig. (2-tailed)	.000	.000	.000	.000
N	80	80	80	80

\*\* Correlation is significant at the 0.01 level (2-tailed).

In light of the results shown in Table 21, the internal consistency reliability for “overall” was highly reliable at .843, according to the criteria provided by Cohen et al. (2011) shown in Table 18. As for the sub-components in the QPGA, the Cronbach's  $\alpha$  coefficient pointed out that “teacher's facilitation” was also highly reliable with the consequence of .808. Both “learning with peers” and “understanding for writing” were reliable with the outcomes of .789 and .786 respectively. “Model article enhanced writing” was marginally/minimally reliable because the Cronbach's  $\alpha$  coefficient was .685.

**Table 21. *The Internal Consistency Reliability for the QPGA***

	Overall	Teacher's Facilitation	Learning with Peers	Understanding for Writing	Model Article Enhanced Writing
Cronbach's $\alpha$ coefficient	.843	.808	.789	.786	.685
Number of Items	14	4	3	3	4
N	80	80	80	80	80

#### **4.3.2.2 Questionnaire for Writing Strategies**

The section explains the test-retest reliability and the internal consistency reliability of the QWS, which are shown in Tables 22, 23, and 24.

Table 22 demonstrates the test-retest reliability for each individual item in the QWS, and the Spearman's correlation coefficient  $r_s$ , reported that all of the items were reliable in terms of the stability and consistency because all of them were significantly correlated with each other at  $p = .000 < .01$ , except for one at  $p = .009 < .01$ .

**Table 22. The Test-Retest Reliability for the QWS (Individual Item)**

Items	Spearman's		
	Correlation Coefficient	Sig.	N
	<i>rs</i>		
When I do well on English writing, I reward myself.	.588**	.000	80
I use already-known writing skills with different ways in my English writing samples.	.614**	.000	80
I improve my English writing abilities through reading English novels, magazines, or newspapers.	.500**	.000	80
I start with a quick outline and then write the samples elaborately, which make me feel better when doing English writing.	.640**	.000	80
I look for as many opportunities as possible to write in English.	.633**	.000	80
I try to learn native English speakers' culture to help my English writing samples be closer to articles written by native English speakers.	.617**	.000	80
I try to learn as much writing knowledge as possible.	.674**	.000	80
When I am afraid of writing English, I try to relax.	.288**	.009	80
When I do not know how to write in English, I seek helps from my classmates.	.585**	.000	80
I imitate articles written by native English speakers to improve my English writing abilities.	.614**	.000	80
I try to use as many different writing skills as possible.	.385**	.000	80
For English writing, I think about the connections between the new curriculum and the courses I have already learned.	.448**	.000	80
I pay attention to the mistakes I have made to improve my English writing abilities.	.661**	.000	80
When someone writes in English, I pay more attention to it.	.598**	.000	80
I use other ways to express my thoughts that I do not know how to write in English.	.744**	.000	80
I look for partners who can practise English writing with me.	.795**	.000	80
In daily life, I write in English (e.g. memos, comments, and messages...etc.).	.689**	.000	80
I try to write in English as often as possible.	.650**	.000	80
I use writing skills I newly learn in my English writing samples.	.788**	.000	80
I take notes, write messages, letters, or reports in English.	.600**	.000	80
I try to be an excellent English writing learner.	.519**	.000	80
I practise English writing to make me accustomed to it.			

\*\* Correlation is significant at the 0.01 level (2-tailed).

The results of the test-retest reliability of the subcategories in the QWS are reported in Table 23 in which all of them were also significantly correlated at  $p = .000 < .01$ . Consequently, the QWS was reliable for application in this study.

Table 23. *The Test-Retest Reliability for the QWS (Subcategory)*

	Cognition	Known-Knowledge Using	Pressure Reducing	Self-Enhancement
Spearman's Correlation				
Coefficient $r_s$	.866**	.764**	.825**	.728**
Sig. (2-tailed)	.000	.000	.000	.000
N	80	80	80	80

\*\* Correlation is significant at the 0.01 level (2-tailed).

Table 24 reports the internal consistency reliability for the QWS. The outcomes indicated that “overall” and “cognition” were very highly reliable in light of the criteria provided by Cohen et al. (2011) shown in Table 18, because the Cronbach’s  $\alpha$  coefficients were .912 and .909 respectively. “Known-knowledge using” was highly reliable at .856, while “pressure reducing” was reliable with the result of .777. However, “self-enhancement” was marginally/minimally reliable at .610.

Table 24. *The Internal Consistency Reliability for the QWS*

	Overall	Cognition	Known-Knowledge Using	Pressure Reducing	Self- Enhancement
Cronbach's $\alpha$					
Coefficient	.912	.909	.856	.777	.610
Number of Items	22	8	6	5	3
N	80	80	80	80	80

#### 4.3.2.3 Questionnaire for Blog Writing

To confirm the reliability of the QBW, both the test-retest reliability (Tables 25 and 26) and the internal consistency reliability (Table 27) were implemented and are presented below.

Table 25 demonstrates the test-retest reliability for each individual item in the QBW. The items in the QBW were quite reliable according to the Spearman's correlation coefficient  $r_s$  because all of the items were statistically significantly different at  $p = .000 < .01$ , which means the instrument was stable in terms of the consistency between the two tests.

**Table 25. The Test-Retest Reliability for the QBW (Individual Item)**

Items	Spearman's Correlation Coefficient <i>r<sub>s</sub></i>	Sig.	N
It is convenient and fast to update my English blog.	.617**	.000	80
I like to post many entries, photos, or clips on my English blog.	.674**	.000	80
Reading entries on my classmates' English blogs improves my English writing abilities.	.517**	.000	80
I like to leave messages on my classmates' English blogs.	.610**	.000	80
Responding to comments on my English blog improves my English writing abilities.	.592**	.000	80
I like my classmates commenting on my English blog.	.482**	.000	80
When I post entries in English on my blog, I do not worry about how the classmates think of my English abilities.	.526**	.000	80
I like my teachers' commenting on my English blog entries.	.650**	.000	80
I like to practise writing on English blogs more than in class.	.655**	.000	80
I am more creative when writing on my English blog than on paper.	.529**	.000	80
I think I am more confident when writing on blogs than on paper.	.555**	.000	80
English blog writing expresses my thoughts better than paper-pencil writing.	.588**	.000	80
I think I write more contents on my English blog than my paper-pencil writing.	.490**	.000	80
I like to hand in assignments through blogs instead of paper.	.651**	.000	80
My English grammatical abilities have been improved since I have used English blogs.	.623**	.000	80
When writing on my English blog, I use different forms of English words (e.g. Tense: eat, ate, eaten).	.603**	.000	80
I learn more new words when I read the entries on my classmates' English blogs.	.587**	.000	80
When using English blogs, I look up difficult words more actively.	.683**	.000	80
I think English blog writing enhances my organising abilities.	.511**	.000	80
I think using English blogs to practise English writing is a good idea.	.617**	.000	80
I am more careful with my writing samples when using English blogs.	.568**	.000	80
I always examine sentences carefully before posting entries on my English blog.	.615**	.000	80
I do not worry about making mistakes when I write on my English blog.	.565**	.000	80
I enjoy communicating with my classmates through English blogs.	.591**	.000	80
I will keep using my English blog after the programme is completed	.729**	.000	80

\*\* Correlation is significant at the 0.01 level (2-tailed).

Also, the test-retest reliability for the subcategories in the QBW demonstrated in Table 26 indicates that all of the items were significantly correlated at  $p = .000 < .01$ , so the consistency of the subcategories in the QBW could be confirmed as well.

Table 26. *The Test-Retest Reliability for the QBW (Subcategory)*

	Blog vs. Paper- Pencil Writing	Blog Enhanced Writing	Blog for Socialisation	Attitudes toward Blog Writing	Affections toward Blog Writing
Spearman's Correlation Coefficient <i>r<sub>s</sub></i>	.777**	.787**	.793**	.735**	.662**
Sig. (2-tailed)	.000	.000	.000	.000	.000
N	80	80	80	80	80

\*\* Correlation is significant at the 0.01 level (2-tailed).

As presented in Table 27, the “overall” result for the QBW was very highly reliable based on the criteria provided by Cohen et al. (2011) shown in Table 18 because the Cronbach's  $\alpha$  coefficient was .914. Furthermore, the results in the subcategories of “blog vs. paper-pencil writing,” “blog enhanced writing,” and “blog for socialisation” were also highly reliable with the consequences of .862, .850, and .855 respectively. The Cronbach's  $\alpha$  coefficient was slightly lower at .762 in “attitudes toward blog writing” and at the third level of the reliable criteria. However, the value for the “affections toward blog writing” was the least at .676 among all the subcategories, but still at the level of being marginally/minimally reliable. Therefore, the internal consistency reliability of the QBW could be verified.

Table 27. *The Internal Consistency Reliability for the QBW*

	Overall	Blog vs. Paper- Pencil Writing	Blog Enhanced Writing	Blog for Socialisation	Attitudes toward Blog Writing	Affections toward Blog Writing
Cronbach's $\alpha$ Coefficient	.914	.862	.850	.855	.762	.676
Number of Items	25	7	7	5	3	3
N	80	80	80	80	80	80

Ultimately, in addition to the validity of the questionnaires, the reliability of the employed questionnaires was also confirmed. Followings introduced the face validity of the research instruments, including the questionnaires as well as the interview questions, in order to ensure they were suitable and appropriate for the participants.

#### **4.4 Interviews**

It is suggested that questionnaires be pilot tested before distributing them to the intended participants, so a researcher can ask individuals to read aloud and complete the questionnaires to help identify any deficiencies (Gay & Airasian, 2000; Johnson & Christensen, 2014; Mertens, 2015). In order to realise whether the questionnaires are understandable and readable to the formal subjects, interviews were conducted in the pilot study. In the pre-test of the pilot study, the participants were asked to fill in a form, which enquired about their willingness to be interviewed so that I would be able to find some volunteers for the interviews. The purposes and procedures of the interviews were explained verbally before they filled in the form, so they could have clearer ideas about deciding whether they would like to take part in the interviews. Since the numbers of the volunteers were greater than the necessary total amount I needed, the interview subjects were chosen from the list, randomly and finally eight students were selected for the interviews that took place right after the post-test of the pilot study.

Before these interviews took place, each interview subject was informed that they had the right to answer or not to answer the questions, and all of the interview processes would be audio recorded. In order to ensure they understood their rights and privacy before, during, and after the interviews, all of the interview subjects were asked to sign the consent form (Appendix K). During the interviews, the interview subjects were asked to read all of the questions in the questionnaires aloud, and to think about whether they could understand the items synchronously as they were reading. Since all of the items were written in traditional Mandarin Chinese, the participants' native language, they could understand the questions easily. In other words, the item descriptions were clear and understandable to them. All of the interviews were carried out for about ten to fifteen minutes, depending on how fast the interview subjects read the questions, and how much time they needed to give their comments.



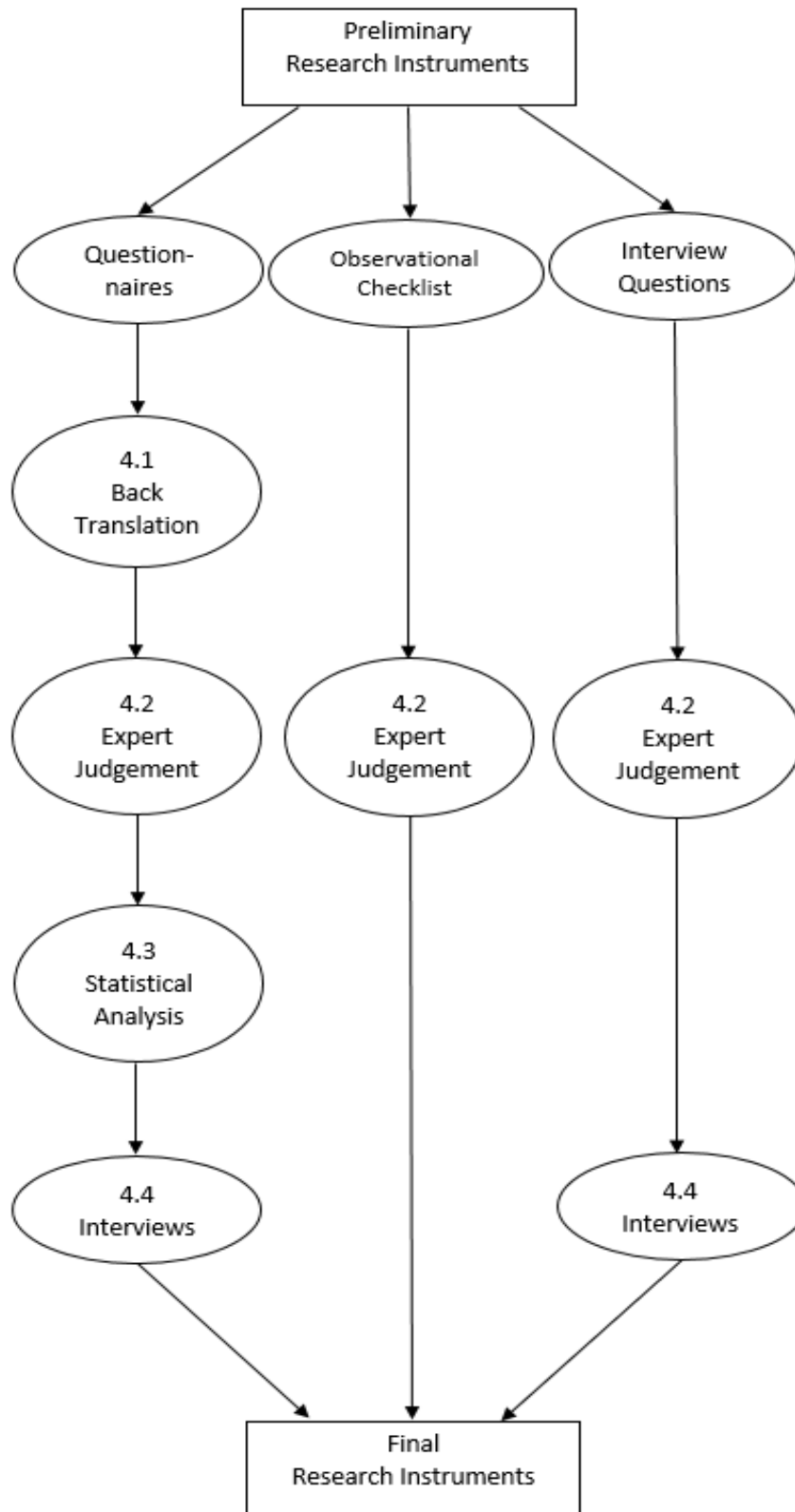
In addition, Bryman (2012) suggested having interview questions piloted through interviews could help researchers detect confusing and poorly worded descriptions and instructions in questions to avoid respondents' skipping questions and missing data. Therefore, I had different five students examine the interview questions and asked them to explain what the questions were asking in their native language, Mandarin Chinese, in order to ensure the questions were comprehensible to them. After the interviews, I could understand that the students were able to explain what the questions intended to ask, so the comprehensibility of the interview questions was also confirmed. The interviews were completed during a time of between fifteen and twenty minutes on average.

#### **4.5 Chapter Summary**

To confirm the comprehensibility and feasibility of the research instruments, this chapter mainly presented how the pilot study measured the research instruments, including the back translation, expert judgement, factor analysis, test-retest reliability, internal consistency reliability, and interviews. All of them, the questionnaires, observational checklist, and interview questions, were modified based on the results and the returned feedback, and they were also certified by my supervisors again before they were formally applied.

Finally, a flow chart (Figure 16) is portrayed to summarise the pilot study. It can be seen that the preliminary research instruments (the questionnaires, observational checklist, and interview questions) were piloted before the formal study. The questionnaires were back translated, as is presented section 4.1. All of the instruments were reviewed by the professional experts, which is presented in section 4.2. The validity and reliability issues for the questionnaires are presented in section 4.3. Lastly, both the questionnaires and interview questions were confirmed by the interview subjects in order to ensure their comprehensibility, which is presented in section 4.4.

The quantitative data analysis and results as well as the qualitative data analysis and results for the formal study are reported in the next two chapters respectively.



*Figure 16. The Flow Chart of the Pilot Study*

## CHAPTER FIVE: QUANTITATIVE DATA ANALYSIS AND RESULTS

The chapter presents the quantitative data analysis and results. In order to answer the RQs properly, several kinds of statistical tools were adopted. First, the inter-rater reliability to confirm the scores given by the two different evaluators is reported in section 5.1. Then, the data related to the students' writing performances were treated with different statistical tools for different purposes. The results of the independent *t*-test to make sure the participants' initial writing abilities are presented in section 5.2, while the paired-sample *t*-test was applied to determine the statistical differences between the pre-test and the post-test in the two groups is presented in sections 5.3 and 5.4. In addition, the Mann-Whitney *U*-test and Wilcoxon signed-rank test were used to analyse the data collected from the questionnaires, and they are detailed in sections 5.5 and 5.6 respectively. Also, to examine the relationships among each factor in the questionnaires between the pre-test and the post-test, Spearman's correlation coefficient is used and reported in section 5.7. Finally, the chapter is summarised in section 5.8. Table 28 demonstrates how the employed statistical tools related to the RQs and purposes of the RQs, and how the chapter was constructed.

Table 28. *A Presentation of the RQs with the Employed Statistical Tools*

RQs	Purposes of the RQs	The Employed Statistical Tools to Answer the RQs
<p>RQ 1: Are there any statistically significant differences in terms of the participants' English writing performances after the treatments, and are there any inter-relationships among the instructional procedures? If there are, are there any differences between the two groups?</p>	<p>Examining whether the participants' English writing performances were enhanced, and how the writing instruction influenced the participants' writing performances in the two groups in order to provide effective instructional and learning suggestions to PGA-based writing classrooms.</p>	<ul style="list-style-type: none"> <li>. Inter-rater reliability in section 5.1</li> <li>. Independent <i>t</i>-test in section 5.2</li> <li>. Paired-sample <i>t</i>-test in sections 5.3 and 5.4</li> </ul>

RQs	Purposes of the RQs	The Employed Statistical Tools to Answer the RQs
<p>RQ 2: Are there any statistically significant differences in terms of the participants' perceptions of the PGA after the treatments, and are there any inter-relationships among the participants' conceptions in the PGA? If there are, are there any differences between the two groups?</p>	<p>Examining how the participants perceived the writing approach, the PGA, and whether there were any inter-relationships among the participants' conceptions in the PGA in order to determine how the PGA benefited the participants' writing performances.</p>	<ul style="list-style-type: none"> <li>. Mann-Whitney <i>U</i>-test in sections 5.5.1.1 and 5.5.2.1</li> <li>. Wilcoxon signed-rank test in section 5.6.1</li> <li>. Spearman's correlation coefficient in section 5.7.1</li> </ul>
<p>RQ 3: Are there any statistically significant differences in terms of the participants' use of the writing strategies after the treatments, and are there any inter-relationships among the participants' conceptions in the writing strategies? If there are, are there any differences between the two groups?</p>	<p>Examining whether there were any differences in terms of the participants' use of the writing strategies in the two groups, and whether there were any inter-relationships among the participants' conceptions in the writing strategies in order to determine how the integration of the PGA and blog influenced the participants' learning.</p>	<ul style="list-style-type: none"> <li>. Mann-Whitney <i>U</i>-test in sections 5.5.1.2 and 5.5.2.2</li> <li>. Wilcoxon signed-rank test in section 5.6.2</li> <li>. Spearman's correlation coefficient in section 5.7.2</li> </ul>
<p>RQ 4: Are there any statistically significant differences in terms of the participants' perceptions of blog writing after the treatments, and are there any inter-relationships among the participants' conceptions in the use of blog writing in the experimental group?</p>	<p>Examining the participants' perceptions of the affordance of blogs in the English writing classroom, and whether there were any inter-relationships among the participants' conceptions in blog writing in order to determine how using blog facilitated the participants' writing performances in a PGA-based writing classroom.</p>	<ul style="list-style-type: none"> <li>. Wilcoxon signed-rank test in section 5.6.3</li> <li>. Spearman's correlation coefficient in section 5.7.3</li> </ul>

### 5.1 The Inter-Rater Reliability for the Writing Scores between the Two Groups

Table 29 indicates that the two sets of writing scores given by the two evaluators were highly correlated in the pre-test and the post-test in the two groups. In the control group, the Pearson correlation coefficients were .659 ( $p = .006 < .01$ ) and .644 ( $p = .007 < .01$ ) respectively in the pre-test and the post-test. As for the results in the experimental group, the Pearson correlation coefficients were .614 ( $p = .007 < .01$ ) and .607 ( $p = .008 < .01$ ) respectively in the pre-test and the post-test. Therefore, the inter-rater reliability of the two sets of writing scores was corroborated.

Table 29. *The Inter-Rater Reliability for the Writing Scores between the Two Groups*

	Control Group		Experimental Group	
	Pre-test	Post-test	Pre-test	Post-test
Pearson Correlation Coefficient	.659**	.644**	.614**	.607**
Sig. (2-tailed)	.006	.007	.007	.008
N	16	16	18	18

\*\*Correlation is significant at the 0.01 level (2-tailed).

### 5.2 Independent *t*-Test for the Participants' Initial English Writing Proficiency between the Two Groups

Tables 30 and 31 below show the results following analysing the independent *t*-test to account for the participants' initial English writing proficiency based on the data collected from the pre-test in the control group and the experimental group.

#### 5.2.1 The Descriptive Statistics for the Participants' Initial English Writing Proficiency between the Two Groups

As shown in Table 30, the descriptive statistics demonstrates that the mean score in the control group was 53.1563 among the 16 participants, and it was 53.8056 among the 18 subjects in the experimental group. The difference of the mean score between the two groups was 0.6493, and the result in the experimental group was slightly higher than that in the control group.

Table 30. *The Descriptive Statistics for the Participants' Initial English Writing Proficiency between the Two Groups*

	Control Group	Experimental Group
Mean	53.1563	53.8056
N	16	18
Std. Deviation	4.5596	6.8944

### 5.2.2 Levene's Test for the Participants' Initial English Writing Proficiency between the Two Groups

Table 31 indicates that there was not statistically significant difference in terms of the participants' initial English writing proficiency ( $p = .136 > .05$ ) according to the consequences in the Levene's test for equality of variances, which means that the variances in the two groups were homogenous. Therefore, the results in the equal variances assumed should be taken into account, which explains no significant difference between the two groups ( $p = .751 > .05$ ). Therefore, the participants in the two groups were homogenous in terms of their initial English writing proficiency. A paired-sample  $t$ -test was consequently conducted to determine whether there were any significant differences in terms of their English writing proficiency between the two groups after the treatments, which are detailed in sections 5.3 and 5.4.

Table 31. *Levene's Test for the Participants' Initial English Writing Proficiency between the Two Groups*

	Levene's Test for Equality of Variances		t-test for Equality of Means						
	F	Sig.	t	df	Sig. (2- tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
								Lower	Upper
Equal variances assumed	2.333	.136	-.319	32	.751	-.649	2.032	-4.789	3.491
Score Equal variances not assumed			-.327	29.697	.746	-.649	1.984	-4.704	3.406

Significance level is at  $p < .05$ .

### 5.3 Paired-Sample *t*-Test for the Participants' Overall English Writing Performances between the Two Groups

Tables 32 and 33 demonstrate the results of the paired-sample *t*-test, which indicate the differences of the participants' overall English writing performances between the pre-test and the post-test in the control group and the experimental group.

#### 5.3.1 The Descriptive Statistics for the Participants' Overall English Writing Performances between the Two Groups

Table 32 demonstrates the mean scores for the pre-test and the post-test regarding the participants' English writing performances between the two groups. In the pre-test, the mean scores were 53.1563 and 53.8056 respectively in the control group and the experimental group with a small difference of 0.6493. However, the mean scores in the post-test were 68.4063 in the control group, and 70.7222 in the experimental group. The difference between the two groups was 2.3159. The result in the experimental group was higher than that in the control group, and the difference in the post-test was greater than the pre-test's.

Table 32. *The Descriptive Statistics for the Participants' Overall English Writing Performances between the Two Groups*

	Control Group		Experimental Group	
	Pre-test	Post-test	Pre-test	Post-test
Mean	53.1563	68.4063	53.8056	70.7222
N	16	16	18	18
Std. Deviation	4.5596	7.1162	6.8944	7.2967

#### 5.3.2 The Inferential Statistics for the Participants' Overall English Writing Performances between the Two Groups

As presented in Table 33, the paired-sample *t*-test demonstrates that there were significant differences in terms of the participants' overall English writing performances in both the control group and the experimental group. The mean score was -15.250 at  $p = .000 < .05$  in the control group, while it was -16.916 at  $p = .000 < .05$  in the experimental group. Therefore, the results of the test certified that the participants' English writing proficiency had been improved significantly after the treatments in both groups.

Table 33. *The Inferential Statistics for the Participants' Overall English Writing Performances between the Two Groups*

		Paired Differences					t	df	Sig. (2-tailed)
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
					Lower	Upper			
Pair	contr_pre	-			-	-	-		
1	contr_post	15.250	6.019	1.504	18.457	12.042	10.134	15	.000
Pair	experi_pre	-			-	-	-		
2	experi_post	16.916	6.952	1.638	20.373	13.459	10.324	17	.000

Significance level is at  $p < .05$ .

#### 5.4 Paired-Sample *t*-Test for the Participants' Sub-Componential English Writing Performances between the Two Groups

The section explains the participants' English writing performances in terms of the five components proposed by Hughey's et al. (1983) in ESLCP, namely the content, organisation, vocabulary, language use, and mechanics, between the two groups after the treatments.

##### 5.4.1 The Descriptive Statistics for the Participants' Sub-Componential English Writing Performances between the Two Groups

Table 34 details the descriptive statistics of the participants' English writing performances in terms of the five components in ESLCP between the pre-test and the post-test in the two groups. The consequences illustrate that the mean scores in the post-test were higher than those in the pre-test in all categories in both groups. Then, the paired-sample *t*-test was used to determine whether there were any statistically significant differences in each component between the two tests in both groups.



Table 34. *The Descriptive Statistics for the Participants' Sub-Componential English Writing Performances between the Two Groups*

	Components	Mean	N	Std. Deviation
Pair 1	control_pretest_content	17.2500	16	1.8257
	control_posttest_content	20.8125	16	2.1669
Pair 2	control_pretest_organisation	11.1563	16	1.3256
	control_posttest_organisation	13.8438	16	1.3990
Pair 3	control_pretest_vocabulary	10.6875	16	.7274
	control_posttest_vocabulary	13.7188	16	1.4138
Pair 4	control_pretest_language use	11.2188	16	1.4828
	control_posttest_language use	16.4375	16	2.0155
Pair 5	control_pretest_mechanics	2.8438	16	.3966
	control_posttest_mechanics	3.5938	16	.5543
Pair 6	experimental_pretest_content	17.3889	18	1.9893
	experimental_posttest_content	21.5833	18	1.9421
Pair 7	experimental_pretest_organisation	11.1944	18	1.5824
	experimental_posttest_organisation	14.6111	18	1.3455
Pair 8	experimental_pretest_vocabulary	10.9167	18	1.5647
	experimental_posttest_vocabulary	14.6111	18	1.8275
Pair 9	experimental_pretest_language use	11.5278	18	1.8268
	experimental_posttest_language use	16.2222	18	2.1159
Pair 10	experimental_pretest_mechanics	2.7778	18	.4608
	experimental_posttest_mechanics	3.6944	18	.5723

#### 5.4.2 The Inferential Statistics for the Participants' Sub-Componential English Writing Performances between the Two Groups

Table 35 presents the results of the paired-sample *t*-test for the participants' English writing performances in terms of the five components in ESLCP in the control group after the treatments, while its results are shown in Table 36 for the experimental group. According to the outcomes, there were significant differences at  $p = .000 < .05$  in all pairs, which indicate that the subjects' English writing performances had been conspicuously advanced in writing content, organisation, vocabulary, language use, and mechanics in both groups.

Table 35. *The Inferential Statistics for the Participants' Sub-Componential English Writing Performances in the Control Group*

		Paired Differences				t	df	Sig. (2-tailed)		
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference					
					Lower				Upper	
Pair 1	pre_content post_content	-3.562	2.235	.558	-4.753	-2.371	-6.375	15	.000	
Pair 2	pre_organisation post_organisation	-2.687	1.740	.435	-3.614	-1.760	-6.177	15	.000	
Pair 3	pre_vocabulary post_vocabulary	-3.031	1.371	.342	-3.762	-2.300	-8.838	15	.000	
Pair 4	pre_language use post_language use	-5.218	1.527	.381	-6.032	-4.404	-	13.669	15	.000
Pair 5	pre_mechanics post_mechanics	-.750	.447	.111	-.988	-.511	-6.708	15	.000	

Significance level is at  $p < .05$ .

Table 36. *The Inferential Statistics for the Participants' Sub-Componential English Writing Performances in the Experimental Group*

		Paired Differences				t	df	Sig. (2-tailed)		
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference					
					Lower				Upper	
Pair 1	pre_content post_content	-4.194	1.903	.448	-5.140	-3.248	-9.351	17	.000	
Pair 2	pre_organisation post_organisation	-3.416	1.447	.341	-4.136	-2.696	-	10.013	17	.000
Pair 3	pre_vocabulary post_vocabulary	-3.694	1.941	.457	-4.659	-2.729	-8.074	17	.000	
Pair 4	pre_language use post_language use	-4.694	2.256	.531	-5.816	-3.572	-8.826	17	.000	
Pair 5	pre_mechanics post_mechanics	-.916	.492	.116	-1.161	-.671	-7.895	17	.000	

Significance level is at  $p < .05$ .

## 5.5 Mann-Whitney *U*-Test for the QPGA and QWS between the Two Groups

In order to examine whether there were any statistically significant differences in terms of the participants' perceptions of the PGA and the use of their writing strategies in the pre-test and the post-test between the two groups, a Mann-Whitney *U*-test was therefore applied. The results for the pre-test are reported in section 5.5.1, while the results for the post-test are presented in section 5.5.2.

### 5.5.1 Mann-Whitney *U*-Test for the QPGA and QWS in the Pre-Test between the Two Groups

This section demonstrates the results analysed by the Mann-Whitney *U*-test to determine whether there were any significant differences in terms of the participants' perceptions of the PGA and the use of their writing strategies before the treatments in the two groups, which are presented in sections 5.5.1.1 and 5.5.1.2 respectively.

#### 5.5.1.1 Mann-Whitney *U*-Test for the QPGA in the Pre-Test between the Two Groups

Based on the statistical results reported in Table 37, there was not significant difference,  $p = .077 > .05$ , between the two groups in terms of the participants' perceptions of the PGA in light of the data gathered from the QPGA in the pre-test, so the participants in the two groups were homogeneous before the treatments.

Table 37. *Mann-Whitney U-Test for the QPGA in the Pre-Test between the Two Groups*

	QPGA
Mann-Whitney U	1901.500
Wilcoxon W	3981.500
Z	-1.769
Asymp. Sig. (2-tailed)	.077
Exact Sig. (2-tailed)	.077

Significance level is at  $p < .05$ .

#### 5.5.1.2 Mann-Whitney *U*-Test for the QWS in the Pre-Test between the Two Groups

The statistical results in Table 38 point out there was not significant difference,  $p = .417 > .05$ , in the Mann-Whitney *U*-test in terms of the participants' application of the writing strategies. As a result, the participants in the two groups were homogeneous before the treatments.

Table 38. *Mann-Whitney U-Test for the QWS in the Pre-Test between the Two Groups*

	QWS
Mann-Whitney U	2117.500
Wilcoxon W	4197.500
Z	-.814
Asymp. Sig. (2-tailed)	.415
Exact Sig. (2-tailed)	.417

Significance level is at  $p < .05$ .

After confirming the subjects' homogeneity between the control group and the experimental group, the Wilcoxon signed-rank test was consequently used to determine whether there were any significant differences in terms of their perceptions of the PGA, the use of their writing strategies, and perceptions of blog writing after the treatments in the two groups, which are presented in section 5.6.

### 5.5.2 Mann-Whitney *U*-Test for the QPGA and QWS in the Post-Test between the Two Groups

The following reports the results analysed by the Mann-Whitney *U*-test to determine whether there were any significant differences in terms of the participants' perceptions of the PGA and the use of their writing strategies after the treatments between the control group and the experimental group.

#### 5.5.2.1 Mann-Whitney *U*-Test for the QPGA in the Post-Test between the Two Groups

According to the results presented in Table 39, there was a significant difference,  $p = .011 < .05$ , between the two groups in terms of the participants' perceptions of the PGA after the treatments, so it was claimed that the students in the two groups had different perceptions of the PGA due to the employment of different instructional and learning tools.

Table 39. *Mann-Whitney U-Test for the QPGA in the Post-Test between the Two Groups*

	QPGA
Mann-Whitney U	1726.000
Wilcoxon W	3806.000
Z	-2.538
Asymp. Sig. (2-tailed)	.011
Exact Sig. (2-tailed)	.011

Significance level is at  $p < .05$ .

### 5.5.2.2 Mann-Whitney *U*-Test for the QWS in the Post-Test between the Two Groups

As can be seen in Table 40, there was not significant difference,  $p = .251 > .05$ , in terms of the participants' use of the writing strategies after the treatments. Hence, the utilisation of the different instructional and learning tools did not influence how the students applied their writing strategies in both groups.

Table 40. *Mann-Whitney U-Test for the QWS in the Post-Test between the Two Groups*

	QWS
Mann-Whitney U	2040.500
Wilcoxon W	4120.500
Z	-1.151
Asymp. Sig. (2-tailed)	.250
Exact Sig. (2-tailed)	.251

Significance level is at  $p < .05$ .

### 5.6 Wilcoxon Signed-Rank Test for the QPGA, QWS, and QBW between the Two Groups

In order to examine whether there were any significant differences in terms of the participants' perceptions of the PGA, the use of their writing strategies, and perceptions of blog writing after the treatments in the two groups, a Wilcoxon signed-rank test was applied. The results for the QPGA and QWS collected from both groups are presented in sections 5.6.1 and 5.6.2 respectively, while the results for the QBW collected from the experimental group are reported in section 5.6.3.

#### 5.6.1 Wilcoxon Signed-Rank Test for the QPGA between the Two Groups

Table 41 reports the statistical results for the QPGA in the control group after the treatments, which were analysed by the Wilcoxon signed-rank test. It can be found that there was not significant difference in the 2-tailed test. Nevertheless, the RQ of the study was to determine whether there were any significant differences after the treatments, so 1-tailed test could be taken into account. The results in the 1-tailed test demonstrate that there was a significant difference in the category of "learning with peers" at  $p = .046 < .05$  in the control group.

Table 41. *Wilcoxon Signed-Rank Test for the QPGA in the Control Group*

	Teacher's Facilitation	Learning with Peers	Understanding for Writing	Model Article Enhanced Writing
Z	-.288	-1.758	-1.084	-.957
Asymp. Sig. (2-tailed)	.773	.079	.279	.339
Exact Sig. (2-tailed)	.797	.092	.345	.362
Exact Sig. (1-tailed)	.399	.046	.172	.181

Significance level is at  $p < .05$ .

The differences of the QPGA between the pre-test and the post-test in the experimental group were analysed by the Wilcoxon signed-rank test as well, which is illustrated in Table 42. The statistical results point out that one significant difference was found in the category of “understanding for writing” at  $p = .016 < .05$ . Nevertheless, this study demonstrated whether there were any significant differences after the treatments, so the results of the 1-tailed test are also presented. However, the outcomes were similar to the aforementioned consequences in which only one significant difference was found in the category of “understanding for writing” at  $p = .008 < .05$ .

Table 42. *Wilcoxon Signed-Rank Test for the QPGA in the Experimental Group*

	Teacher's Facilitation	Learning with Peers	Understanding for Writing	Model Article Enhanced Writing
Z	-1.230	-.679	-2.411	-1.711
Asymp. Sig. (2-tailed)	.219	.497	.016	.087
Exact Sig. (2-tailed)	.233	.521	.016	.104
Exact Sig. (1-tailed)	.117	.260	.008	.052

Significance level is at  $p < .05$ .

### 5.6.2 Wilcoxon Signed-Rank Test for the QWS between the Two Groups

Table 43 indicates the results in terms of the participants' use of the writing strategies after the treatments in the control group, which were computed by using the Wilcoxon signed-rank test. The consequences show that there was not significant difference in the four components in the QWS in both the 2-tailed test and the 1-tailed test.

Table 43. *Wilcoxon Signed-Rank Test for the QWS in the Control Group*

	Cognition	Known- Knowledge Using	Pressure Reducing	Self- Enhancement
Z	-.106	-.996	-.907	-.690
Asymp. Sig. (2-tailed)	.916	.319	.365	.490
Exact Sig. (2-tailed)	.940	.357	.418	.615
Exact Sig. (1-tailed)	.470	.178	.209	.308

Significance level is at  $p < .05$ .

The results of the Wilcoxon signed-rank test for the participants' use of the writing strategies in the experimental group are demonstrated in Table 44. However, no statistically significant difference was found in both the 2-tailed test and the 1-tailed test after the treatments in terms of the four dimensions in the QWS.

Table 44. *Wilcoxon Signed-Rank Test for the QWS in the Experimental Group*

	Cognition	Known- Knowledge Using	Pressure Reducing	Self- Enhancement
Z	-1.487	-.072	-.991	-.030
Asymp. Sig. (2-tailed)	.137	.942	.322	.976
Exact Sig. (2-tailed)	.149	.950	.337	.999
Exact Sig. (1-tailed)	.075	.475	.169	.500

Significance level is at  $p < .05$ .

### 5.6.3 Wilcoxon Signed-Rank Test for the QBW in the Experimental Group

As can be seen in Table 45, the results of the Wilcoxon signed-rank test (2-tailed) indicate that there was not significant difference in terms of the students' perceptions of blog writing among the five categories in the QBW. However, the study tried to find out the differences after the treatments, which was a 1-tailed test, so the  $p$  value in the 2-tailed test should be divided by 2. After the data analysis, it was found that there were significant

differences in terms of the students' "attitudes toward blog writing" at  $p = .027 < .05$ , and "affections toward blog writing" at  $p = .027 < .05$ .

Table 45. *Wilcoxon Signed-Rank Test for the QBW in the Experimental Group*

	Blog vs. Paper-Pencil Writing	Blog Enhanced Writing	Blog for Socialisation	Attitudes toward Blog Writing	Affections toward Blog Writing
Z	-.667	-.530	-1.424	-1.900	-1.929
Asymp. Sig. (2-tailed)	.505	.596	.155	.057	.054
Exact Sig. (2-tailed)	.513	.622	.165	.053	.055
Exact Sig. (1-tailed)	.257	.311	.083	.027	.027

Significance level is at  $p < .05$ .

### 5.7 Spearman's Correlation Coefficient for the QPGA, QWS, and QBW after the Treatments in the Two Groups

This section reports the correlations among the participants' perceptions of the PGA, the use of their writing strategies, and perceptions of blog writing after the treatments between the control group and the experimental group. The results were computed by a Spearman's correlation coefficient, and the outcomes are presented in the following sub-sections: the QPGA between the two groups in section 5.7.1; the QWS between the two groups in section 5.7.2; the QBW in the experimental group in section 5.7.3.



### 5.7.1 Spearman's Correlation Coefficient for the QPGA after the Treatments in the Two Groups

The results for the participants' perceptions of the PGA in the control group after the treatments are presented in Table 46. The consequences of "understanding for writing" was correlated with "learning with peers" at  $p = .015 < .05$ . The factor of "model article enhanced writing" was also significantly correlated with "teacher's facilitation" at  $p = .006 < .01$  and "understanding for writing" at  $p = .007 < .01$ .

Table 46. *Spearman's Correlation Coefficient for the QPGA in the Control Group*

Spearman's rho	Teacher's Facilitation	Learning with Peers	Understanding for Writing	Model Article Enhanced Writing
<b>Teacher's Facilitation</b>				
Correlation Coefficient	1.000	.207	.484	.651**
Sig. (2-tailed)	.	.441	.057	.006
N	16	16	16	16
<b>Learning with Peers</b>				
Correlation Coefficient		1.000	.594*	.468
Sig. (2-tailed)		.	.015	.068
N		16	16	16
<b>Understanding for Writing</b>				
Correlation Coefficient			1.000	.644**
Sig. (2-tailed)			.	.007
N			16	16
<b>Model Article Enhanced Writing</b>				
Correlation Coefficient				1.000
Sig. (2-tailed)				.
N				16

\*\* . Correlation is significant at the 0.01 level (2-tailed).

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

The results of the participants' perceptions of the PGA in the experimental group after the treatments are presented in Table 47. In accordance with the Spearman's correlation coefficient, the consequences show that each sub-category was significantly correlated with each other in the experimental group ( $p < .05$ ).

**Table 47. Spearman's Correlation Coefficient for the QPGA in the Experimental Group**

Spearman's rho	Teacher's Facilitation	Learning with Peers	Understanding for Writing	Model Article Enhanced Writing
<b>Teacher's Facilitation</b>				
Correlation Coefficient	1.000	.612**	.600**	.765**
Sig. (2-tailed)	.	.007	.008	.000
N	18	18	18	18
<b>Learning with Peers</b>				
Correlation Coefficient		1.000	.575*	.568*
Sig. (2-tailed)		.	.013	.014
N		18	18	18
<b>Understanding for Writing</b>				
Correlation Coefficient			1.000	.594**
Sig. (2-tailed)			.	.009
N			18	18
<b>Model Article Enhanced Writing</b>				
Correlation Coefficient				1.000
Sig. (2-tailed)				.
N				18

\*\* . Correlation is significant at the 0.01 level (2-tailed).

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

### 5.7.2 Spearman's Correlation Coefficient for the QWS after the Treatments in the Two Groups

Table 48 indicates the results of the participants' using of the writing strategies in the control group. The outcomes in the Spearman's correlation coefficient present that the concept of "cognition" correlated with "known-knowledge using" at  $p = .003 < .01$ , and "pressure reducing" at  $p = .034 < .05$ . The factors of "pressure reducing" and "self-enhancement" were also correlated to each other at  $p = .042 < .05$ .

Table 48. *Spearman's Correlation Coefficient for the QWS in the Control Group*

Spearman's rho	Cognition	Known-Knowledge Using	Pressure Reducing	Self-Enhancement
<b>Cognition</b>				
Correlation Coefficient	1.000	.695**	.532*	.297
Sig. (2-tailed)	.	.003	.034	.264
N	16	16	16	16
<b>Known-Knowledge Using</b>				
Correlation Coefficient		1.000	.472	.234
Sig. (2-tailed)		.	.065	.382
N		16	16	16
<b>Pressure Reducing</b>				
Correlation Coefficient			1.000	.514*
Sig. (2-tailed)			.	.042
N			16	16
<b>Self-Enhancement</b>				
Correlation Coefficient				1.000
Sig. (2-tailed)				.
N				16

\*\* . Correlation is significant at the 0.01 level (2-tailed).

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

Table 49 explains the results of the use of the students writing strategies in the experimental group after the treatments. All of the sub-categories were significantly correlated with each other in the experimental group ( $p < .05$ ).

Table 49. *Spearman's Correlation Coefficient for the QWS in the Experimental Group*

Spearman's rho	Cognition	Known-Knowledge Using	Pressure Reducing	Self-Enhancement
<b>Cognition</b>				
Correlation Coefficient	1.000	.547*	.582*	.737**
Sig. (2-tailed)	.	.019	.011	.000
N	18	18	18	18
<b>Known-Knowledge Using</b>				
Correlation Coefficient		1.000	.734**	.607**
Sig. (2-tailed)		.	.001	.008
N		18	18	18
<b>Pressure Reducing</b>				
Correlation Coefficient			1.000	.731**
Sig. (2-tailed)			.	.001
N			18	18
<b>Self-Enhancement</b>				
Correlation Coefficient				1.000
Sig. (2-tailed)				.
N				18

\*\* . Correlation is significant at the 0.01 level (2-tailed).

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

### 5.7.3 Spearman's Correlation Coefficient for the QBW after the Treatments in the Experimental Group

Table 50 demonstrates the correlations of the participants' perceptions of blog writing in the experimental group after the treatments. The results in the Spearman's correlation coefficient indicate that "blog enhanced writing" correlated with "blog for socialisation" at  $p = .000 < .01$ , and "attitudes toward blog writing" at  $p = .005 < .01$ .

Table 50. *Spearman's Correlation Coefficient for the QBW in the Experimental Group*

Spearman's rho	Blog vs. Paper-Pencil Writing	Blog Enhanced Writing	Blog for Socialisation	Attitudes toward Blog Writing	Affections toward Blog Writing
Blog vs. Paper-Pencil Writing					
Correlation Coefficient	1.000	.395	.305	.341	.234
Sig. (2-tailed)	.	.105	.219	.166	.350
N	18	18	18	18	18
Blog Enhanced Writing					
Correlation Coefficient		1.000	.770**	.634**	.256
Sig. (2-tailed)		.	.000	.005	.305
N		18	18	18	18
Blog for Socialisation					
Correlation Coefficient			1.000	.387	.407
Sig. (2-tailed)			.	.112	.094
N			18	18	18
Attitudes toward Blog Writing					
Correlation Coefficient				1.000	.153
Sig. (2-tailed)				.	.545
N				18	18
Affections toward Blog Writing					
Correlation Coefficient					1.000
Sig. (2-tailed)					.
N					18

\*\* . Correlation is significant at the 0.01 level (2-tailed).

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

## **5.8 Chapter Summary**

The current chapter mainly discussed the quantitative results analysed and computed by IBM SPSS Statistics version 22, a renowned statistical tool, because the numerical data collected from the students' writing essays as well as the three employed questionnaires were used to determine the descriptive statistical outcomes and inferential statistical consequences in the control group and the experimental group in order to find the answers to respond to the RQs. The tests for differences between means were utilised to examine the differences between the pre-test and the post-test in terms of the participants' writing performances, perceptions of the PGA, the use of their writing strategies, and perceptions of blog writing in the two groups. Then, the correlation tests were employed to examine whether there were any significant relationships in each dimension in the two groups after the treatments. However, quantitative research methods can generally explain the relationships among variables, but it is unable to prove more specific understanding, which can be offset by qualitative research methods (Creswell & Clark, 2011). In order to present more in-depth findings for the RQs of this study, the data gathered from the observations and the interviews is analysed and detailed in the next chapter.

## **CHAPTER SIX: QUALITATIVE DATA ANALYSIS AND RESULTS**

The qualitative data collected from the observations and the interviews is analysed and reported in this chapter, which is divided into three main sections: the observational data analysis and results in section 6.1; the interview data analysis and results in section 6.2; a chapter summary in section 6.3.

### **6.1 Results of the Observational Data**

The results of the observational data is presented in this section, in which six themes: inactive peers' discussion (section 6.1.1), inconvenience of blogs (section 6.1.2), unconstructive feedback (section 6.1.3), inactive class participation (section 6.1.4), lengthy instruction (section 6.1.5), as well as difficulty in marking essays on blogs (section 6.1.6) were extracted to explain the obstacles of the approach in EFL writing classrooms settings. The first three themes are more related to the students' learning perspectives, while the later three ones are more related to the instructor's teaching perspectives. All of them are analysed and reported in the following sub-sections respectively.

#### **6.1.1 Inactive Peers' Discussion**

The first theme, inactive peers' discussion, explains the students to students interactions in class.

Although the interview subjects mentioned that they had more interactive and communicative opportunities with their peers in this programme (see section 6.2.1), it was observed that the students were not really attentive during the genuine discussion phase. In fact, the students were inclined to be inactive when they were asked to discuss written contents with their peers. For example, they were talking to each other, using their smart phones, and otherwise wasting time. Although some of them were engaged in discussions with their peers, they usually talked about grammatical mistakes instead of exchanging or inspiring writing thoughts, reflections, and ideas.

This could have been due to Taiwanese students not being accustomed to having class discussions because they usually listen to instructors' deliveries of lectures, and have few opportunities to talk to each other during class time. When the students were given

opportunities to express themselves and to give ideas in class, they avoided volunteering for this purpose. They do not answer questions or provide comments voluntarily, which is typical of most Taiwanese students' learning attitudes in class. In addition, due to the Taiwanese educational system being results-driven and score-oriented, the students usually paid much more attention to their grammatical problems rather than to their writing contents. This could be a possible reason why the participants discussed grammar more than the contents.

Therefore, carrying out peers' discussion was a difficult task for both instructors and students in this type of research context, which could possibly have decreased the effectiveness of the PGA because interaction and communication are greatly emphasised in PGA-based writing classrooms.

### **6.1.2 Inconvenience of Blogs**

This extract reflects the potential difficulties for both instructors and students when blogs were used in Taiwanese English writing classrooms.

Unlike having handouts in hand, the students who used blogs as the learning medium were unable to take notes as easily as the students in another group. The students in the control group could take notes on the handouts easily and clearly as I was conveying the teaching contents in class. They could refer to their notes by simply looking at how and what they added to their notes. For example, if the students did not understand the meanings of words, they could directly write down the Mandarin Chinese translation next to the English vocabulary words. In contrast, the students had to take notes elsewhere (i.e. a sheet of paper or a notebook) if they used blog writing, which could interfere with their learning. They had to keep their class notes careful, or otherwise they would forget what they were about. It was also found that the students became distracted in class easily when blog contents were used in the classroom because passive learners were uninterested. Neither were they able to take notes on computers, and nor did they take notes voluntarily on a sheet of paper, so it made it difficult for them to concentrate on the instruction in progress.



Blogs are not a perfect instructional means for language education, and there are certain problems, which have been widely discussed in the previous studies and presented in section 2.3.3 of this work. However, the abovementioned viewpoint is relatively scarcely proposed in the literature, so this is a valuable finding for future implications and research.

### **6.1.3 Unconstructive Feedback**

This section presents the efficacy of peers' feedback on blogs according to the observed situation.

In terms of the peers' feedback on blogs, most of the students' comments were not really sufficiently constructive to develop writing competence because they did not provide explanations for linguistic functions or encouragements to generate further contents. They were also prone to offering compliments that did not really improve one's writing abilities, such as "I agree with you," or "your writing is good." Since leaving comments for each other was a part of the course requirement, it seemed that the students did this to fulfil this requirement.

Several possible reasons were proposed to explain the consequence. First, the students might not have focused carefully on reading the peers' written work on blogs before giving feedback, and therefore they did not know what to comment on. Second, they had to leave their comments in English, so they might not have felt confident or comfortable about writing comments in English. Finally, perhaps they were afraid that giving direct comments would offend their peers. The writers could only read the peers' comments on blogs, and the commentators could not talk about the comments with their peers, so they were likely to misunderstand each other, which could undermine their relationships. The students consequently would prefer giving compliments, rather than providing critical comments. As a result, it was found that giving feedback on blogs was not as helpful as what had been expected.

Although giving comments on blogs could be very convenient without there being time and place constraints, it could not function well with some students, such as EFL learners, due to their underlying feelings of uncertainty and lacking confidence. Therefore, providing online

comments along with exchanging feedback in class could be more helpful to maximise the effectiveness of the peers' comments on blogs.

#### **6.1.4 Inactive Class Participation**

This theme accounts for how the participants interacted and communicated with me during the data collection process.

During the treatment phase, the students tended to be passive and reticent. The possible reason could be attributed to the Taiwanese educational system and culture. Instructors in Taiwan are deemed to be authoritative in classrooms, and students depend on them to a wide extent. Taiwanese students usually accept information from instructors unilaterally while having very few questions. Most Taiwanese students consequently lack independent critical thinking abilities, and they are receptive rather than productive in class, and rarely offer their ideas, opinions, or thoughts voluntarily.

Moreover, the concept of "correct answers" is usually embedded in students' minds, which makes them hesitant about giving their input in class voluntarily because they are afraid of giving incorrect answers. In order to avoid committing mistakes, they are therefore inclined to be silent and reticent in class. Most Taiwanese students are also shy about speaking in public, or lack self-confidence in class, and therefore providing their feedback, comments, or opinions is not their custom.

In PGA-based writing classrooms, however, students have to frequently interact and communicate with instructors to inspire their writing ideas. Unfortunately, the participants were commonly passive and reticent during the discussion process even though they had an idea in mind. They preferred not giving their opinions voluntarily, unless I specifically assigned them the task of responding to questions. Therefore, this approach was difficult to be carried out in this research context, and consequently, the students had to be encouraged about why they ought to voice their thoughts voluntarily, which was time-consuming.

### **6.1.5 Lengthy Instruction**

Owing to the combination of the PCA and GRA, it took much longer time to go through all of the teaching steps in PGA-based writing classrooms.

Due to there being a time constraint, the available amount of time to deliver the course contents was very limited. Only one paragraph in the model article could be demonstrated every week in which these paragraphs had to be analysed and explained during reading of the model articles. Then, some time had to be allocated for the students to talk about the contents in the paragraphs with their peers, and then I had to discuss the results about the students' discussions again. These results also had to be compiled, and the students were guided to construct their writing samples with their own ideas gathered from the discussions with their peers. It took a great deal of time to carry out each step in the process, so only one paragraph could be completed every week.

Moreover, the students' writing assignments were based on weekly progress, so it was found that the students were writing about the same topic for several consecutive weeks. In other words, if the lecture component of the course was about the first paragraph of the model article during the first week of instruction, the assignment for the week was writing the first paragraph. If the next class course was about the second paragraph of the model article during the second week of instruction, the assignment for the week was writing the second paragraph along with revising the first paragraph. If the class was about the third paragraph of the model article during the third week of instruction, the assignment for the week was writing the third paragraph along with revising the first and second paragraphs. Finally, the students had to submit a final draft of their essays again during the fourth week of instruction. Consequently, the students had negative attitudes toward the writing approach because they wrote about the same topic for several weeks due to the prolonged period of instruction.

It was therefore suggested that the extended instruction influenced the students' perceptions of the PGA, which could be one of the potential disadvantages of the PGA. It makes students receive similar instructional contents repetitively, and they have to write

and revise about the same topic reiteratively. Both of them could possibly decrease their writing motivations and interests.

#### **6.1.6 Difficulty in Marking Essays on Blogs**

Finally, it was also observed that marking essays on blogs could be time-consuming because it took much more time to provide organised and comprehensible comments when technical inconveniences were aggravating factors.

Marking the students' writing samples on blogs was likewise time-consuming. During the process, I had to scroll up and scroll down the windows on the screen at all times while marking the students' writing samples and leaving comments on their blogs. Because it was impossible to provide written comments at the points where revisions on the students' blogs were needed, the students' mistakes had to be copied and pasted in the "leave your comments" section. Mistakes on the students' blogs then had to be explained carefully in order to prevent the students from misunderstanding the comments. Thus, I spent a great deal of time and energy to think of how to arrange and leave comprehensible comments on their blogs while marking their written contents.

Although I provided comments carefully to keep the students from misunderstanding them, they sometimes did not really understand those comments. It was found that sometimes the students' revised writing samples were unsatisfactory due to their misunderstanding the comments. The students sometimes copied the first writing sample onto the second sample (the revised one) effortlessly in order to submit their assignments as soon as possible. Hence, they did not modify their written work based on the given comments, so those comments on blogs were sometimes ignored.

The difficulty in marking essays on blogs could impede writing instructors to apply blogs in their classrooms owing to its inconvenience. In order to simplify instructor's marking, instructors could have the access to students' account and mark their essays on their mistakes directly, so instructors are also allowed to use different colour fonts to highlight and emphasise the comments.

Finally, the phenomenon and situations observed in genuine writing classrooms were reported in this section, which were gathered, analysed, and presented according to both teaching and learning perspectives. In addition to this analysis and reporting about the observational data, there were also some certain unobservable phenomena. These included students' mental status that could be elicited through interviews, which are detailed in the next section.

## **6.2 Results of the Interview Data**

The interviews consisted of three different dimensions, which are presented in the sub-sections respectively: the subjects' perceptions of the employment of the PGA in EFL writing settings collected in both groups (section 6.2.1); the participants' use of the writing strategies collected in both groups (section 6.2.2.); and the students' concepts toward the affordance of the blogs in EFL writing classrooms collected in the experimental group (section 6.2.3).

### **6.2.1 Perceptions of the Process/Genre Approach**

This section deals with the interview analysis and results with reference to the participants' perceptions of the application of the PGA in English writing classrooms, in which the themes were constructed based on the extracted dimensions in the QPGA as the pre-determined themes: teacher's facilitation (section 6.2.1.1), learning with peers (section 6.2.1.2), understanding for writing (section 6.2.1.3), and model article enhanced writing (section 6.2.1.4).

#### **6.2.1.1 Teacher's Facilitation**

The role of instructors is important in a PGA-based writing classroom because they have to provide as many similar social contexts as possible for learners, and offer sufficient information for them to compose writing samples (GRA). Students then use their language knowledge and skills to respond to writing tasks (PCA) (Badger & White, 2000). Learners who have adequate knowledge toward a genre may not need help from instructors because the more students understand the genre, the less they need from teachers, and vice versa (Callaghan et al., 1993; Nordin & Mohammad, 2006). Therefore, it is necessary to talk about how instructors facilitate learners' learning in the classroom of this kind. After going through

the interview data, the concepts of starting writing easily and improving grammatical abilities have been coded in this theme. The students described that they were more able to start their writing tasks after receiving explanations about the writing topics, and their grammatical abilities had been improved after their writing samples were marked. The analyses and interview excerpts are shown below.

### ***Starting writing easily***

Most of the interview subjects agreed that they had clear writing directions for their writing tasks after having received explanations to the model articles. Sometimes they did not understand how to start their writing after reading the writing topics, but the instruction together with the use of the model articles helped them understand the writing topics and start their writing more easily because the instruction clarified the writing tasks.

Interview subject #1:

*..... I don't know what to write when I read the writing topics for the first time. But, I had a preliminary direction after reading the model articles .....*

Interview subject #3:

*(after the instruction) I have more directions about the writing, and I can refer to the contents in the model articles as well.*

Interview subject #6:

*..... Sometimes I don't know how to start outlines after reading the writing topics, but I have more ideas after the instructor's explanations.*

They further pointed out that the given examples were quite clear and understandable, which helped them find the writing directions and understand the writing topics. Therefore, these examples made the students become more competent and contemplative about their writing tasks as well.

Interview subject #8:

*..... The model articles and the instructor's instruction are quite clear. The instructor also provides some examples, so we can understand the structures and the key points of the model articles.*

Interview subject #12:

*..... The instructor usually provides examples and vocabulary. For example, he provides the possible reasons for the low birth rate, which helps me find out the writing directions.*

Interview subject #13:

*..... The instructor provides examples in class, which helps me understand how to write the essays. Moreover, it is easier for me to start writing after the instructor's explanations.*

In addition, the students had greater opportunities to interact with others in the PGA-based writing classrooms, because I had encouraged them to think and talk, which helped them have more interactive and communicative opportunities with others, and this developed their writing abilities as well.

Interview subject #5:

*It (the approach) increases the interactions with the instructor, and it is helpful to my writing skills as well.*

Interview subject #13:

*We had scarce opportunities to discuss with the classmates or instructors in previous writing classes, but we have a great number of discussions in this programme. I think my writing abilities have been developed a great deal.*

While most of the responses were positive, an interview subject disapproved of the effectiveness of the teaching due to the conflict between the teaching and her expectations. In other words, the teaching contents were different from what she had expected, so she could not understand the contents. Therefore, understanding how students think of writing topics is also important for writing instructors, since it can provide students with effective instructional contents.

Interview subject #2:

*..... I think sometimes it (the instruction) was not helpful because the instructor's instruction sometimes doesn't fit in with what I want to write, or sometimes I don't understand what he talks about ..... The instructor's instruction did not fit in with my thoughts, which makes me confused.*

### ***Improving grammatical abilities***

In addition to starting writing more easily, the students also figured out that their grammatical abilities had improved a great deal after they received the comments, which

also helped them understand how to modify their essays. In other words, instructors play important roles in the classroom of this kind because they develop the students' grammatical knowledge by giving feedback, which develops their writing abilities as well.

Interview subject #2:

*..... My grammatical abilities are not good, so I can understand what mistakes I have made after the instructor's marking. The instructor's comments also help me understand how to modify my writing samples.*

Interview subject #10:

*..... The instructor marks my writing samples cautiously, and find out the mistakes. My grammatical abilities are enhanced as well.*

Interview subject #12:

*..... I can understand my mistakes, and I will pay more attention to them in my future writing samples. The frequency of mistakes will also decrease.*

However, one of the interview subjects described that my markings on her writing samples sometimes did not fit in with her expectations, so those comments sometimes did not serve her writing development well. Therefore, again, recognising understanding how the students think of the writing topics is important for writing instructors, so that not only can effective instructional contents be provided, but effective comments can also be offered.

Interview subject #13:

*..... Sometimes the instructor's markings are different from my ideas that I want to express.*

Although there was unfavourable feedback toward the teacher's facilitation in terms of giving lecturers or comments, most of the interview subjects were in favour of the teaching contents because they had more ideas, understood the structures of the writing, and had a wider range of examples for their essays. All of these helped them have clear writing directions and enabled them to start writing more easily. In addition, the provided feedback also increased their understanding about their limited English writing abilities. However, there were not any differences between the control group and the experimental group, which implies that the teaching contents were not influenced by applying different instructional tools.



### 6.2.1.2 Learning with Peers

According to Vygotsky, interaction is important in one's language learning process, and one needs to interact with others to learn a language (Cook, 2008) because language learning is a type of social interaction with others, and it is not an individual information process (Donato, 2000). Therefore, how the students perceived their interaction with their peers while they were learning writing seemed important to be addressed. However, two negative themes, scepticism and lacking constructive feedback, emerged from the interview data although there was a positive one, which was obtaining different perspectives. The interview subjects expressed that they were more able to obtain different perspectives for their writing samples after interacting with their peers, but they were sceptical about their abilities, which also lacked constructive viewpoints in developing writing competence. The analyses and interview excerpts are shown below.

#### ***Obtaining different perspectives***

Some of the interview subjects mentioned that they were able to collect different points of view for their writing samples and could learn from each other's strengths after interacting with their peers, and therefore peers' interaction led to increasing the amount of their language input.

Interview subject #5:

*..... Sometimes the classmates' ideas are what I haven't thought about. I can refer to their ideas.*

Interview subject #6:

*..... Sometimes my ideas are different from my classmates'. We can exchange our ideas, which enhances our writing abilities.*

Interview subject #10:

*..... I can learn from others' strengths.*

They thought that their writing abilities could be developed through this peer-to-peer interaction because they were allowed to interact with more competent students.

Interview subject #4:

*..... Some more proficient classmates are able to provide helps through the discussions ..... They provide their opinions and directions when we don't know how to write.*

### **Scepticism**

Although peers' interaction would facilitate the students' writing abilities, some of the interview subjects were not in favour of the effectiveness of the peers' feedback because they were sceptical about their abilities.

Interview subject #2:

*..... It (peers' feedback) doesn't help a great deal because they may not know how to write, either.*

Interview subject #11:

*..... Some classmates provide suggestions based on their own viewpoints. The suggestions may not be correct, so they don't really improve my writing abilities.*

### **Lacking constructive feedback**

Moreover, some maintained that the peers' comments did not contain constructive suggestions for their writing samples, because they usually provided them with compliments, which did not serve as "real" comments.

Interview subject #8:

*It depends. Most classmates offer compliments which don't really improve my writing abilities.*

Interview subject #9:

*..... My classmates' feedback is "very good" at all times. They neither provide specific criticisms, nor provide any grammatical or writing suggestions for me.*

Interview subject #12:

*..... My classmates rarely provide specific suggestions. They don't criticise on certain parts.*

In contrast to the teacher's facilitation, peers seemed to offer fewer contributions to develop one's writing abilities. Although they had more interactions with their peers in the PGA-based writing classrooms in which they were allowed to learn from each other, they sometimes did not really trust in their peers' writing abilities or their comments did not really provide helpful or critical suggestions. However, it is interesting to note that those who stated peers' feedback in lack of constructive suggestions were in the experimental group, which reveals that giving feedback on blogs was different from giving feedback in class. It is therefore inferred that providing comments on blogs is unilateral, and it is not as

interactive as offering feedback in class, where students are allowed to discuss or clarify their contents verbally. To avoid offending their peers and undermining their relationships, the students' motivations to provide "real" comments on blogs are therefore low.

### **6.2.1.3 Understanding for Writing**

The creation of the PGA helps students understand the writing process, and realise the writing purposes and contexts toward certain genres. It not only strengthens students' awareness of the writing process, but also develops their knowledge toward different types of genres (Yan, 2005) because they are able to receive lectures, read model articles, and write repetitively. These three coded factors were therefore used to explain how the students familiarised themselves with the writing topics. First, they were more able to understand their writing tasks after receiving lectures. Then, their understanding for writing and writing abilities could be facilitated in the great reading and repetitive writing process. The analyses and interview excerpts are shown below.

#### ***The lectures***

According to the responses collected in the interviews, the lectures provided the students with writing directions, and helped them understand the structures of the writing, so they were able to start writing more easily and not digress from the writing topics. In other words, the lectures helped them understand how to write their samples.

Interview subject #4:

*Sometimes I don't understand the articles, but I can understand them after the instructor's explanations. I can understand more about the structures of the articles, and I have clearer writing directions.*

Interview subject #9:

*..... My writing samples would not digress from the writing topics, and it is easier to write. I can understand how to use phrases or grammar.*

Interview subject #10:

*..... The instructor provides us with writing directions, and guides us to read the model articles. We can understand how to start writing.*

### **Reading articles**

In addition to the lectures, the students had to read the model articles at the early stage of the instruction before writing their essays, which also helped them understand the writing topics, have writing directions, and focus on the writing topics. Especially for some more difficult writing topics, reading articles before writing was indeed helpful to increase their understanding about the writing tasks.

Interview subject #5:

*..... I can understand how the writers write or the writing directions after reading the model articles. I can have writing directions, and I will not digress from the writing topics. Also, I can refer to the contents in the model articles.*

Interview subject #8:

*..... The writing topics are quite difficult to us, such as the low birth rate and global warming. It would be very difficult to start if we don't search for the information in advance. However, because of the instructor's provision of the model articles, we are able to have the writing directions.*

However, due to the use of blogs in the experimental group, the students had sufficient time to think about the given comments, which could not be achieved in a traditional writing classroom.

Interview subject #8:

*..... We have sufficient time to understand the instructor's opinions on blogs. If we ask questions in class, we need to worry about whether we take up too much time, whether we are late for the next class, or whether there is anyone waiting to ask questions. Also, it is impossible to miss the instructor's comments on blogs, but we would forget what he said after class.*

The interview subjects in the experimental group also mentioned that they could understand what their readers might want to know after their reading, which implies that writing on blogs is very likely to develop students' senses of ownership and readership. Therefore, the relationships between writers and readers could be established, and students' perception of "writing for interaction and communication" is possibly established as well. These inferences were not detected in the control group.

Interview subject #10:

*..... We never wrote about these kinds of writing topics before. However, we are more able to understand how to write, and what readers need after the instructor's explanations.*

Interview subject #12:

*..... Our writing topics are about global warming and low birth rate. After reading the model articles, we can understand what information readers need, and then we can provide specific examples and explanations.*

### ***Repetitive writing***

Writing repetitively also enhanced the students' understanding about their writing tasks. Because of the application of the PGA, the students had more writing opportunities before they completed their writing and submitted the final drafts. In this recursive process, the students had to write about the same writing topics repeatedly and revise their writing samples based on the given comments. Therefore, some of the interview subjects expressed that their writing abilities were facilitated in this process.

Interview subject #6:

*It increases our writing opportunities, and helps us write better.*

Interview subject #14:

*I think I have made progress with my writing abilities. My writing abilities were not good, but I think my writing abilities are improving greatly because I have to write and modify my writing samples repeatedly in this programme.*

Unfortunately, it also made the students tired of writing about the same topics reiteratively, which is a potential disadvantage that is caused by the employment of the PGA in EFL writing classrooms.

Interview subject #4:

*Need to revise writing samples repeatedly.*

Interview subject #5:

*Writing about the same topics repeatedly.*

Interview subject #6:

*Writing about the same topics repeatedly. I think I am writing the same contents all the time.*

It was suggested that providing lectures on the model articles, reading essays written by others, and writing repeatedly developed the students' understanding about their writing tasks. Although there is a potential drawback for repetitive writing, those who proposed this negative perception were all in the control group. In other words, it implies that the students might not perceive the same feeling if different writing tools are utilised, such as blogs. Therefore, not only could the students have more reading samples apart from the provided model articles, but their senses of ownership and readership as well as sense of writing for interaction and communication may also be developed in a blog-based writing classroom.

#### **6.2.1.4 Model Article Enhanced Writing**

By offering the model articles, the students are able to grasp more linguistic knowledge and understand writing purposes, because both language input and information are provided for them to compose writing samples (Badger & White, 2000). Therefore, navigating writing and providing references were found to explain the theme, model article enhanced writing. On the other hand, a negative one, confining to model articles, was also indicated. Because the provision of the model articles, the students were more able to find out their writing directions and refer to the contents in the model articles when they had writing difficulties. However, reading model articles would hamper their ideas and creativity in relation to their writing tasks. The analyses and interview excerpts are shown below.

#### ***Navigating writing***

The model articles helped the students navigate through their writing directions because they could understand the structures of the writing and start writing more easily after reading them. They would find that writing was not as difficult as what they had expected.

Interview subject #9:

*..... It is easier to start, and we can refer to the contents and structures in the model articles directly.*

Interview subject #12:

*Reading model articles before writing helps us find out writing directions, and it is easier to start writing as well.*

### ***Providing references***

In addition, the students were allowed to refer to the contents in the model articles to gather ideas for their writing samples when they had difficulties with writing, which not only helped them understand how to write but also what to write. Consequently, their writing could be focused on the given topics.

Interview subject #3:

*..... I have more directions about the writing, and I can refer to the contents in the model articles as well.*

Interview subject #5:

*..... I can understand how the writers write or the writing directions after reading the model articles. I can have writing directions, and I will not digress from the writing topics. Also, I can refer to the contents in the model articles.*

Moreover, they had more opportunities to be exposed to language input because they needed to read the model articles before writing their essays. Therefore, some interview subjects revealed that this approach was easy and made learning faster when their abilities were developed at the same time.

Interview subject #1:

*It is easy. We learn faster.*

Interview subject #4:

*It improves my grammatical abilities.*

### ***Confining to the model articles***

While the provision of model articles enhanced the students' writing abilities, there could have been a potential disadvantage, i.e., the students' ideas and creativity toward their writing samples would be confined to the model articles after their reading.

Interview subject #6:

*..... I can refer to the model articles. However, sometimes I find my ideas are similar to the ones used in the model articles after reading them .....*

Interview subject #12:

*After reading the model articles, our ideas are confined to them, and we lack our own ideas.*

It was also possible for the students to copy the contents in the model articles because of the limited writing ideas and insufficient writing abilities.

Interview subject #7:

*..... sometimes I want to copy the contents in the model articles ..... When I don't know how to write, I refer to the model articles. After reading them, I want to copy them.*

According to the interview information, the application of the model articles benefited the students' writing performances in both types of classrooms because it helped the students follow their writing directions and also provided them with writing ideas. However, it could undermine the students' writing abilities by suppressing their creativity as well. Therefore, offering sufficient lecture contents and discussions could effectively develop the students' creativity because they will need to think, talk, read, and write continuously in the process, and therefore they will gather more thoughts and ideas for their writing tasks.

In summary, the instruction facilitated the students' writing potential because it facilitated the writing process, and helped them understand their writing deficiencies. The students could also gather different ideas from their peers although they sometimes were sceptical about their peers' abilities, or they sometimes were unable to provide meaningful feedback. Nevertheless, they had the instructor and model articles to collate their understanding about their writing tasks. However, the instruction could not fully clarify students' understanding toward a writing task, and providing model articles could not completely resolve students' writing difficulties. It is suggested that one's instruction could greatly meet students' needs with appropriate model articles, and the effectiveness of model articles could be maximised along with providing sufficient amount of instruction time. When these two techniques are integrated, it is very likely to upgrade students' writing performances.

### **6.2.2 Perceptions of the Use of the Writing Strategies**

The interview data about the participants' employment of writing strategies is analysed and reported in this section. Four themes: cognition (section 6.2.2.1), known-knowledge using (section 6.2.2.2), pressure reducing (section 6.2.2.3), and self-enhancement (section 6.2.2.4) were used to analyse and explain the interview data according to the extracted dimensions in the employed questionnaire, the QWS.



### 6.2.2.1 Cognition

Cognitive strategies, which refer to the use of conscious methods (e.g. note-taking) to enhance learning (Cook, 1991), are required and have been found to be the most common strategies that language learners apply (Oxford, 1990), because they directly relate to new language input that one receives and converts into comprehensible units to facilitate their language learning (O'Malley & Chamot, 1990). It was also found that cognitive strategies were used mostly among the proposed strategies by the participants in this study. The students mentioned that they usually memorised/recited language, or took notes to learn English writing instead of practising writing in their daily lives. The analyses and interview excerpts are shown below.

#### ***Memorising/reciting***

The interview subjects described that they memorised/recited vocabulary, phrases, grammar, or writing skills to develop their writing abilities because they would use them in their future writing samples. This technique also helped them write more contents in more organised and systematic ways, which led to improved results if they memorised/recited those input.

Interview subject #2:

*I usually take writing skills, so I may write more contents and write more smoothly. I also recite and memorise vocabulary, and I write with different words to avoid word repetitions ..... Recite by heart.*

Interview subject #7:

*I keep them in mind ..... I may use them in my future writing samples.*

Interview subject #14:

*I usually take grammar. My grammar is relatively weak, so I usually remember them ..... Keep in mind ..... Perhaps I may use them someday.*

Some other interview subjects mentioned that they memorised/recited language input for their writing exams as well because it helped them avoid making mistakes and achieve better results.

Interview subject #4:

*If I remember them, I can write faster, more smoothly, and better during exams. If I could get higher scores, I would not fail the course ..... Keep in mind .....*

Interview subject #13:

*I memorise and recite some phrases, vocabulary, or articles ..... I can use them when I am writing or doing tests. I would make fewer mistakes.*

### **Taking notes**

However, some students preferred writing down usages, vocabulary, grammar, or writing skills in their notes for the similar purposes mentioned above, because they did not want to memorise/recite them.

Interview subject #1:

*I take notes on my notebook ..... Something special ..... I can write better essays.*

Interview subject #3:

*I take notes because I may use them in the future ..... I don't want to recite and memorise them.*

Interview subject #12:

*I take vocabulary and grammar ..... I take notes and also recite by heart ..... I may use them in my future writing samples. If I remember them, I can use them someday.*

### **Writing in daily lives**

Apart from memorising/reciting or taking notes for academic purposes, it seemed that the students rarely wrote in English in their daily lives other than in writing classes. They usually wrote in English to avoid writing complicated Chinese characters to save time in their daily lives, but they only wrote short sentences or some vocabulary words for this purpose.

Interview subject #1:

*When I am lazy to write Chinese characters because English involves fewer numbers of strokes.*

Interview subject #8:

*Most of them (English writing samples) are assignments. I rarely do it (writing in English) in my daily life. I only write some vocabulary or one or two English sentences. I don't write a complete essay.*

Interview subject #14:

*Basically, I don't write in English, except for some vocabulary or short sentences ..... It saves time.*

It can be inferred that most of the students wrote in English for academic purposes, rather than for interactive or communicative purposes, because English is not commonly used in Taiwan, and they usually considered English writing to be an assignment to be completed. Although the participants used some cognitive strategies to improve their English writing abilities, English writing was not really infused into their daily lives, which impeded their progress due to rare practice.

### **6.2.2.2 Known-Knowledge Using**

This strategy is parallel to Oxford's (1990) compensation strategy because both of them emphasise the use of other methods or knowledge to make up learning. The concepts of using different vocabulary, writing in simpler ways, as well as searching for online information have emerged from the data. Using different vocabulary was thought to be the easiest and quickest way to increase the clarity and readability of the writing samples, while writing in simpler ways was one of the most convenient and efficient ways to overcome limited grammatical abilities. Due to the commonplace of the computer technology, the students also greatly depended on it to complete their writing tasks. The analyses and interview excerpts are shown below.

#### ***Using different vocabulary***

Many students preferred applying different vocabulary to compose their essays to avoid word repetitions and improve clarity and readability of their writing samples in order to attract their readers' attention and reading interests.

Interview subject #5:

*I avoid using the same vocabulary ..... To increase readers' reading interests, and to prevent them from reading repetitive words.*

Interview subject #9:

*I will modify it (the writing sample) if I use too much similar vocabulary or grammar ..... The writing samples of this kind are better. Readers will not read the same contents all the time.*

Interview subject #10:

*I use different vocabulary to avoid word repetitions, which keeps the writing samples from monotony .....*

The possible reasons for using different vocabulary include: (a) the students could have easy access to conventional hard copy dictionary, an electronic dictionary, or an online dictionary, or (b) they could simply think about synonyms to compose their writing samples when they were writing.

Interview subject #4:

*Look up words in a dictionary or search for online information. Sometimes I use translation software to help me start writing samples, or find out substitute words .....*

Interview subject #12:

*For vocabulary, I think about other words to substitute. If I can't make it, I will look up words in a dictionary .....*

Interview subject #14:

*I look up words in a dictionary in the first place. If I don't have a dictionary at hand, I use different words to substitute .....*

### **Writing in simpler ways**

The students also wrote in simpler ways to express their writing ideas that they did not precisely know how to write in English, and this strategy was mostly used to compensate for their limited grammatical abilities.

Interview subject #2:

*..... For grammar, I sometimes skip it and not to write it, or I write with other simpler sentences .....*

Interview subject #9:

*..... For grammar, I express with the simplest sentences .....*

### **Searching for online information**

Since the students had ready access to computer technology, they also used it extensively to help them complete their writing tasks. By doing so, they usually searched for writing ideas or model samples on the Internet to make them more contemplative and reflective.

Interview subject #7:

*..... Search for online information. Find out what can be included in writing samples.*

Interview subject #12:

*..... For essays, I search for online information to make me more thoughtful to my writing samples.*

Interview subject #14:

*..... For essays, I refer to online articles.*

In this theme, several strategies were coded, which means the students understood how to use different kinds of strategies to compensate for different difficulties to complete their writing tasks. However, the data did not show any differences between the control group and the experimental group, so the use of blogs did not influence how the students applied the strategies in their writing process.

### **6.2.2.3 Pressure Reducing**

In this theme, asking for assistance, not feeling anxious, taking breaks, and self-rewards were drawn to explain how the students reduced pressure while they were writing. The strategy involves both the affective strategies and social strategies in terms of Oxford's (1990) classification. Affection refers to emotions, attitudes, motivations, and values (Oxford, 1990) that are related to one's emotional status involving a wide range of personality factors (Brown, 2000), while social strategies refer to the behaviour of interacting with others (Cohen, 1998; Cook, 1993; O'Malley & Chamot, 1990). Pressure reducing explains how the students learned a language through self-emotion controlling and socialising. Through interacting with others, the students' writing difficulties would be worked out. Since some of the students did not feel anxious about their writing tasks, they could write comfortably and freely. In contrast, those who felt anxious about writing would take breaks to reduce their levels of anxiety. Self-rewards could be a way to reduce students' pressure efficiently when they felt encouraged and motivated intrinsically. The analyses and interview excerpts are shown below.

#### ***Asking for help***

The students asked for help from their instructors or peers when they had difficulties in their writing process, because they thought this was an effective way to solve their problems.

Interview subject #1:

..... *Asking instructors or classmates. It is faster.*

Interview subject #8:

..... *As for grammar, structures, or writing directions, I ask instructors directly, or discuss with my classmates.*

Interview subject #10:

*I ask instructors or classmates ..... Instructors provide directions directly. It is difficult to achieve the requirements by myself. I also ask my classmates who are proficient in writing. We are about the same age, so it is easier to communicate.*

### ***Not feeling anxious***

When talking about the anxiety, many of the interview subjects did not feel anxious about their writing tasks because they thought there was nothing worthwhile to worry about, and if they felt anxious about their writing tasks, they could not write anything. Therefore, the state of not feeling anxious happened naturally to some of the students while they were writing, and they wrote what they wanted to write according to the given topics.

Interview subject #2:

..... *If I feel anxious, I can't produce anything.*

Interview subject #6:

..... *Nothing worthwhile to worry about.*

Interview subject #9:

..... *I don't feel anxious ..... Just write what I want to write. Nothing worthwhile to worry about.*

### ***Taking a break***

However, there were some others who felt anxious about their writing tasks because they were not confident in their own English writing abilities, or they were afraid that their writing samples would be rejected. In order to reduce the levels of anxiety, they would take breaks before going further. These techniques helped them relieve senses of apprehension.

Interview subject #4:

*I feel annoyed if I can't produce anything ..... Just leave it there, and do it when I want to do it.*

Interview subject #5:

*I am afraid that my writing samples would be rejected, or I also feel anxious when I don't know how to write ..... Take a break first, or search for online information.*

Interview subject #7:

*..... when I don't know how to write the next sentence. Sometimes I don't know how to convert Chinese ideas into English writing, or I write in Chinglish ..... Search for information or do it some other day.*

### **Self-rewards**

It was also found that some students would reward themselves to motivate and encourage their performances on English writing, although some others thought that there was nothing worthwhile to reward them for completing assignments.

Interview subject #1:

*No ..... It is just an assignment. Nothing worthwhile to reward.*

Interview subject #9:

*Yes ..... I will have more motivations to write ..... Buy some food for myself.*

Interview subject #12:

*Maybe yes ..... Encourage myself.*

This section reports how the students relieved their pressure when they were writing. Due to the educational system and cultural background, there was not very much information to address this issue because the students were rarely instructed about how they could reduce their anxiety and apprehension when they were learning. Since all the participants were college-level students, their cognitive behaviours were mature enough to learn pertinent strategies to complete their writing tasks. Some of them did not feel anxious about their writing tasks, while some others would find some ways to relieve stress if they felt it, or motivate and encourage themselves by rewarding themselves.

#### **6.2.2.4 Self-Enhancement**

Self-enhancement is parallel to Oxford's metacognitive strategies, which help students monitor their learning process (Oxford, 1990). In other words, both terms explain how students plan to enhance their learning. The codes of reading and watching emerged from

the interview data to demonstrate how the participants facilitated their writing abilities, while lacking motivations was also found to demonstrate how they viewed the task of English writing. The analyses and interview excerpts are shown below.

### **Reading**

Reading is one of the traditional methods to enhance writing abilities, so some of the interview subjects revealed that they read different kinds of written texts to improve their writing abilities. For example, some read English novels to increase grammatical abilities as well as amount of vocabulary instead of reading magazines.

Interview subject #7:

*I read novels ..... Reading novels increases my grammatical abilities and the amount of vocabulary. I may use them in my future writing samples.*

Interview subject #10:

*I read English novels, which helps me write more smoothly ..... I just read English novels.*

However, some others found that the contents in magazines were very helpful for their writing abilities because they provided many phrases or idioms, which were useful and helpful for their writing development.

Interview subject #12:

*I read magazines. There are a large number of phrases and idioms in magazines. I think they are helpful to my writing a great deal.*

### **Watching**

According to the information collected in the interviews, it is interesting to point out that watching movies could be a potential method to develop one's writing abilities, which is not commonly found in the previous studies, because it is usually connected to improving listening or speaking abilities. The interview subjects claimed that watching movies was helpful for their English writing abilities, since they could learn how native speakers use English, and made them more contemplative, which developed their critical thinking abilities.



Interview subject #9:

*..... I watch English movies and listen to English songs ..... I can understand how they use English, such as preposition, vocabulary and the like.*

Interview subject #11:

*I usually watch movies ..... It improves my critical thinking abilities. It makes me more thoughtful.*

Therefore, they believed that their English writing abilities would be enhanced if they kept listening to and watching what they were interested in.

Interview subject #14:

*I prefer watching movies. I make progress by listening to and watching what I am interested in.*

### ***Lacking motivations***

Apart from practising English writing in class, the students scarcely did it in their daily lives, because they were lazy and passive about this matter, and they were not used to doing it, either.

Interview subject #1:

*I am not used to doing it (practising English writing in daily life).*

Interview subject #5:

*.....except for in writing class ..... I am lazy and passive.*

They also described that it was difficult to have someone who was willing to practise English writing with them, because they thought that speaking abilities were more important, and writing was for the purpose of assignment completion.

Interview subject #3:

*I would like to improve my speaking abilities more ..... I would like to talk with foreigners, but not write to them. Speaking is more important. Writing is for written report only.*

Interview subject #9:

*..... It seems that nobody wants to be a writing partner. We only practise writing in class.*

Although some of them would practise English writing in their daily lives, they would stop once they reached their expectations or plans were completed. For example, they practised

English writing for different kinds of tests, but they would not continue doing it if they completed a test, or English writing was not included on a test, such as TOEIC.

Interview subject #2:

*..... I went to an after-school programme for the GEPT test, and I wrote more frequently than before and had my writing samples marked by the instructor. After finishing the programme, I no longer do it.*

Interview subject #7:

*..... I need to take a TOEIC test, but writing is not included in the test. I focus on the listening and reading practice mostly.*

In terms of self-enhancement, the students usually improved their writing abilities through reading and watching contents in English. The former was used commonly, while the latter was an interesting finding. However, most of the participants lacked motivations to practise English writing, which could be one of the possible reasons to account for why Taiwanese students' English writing abilities were relatively weak in contrast to other language abilities, such as listening, speaking, and reading according to the IELTS results, which had been indicated in section 1.1.

The students' perceptions of the use of the writing strategies were discussed in this section in which several codes emerged in each theme to illustrate how the students perceived the use of their writing strategies. Nevertheless, because the participants were all college-level students who were comparatively mature in terms of their cognition and behaviour, they were able to find their own ways to develop their writing abilities. However, they usually depended on ingrained techniques to enhance their writing abilities. For example, many of them learned English writing by memorising/reciting because this was the most common way how Taiwanese students learn English due to common practices in the educational system. Unfortunately, this would worsen the students' learning motivations because they could not find the practicality for English writing, rather than merely serving academic purposes. In order to increase the practicality of English writing, different types of instructional tools can be employed to supplement students' learning. For example, students could have access to online information easily to enrich the contents in their writing samples, which could enhance their confidence in writing, or they could interact with their readers if they are writing online, which could facilitate their senses of ownership

and readership. Consequently, they are likely to find out different strategies to develop their writing abilities in the process.

### **6.2.3 Perceptions of the Blog Writing**

In order to fully determine the participants' opinions, ideas, and comments regarding their perceptions of the use of blogs in an EFL writing classroom, the interview data was analysed based on the extracted dimensions in the QBW, which are blogs vs. paper-pencil writing (section 6.2.3.1), blog enhanced writing (section 6.2.3.2), blog for socialisation (section 6.2.3.3), attitudes toward blog writing (section 6.2.3.4), as well as affections toward blog writing (section 6.2.3.5).

#### **6.2.3.1 Blog vs. Paper-Pencil Writing**

Although the effectiveness of blogs on English writing development has been proved in many studies (Aljumah, 2012; Armstrong & Retterer, 2008; Arslan & Şahin-Kızıl, 2010; Fageeh, 2011; Kitchakarn, 2012; Lin et al, 2013; Lin et al., 2014; Liu & Chang, 2010; Noytim, 2010; Silviyanti & Yusuf, 2014), the theme is used to understand what blog writing and paper-pencil writing have in common or whether they are different to further understand how blogs help or influence students' writing development. The factors of the differences between the means and the similarities between the means were therefore coded. The former indicated the pedagogical differences, while the latter presented the similarities in learning perspective. The analyses and interview excerpts are shown below.

#### ***The differences between the means***

It was mentioned that both blog writing and paper-pencil writing were helpful to enhance the students' writing abilities, but the students had greater opportunities to read others' writing samples and learn from each other if they were writing on blogs.

Interview subject #10:

*..... both blog writing and paper-pencil writing are helpful to develop our writing abilities. However, we can read others' writing samples, and learn from each other on blogs.*

However, it was easier to examine writing samples, and the students were allowed to take notes, supplement, or modify their writing samples by simply writing on it if they used paper-pencil writing, which could not be achieved when writing on blogs.

Interview subject #8:

*..... I think paper-pencil writing is easier to examine, and we can take notes on paper directly to remind us to modify or supplement.*

### ***The similarities between the means***

The students described that there was not a great difference between blog writing and paper-pencil writing because any topics could be done with either way, and they should be cautious about their writing contents no matter what kind of writing it was. Therefore, they could not tell the difference between the two means.

Interview subject #9:

*Any topics can be done through paper-pencil writing, so there is not difference between blog writing and paper-pencil writing.*

Interview subject #10:

*I don't think there is a great difference between blog writing and paper-pencil writing.*

After viewing the analysis, the differences and similarities between blog writing and paper-pencil writing can be understood. It was indicated that blog writing brought in more opportunities for the students to be exposed to language input and offered a great deal of convenience for them to complete writing tasks than paper-pencil writing. However, in terms of writing itself, there was not any difference between the two means because they thought they were doing the same things on either blog writing or paper-pencil writing as being student writers.

### **6.2.3.2 Blog Enhanced Writing**

To explain the theme of blog enhanced writing, the codes of having more reading samples, learning different perspectives, and retrieving online resources were extracted from the interview data. These are to further understand how the effectiveness of blog writing has been examined in the extant literature. The first explained the increasing opportunities for the students to retrieve writing samples. The second explained the possibility of obtaining

different ideas from others. The third explained the easiness of approaching online resources for writing samples. The analyses and interview excerpts are shown below.

### ***Having more reading samples***

Having more reading samples is one of the widely-mentioned benefits when writing on blogs because the students were able to link or cross-link to others' essays easily, which helped them gather writing ideas and understand their writing tasks.

Interview subject #9:

*I can refer to others' writing samples and learn some vocabulary.*

Interview subject #10:

*Reading more articles makes us understand how to write.*

Interview subject #13:

*I can read a great number of articles on the Internet, and I can learn much more knowledge.*

### ***Learning different perspectives***

As stated above, the students had more opportunities to read others' writing samples, so they believed that they could learn from others in the process in which they would understand how others composed their essays and learn strengths from others.

Interview subject #11:

*It is convenient to read others' writing samples, learn from others' writing samples, and refer to others' perspectives.*

Interview subject #12:

*..... I can learn how others write their essays.*

Interview subject #14:

*..... Everyone has different writing styles, so we can learn strengths from others.*

Also, they were allowed to gather different ideas for their writing samples that they might never have thought about before reading others' essays.

Interview subject #8:

*I can understand my ideas are different from others', which I may have never thought about.*

Interview subject #13:

*..... I can learn something I don't know. For example, my classmates may talk about an example that I don't know, and then I can learn new knowledge.*

### **Retrieving online resources**

The interview subjects also indicated that they had a great deal of online resources to develop their writing abilities when blogging. For example, they were able to have access to the instructional contents after class. They could search for online information or writing samples for their essays, and therefore many forms of contents could be retrieved. All of these improved their writing abilities.

Interview subject #12:

*..... we need to search for some online information when we are writing. We can learn something we don't know in the process, which may be useful to our future writing.*

Interview subject #13:

*I can read a great number of articles on the Internet, and I can learn much more knowledge.*

Interview subject #14:

*I can review at home. All the teaching contents are erased after class if it is in a traditional writing class.*

After analysing the data, it was found that these three emerged codes underpinned the theme, blog enhanced writing. First, having more reading samples helped the students attain readings for their writing tasks easily, apart from the provided model articles. After reading the online written contents, the students were allowed to learn different perspectives and knowledge from different writers for their writing samples. Lastly, the students could expand their writing ideas and enrich their writing contents by extending their information sources through using the Internet. Therefore, these three components complement each other to enhance the students' writing abilities in the blogging process.

### **6.2.3.3 Blog for Socialisation**

It has been proposed that learning is considered as a social interaction that makes learning takes place in an authentic context (Selwyn, 2011), and also one's effective learning may be due to the participation and interaction with others' modelling behaviour and thought

(Pawan et al., 2003). The web-based applications are therefore defined as social media, such as blogs that are based on the interactive and participatory features, and thus allowing for different groups of people together to communicate with one another (Selwyn, 2011). In this study, the concepts of receiving and giving comments and sharing with others were also found, and both emphasised the importance of interaction and communication. Therefore, blogs could be a potential platform for students to socialise with their peers in classroom settings or anyone outside of classrooms. The analyses and interview excerpts are shown below.

### ***Receiving and giving comments***

Receiving and giving comments to each other were mentioned by the interview subjects. They maintained that they could receive comments on their writing samples from anyone who was interested in their essays other than their peers, which improved their writing abilities.

Interview subject #12:

*The writing samples posted on blogs are for others to read. They may leave their comments, which can improve our writing abilities.*

Interview subject #9:

*Everyone can read our writing samples, and readers are not confined to our classmates only. If someone is interested in our writing samples, they can leave their messages, too. It is very convenient.*

In addition to receiving feedback from others, the students were allowed to give comments to others as well, so they had more opportunities to practise English writing and to learn from each other.

Interview subject #10:

*We have more opportunities to practise English, read others' writing samples, and leave messages to others. We can learn from each other.*

### ***Sharing with others***

Blogs were also platforms for the students to share their writing samples with others, and therefore their senses of ownership and readership could be developed. Meanwhile, they

could understand that they were writing for communication instead of writing for assignments.

Interview subject #13:

*I have my own English blog, and I can share my writing samples with others.*

In general, the use of blogs in formal writing classrooms increased the students' awareness of practicality for learning English writing, because they could find that they were writing for others, rather than merely writing for instructors. In addition, in the process of receiving and giving comments, the students could perceive genuine interaction and communication with their readers because they were allowed to respond to questions, clarify their viewpoints, or defend their own statements in this open blogosphere setting. Moreover, they could write anything they wanted to share with others and then received comments from others as well, so they could understand that they were writing collaboratively and writing for communication, rather than writing individually and writing for assignments. This is definitely an encouraging finding because the students' perceptions of English writing could be possibly changed through this interactive and communicative manner, which is likely to develop their writing motivations and increase their writing interests.

#### **6.2.3.4 Attitudes toward Blog Writing**

Students' attitudes toward the use of blogs in English writing classrooms have been pointed out in the previous studies (Aljuman, 2012; Fageeh, 2011; Fang, 2010; Noytim, 2010). In order to understand the participants' attitudes toward its effectiveness on their writing development, the factors of convenience and continuing using blogs were coded. The former described how the use of blogs simplified the students' writing tasks, while the latter expressed how they treated writing on blogs. The analyses and interview excerpts are shown below.

##### ***Convenience***

The feature of convenience of blogs had facilitated the students' positive attitudes toward blog writing. They described that their essays were arranged chronologically, which helped them read the writing samples easily and conveniently.



Interview subject #12:

*Our writing samples are arranged on blogs clearly, and we can read our previous writing samples anytime. However, there are many sheets of paper when writing on paper, which is a bit messy.*

Also, the students did not need to print out their assignments, and they were allowed to submit the assignments through using smartphones due to the commonplace use of computer technology.

Interview subject #9:

*..... I don't need to print out assignments. Blog writing is more convenient because the Internet is very common nowadays, and I even submit my assignments through using a smartphone.*

### ***Continuing using blogs***

It is also encouraging to report that the students would continue using blogs in their future writing because they liked the way of blogging.

Interview subject #11:

*Blog writing is quite different from paper-pencil writing, and I prefer blog writing. I may start to write something on blogs in the future, which is a great change to me.*

In conclusion, the students' positive attitudes toward blog writing were increased because it simplified their writing tasks, and they would like to use them in their future writing.

### **6.2.3.5 Affections toward Blog Writing**

Lin et al. (2014) and Noytim (2010) mentioned that the employment of blogs decreased the students' negative affections toward writing. To understand if the same effect could be found in this study, the theme of affections toward blog writing was therefore discussed. The concept of reduced stress was extracted after looking at the interview data. According to the provided information in the interviews, the students felt less stress when they were writing on blogs because they had plenty of time to complete their writing samples, and writing on blogs was easier for them. The analyses and interview excerpts are shown below.

Interview subject #8:

*..... I feel less pressure when writing on blogs at home because I have more time to write. As for paper-pencil writing, we sometimes have to finish our writing samples within class time, which makes us feel stress .....*

Interview subject #11:

*..... I think it (blog writing) is easier, and I feel less stress.*

To sum up, writing on blogs not only increased the students' writing motivations, as mentioned previously, but it also decreased their levels of anxiety, as presented in this section. The results therefore demonstrated that blogs effectively developed their writing abilities in an indirect way because their mental status toward English writing was encouraged.

Finally, it is suggested that the use of blogs enhanced the students' writing abilities in two major dimensions. First, it directly developed the students' writing competence through reading others' written work, sharing writing samples with others, and leaving comments for others. Second, it indirectly facilitated their writing performances by increasing their writing motivations and attitudes as well as decreasing their levels of anxiety and apprehension.

While the benefits of blog writing have been largely discussed in this section, some disadvantages were also proposed by the interview subjects. The advantage of allowing people to read the writing samples may be a disadvantage to others, because some students had lower senses of security when writing on blogs. Interview subject #12 mentioned that writing on blogs meant having lower degrees of privacy. Due to the traditional teaching method in Taiwan, some students were not used to sharing their writing samples with someone else other than their writing instructors. When they were writing on blogs, they conspicuously perceived that their written work could be read by everyone in public, which could result in heavier psychological burdens, such as feelings of self-consciousness. In addition to the mental stress, a physical problem was also raised. Reading and writing on computers may be harmful to their eyes when they exposed themselves to being in front of computer screens for a long period of time. Some other technical issues were also mentioned. For example, computers connecting to the Internet should be firstly confirmed prior to their writing, which could lead to dealing with additional task before writing. Although technological devices are widely and commonly used in Taiwan, the

students could not start writing by simply taking a pen/pencil and a sheet of paper as before. These constitute potential obstacles to the utilisation of blogs in EFL writing classrooms.

### **6.3 Chapter Summary**

This chapter mainly illustrated the qualitative data analysis and results collected from the class observations and interviews. After looking at the findings, there were certain contradictions between these forms of data. The interview subjects expressed that they had a greater range of interactive and communicative opportunities with their peers and me in the programme, but it was observed that the students were quite reticent and passive during the process. This could have been due to there being different standards toward interaction and communication between the students and me. In contrast, some findings conformed to each other. For example, the feedback on blogs was not as constructive as what had been expected because giving feedback on these blogs involved a wider number of mental factors than giving comments in person, which could have impeded the students' motivations to give critical comments on their peers' blogs. Regardless of what kind of findings were obtained from the observations and interviews, they all provided valuable information to support and explain the quantitative results that were presented in the previous chapter. Answering the RQs raised in this study, research discussions and findings are presented in the next chapter.

## **CHAPTER SEVEN: RESEARCH DISCUSSIONS AND FINDINGS**

This chapter is to examine the answers to the four RQs raised in the current study. The discussions are presented as follows: the students' English writing performances in section 7.1, the students' perceptions of the PGA in section 7.2, the students' use of the writing strategies in section 7.3, and the students' conceptions toward blog writing in section 7.4. Finally, this chapter is summarised in section 7.5.

### **7.1 Discussions and Findings for Research Question One**

The quantitative results of the students' English writing essay scores and qualitative consequences of the interview as well as observational data were used to answer the first RQ: *Are there any statistically significant differences in terms of the participants' English writing performances after the treatments, and are there any inter-relationships among the instructional procedures? If there are, are there any differences between the two groups?* The purposes of the RQ were to examine whether the participants' English writing performances were enhanced, and how the writing instruction influenced the participants' writing performances in the two groups in order to provide effective instructional and learning suggestions to PGA-based writing classrooms. To discuss the answers for the RQ, the thematic discussions on the research findings are firstly presented in section 7.1.1 followed by a concluding remark in section 7.1.2.

#### **7.1.1 Thematic Discussions on the Research Findings**

In order to discuss the effectiveness of the PGA thoroughly, Gao's (2012) five perspectives of the PGA: model paper analysis and demonstration (section 7.1.1.1), group discussion and imitation (section 7.1.1.2), individual imitation and writing (section 7.1.1.3), whole-class comment and modification (section 7.1.1.4), and final drafting and publication (section 7.1.1.5) were used to respond to the first RQ in both quantitative and qualitative aspects.

The quantitative results demonstrated that the students' overall and sub-componential English writing scores in the post-test were greater than those of the pre-test's in both groups. However, the mean score in the experimental group was higher than the other group's with a difference of 2.3159 (see sections 5.3.1 and 5.4.1). Then, the paired-sample *t* test was applied to further determine whether there were any statistically significant

differences in terms of the participants' overall English writing scores as well as the scores in the five sub-components between the two groups. The outcomes demonstrated that there were statistically significant differences in both groups with the results of  $p = .000 < .05$  (see sections 5.3.2 and 5.4.2). In other words, the participants' English writing competence was enhanced considerably after the treatments.

The qualitative results illustrated that the provision of the model articles together with the explanations on these exemplified articles helped the students understand the writing tasks because they had clearer writing directions, could start writing more easily, and focused on the writing topics. The students also had more interactive and communicative opportunities with others in the writing process, so they were able to obtain different writing perspectives and learn from each other, which developed their conception of cooperative learning. In spite of having these benefits, there were existing some disadvantages when conducting the PGA in EFL writing classrooms, such as, the students' scepticism about their peers' feedback, peers' unconstructive feedback, and limited students' creativity.

Both the quantitative and qualitative results were discussed subsequently based on Gao's (2012) instructional model.

#### **7.1.1.1 Model Paper Analysis and Demonstration**

The first step of the instructional procedures of the PGA is "model paper analysis and demonstration," which is similar to the pre-writing stage because teachers need to provide model texts for students to analyse, and students need to understand the genres, writing structures, writing purposes, and linguistic features, among similar considerations (Gao, 2012). Therefore, the students could have preliminary ideas for their writing samples before thinking about their own essays.

Because of the provided model articles along with the explanations on these samples, the students were aware of the writing directions from which they understood what should be included in their essays. Then, they would be able to start their writing more easily because they had received the supporting ideas and understood the writing structures in the process of model paper analysis and demonstration. Therefore, they could focus on the writing

topics and would not digress from them when they were writing. As Gao (2012) mentioned, students could understand the genres, the writing structures, the writing purposes, and the linguistic features in this process, so a writing task might be easier than what students had faced in their previous assignments.

As a result, the quantitative consequences demonstrated that there were significant differences in terms of the students' writing performances, which indicates that the approach developed the participants' writing abilities. According to the interview information, the provided model articles and the analysis on these articles facilitated the students' writing performances greatly because the combination of this teaching technique lit up the students' path through their writing tasks. It was reasoned based on two aspects: first, the students had opportunities to understand the structures of the model articles through the analysis and explanations before their writing; and second, they were allowed to refer to the model articles for further thoughts or linguistic knowledge during their writing process. As a result, the technique of model paper analysis and demonstration facilitated their writing abilities significantly.

Unfortunately, the students also admitted that their creativity might be confined to the model articles during their writing process, because they had read the model articles prior to their writing. In other words, reading model articles developed the students' writing abilities, but it also hampered their creative abilities, which could be compensated by the instructors' instruction. By doing so, they can provide students with other examples, inspire their ideas, help them exchange opinions, and guide them to think differently.

I therefore suggested that the provision of model articles and instructor's teaching are inseparable. That is to say, model articles might not solve students' writing difficulties completely, and instructor's teaching might not fully clarify students' understanding about a writing task. The effectiveness of model articles could be maximised along with providing sufficient amount of instruction time, and teacher's instruction could greatly meet students' needs with appropriate model articles. When these two techniques are integrated, it is very likely to upgrade EFL college students' writing performances.

### **7.1.1.2 Group Discussion and Imitation**

The second step of the instructional procedures of the PGA is “group discussion and imitation” in which the students have to form a small group to discuss themes about their writing tasks, including writing style, organisation, expression, grammar, and then discuss how they construct their writing frameworks, or how they perform their linguistic features for the themes (Gao, 2012). Therefore, students have a greater range of interactive and communicative opportunities with their peers, which is likely to develop their sense of collaborative learning.

Because the students started with interacting and communicating with their peers to brainstorm and gather writing ideas rather than started writing individually, they could form a social writing network with their peers. According to the interview data, the students described that they were able to learn from others, had more opportunities to be exposed to language input, and collect different perspectives for their writing samples, so their writing abilities were increased in terms of the quantitative outcomes. Although the students sometimes did not really engage in the discussions according to what had been observed, the PGA provided a wider range of interactive and communicative opportunities for the students to learn collaboratively, which had scarcely happened to them in their previous writing experience. It is therefore argued that the social writing network facilitated their understanding about their writing tasks and improved their writing abilities.

Through this process of collaborative learning, learners use the language for the purpose of interaction to gain grammatical, expressive, and cultural abilities (Ohta, 2000), which helps them understand how important interaction is to develop their cognitive and linguistic abilities (Turuk, 2008) because language learners have to interact with others to enhance their learning, and then their cognitive abilities would be developed (Hall, 2007). This point of view also conforms to Vygotsky’s sociocultural theory in which he proposed interaction is one of the most important factors in one’s language learning process, and one needs to interact with others to learn a language in a social context (Cook, 2008), because language learning takes place in a vis-à-vis interaction or in a sharing process (Mitchell & Myles, 2004), and it is not an individual information process (Donato, 2000).

Through interacting and communicating with others, the students would have greater opportunities to acquire linguistic knowledge, writing skills, and other related perspectives to compose their own essays, and therefore not only can their writing abilities be improved, but also they are writing in a collaborative manner. Then, they will realise that writing can be interactive and communicative as well, and it is not merely for the purpose of assignment completion. Consequently, the students' writing motivations and attitudes will be possibly increased.

### **7.1.1.3 Individual Imitation and Writing**

The third step of the instructional procedures of the PGA is "individual imitation and writing" in which students write essays practically by using the writing structures and linguistic features that they have learned from the previous stages into their writing samples (Gao, 2012). Therefore, the students could have received a greater range of writing directions, ideas, skills as well as linguistic knowledge to compose their essays.

According to the information gathered in the interviews, it was pointed out that the students could start their writing samples more easily because they had learned clearer writing directions, understood writing structures, received thoughts of more writing ideas and examples, and realised the purposes of the writing topics. These were due to the provision of the model paper analysis and demonstration in the first stage and group discussion and imitation in the second stage. These techniques helped the students understand their writing tasks by going through the lectures, reading exemplified articles, and obtaining different perspectives so that their writing abilities were developed.

However, the students in the experimental group had a greater range of opportunities to be exposed to language input, because they were allowed to review the instructional contents and read others' writing samples whenever and wherever they wanted and needed during their writing process. In addition, the students' senses of ownership and readership were possibly developed while blogging, because they understood anyone outside of classrooms could retrieve and read their essays and give them comments, which reinforced their perception of writing for interaction and communication. Consequently, they would pay much more attention to their writing samples before posting their entries on blogs. These



could be the possible reasons to explain the students who received blog-based instruction performed better than those who were in a paper-pencil classroom setting.

The other issue that needs to be addressed regarding individual imitation and writing is the research context of this study. As mentioned in the precedent chapters, the research was conducted in Taiwan in which results-driven and score-oriented are emphasised. Because of cultural influences and the common practices in the Taiwanese educational system, the students often lacked critical thinking abilities. I proposed that both writing abilities and critical thinking abilities are requisite to compose essays. In order to improve Taiwanese students' writing abilities and critical thinking abilities, the PGA could be an optimal choice, because the application of the PGA not only enhances the students' linguistic knowledge through model paper analysis and demonstration but also trains their critical thinking abilities through group discussion and imitation. Consequently, both vital abilities in one's writing process are likely to be increased, and therefore they might find that writing becomes more easily in their individual imitation and writing process.

#### **7.1.1.4 Whole-Class Comment and Modification**

The fourth step of the instructional procedures of the PGA is "whole-class comment and modification" in which students' written work are categorised and demonstrated in class in order for the students to compare and contrast their own writings with the samples for correction (Gao, 2012). Therefore, the students could learn how to give comments to each other and understand the quality of their writing samples.

Sharing is important in one's writing process because it helps writers receive their readers' feedback, opinions, or suggestions to revise their drafts (Tompkins, 1994). Through the process of sharing and reading, the students would not only think about their peers' writing essays in order to give comments, but also reflect on their own writing samples in order to revise them. Hence, reading is not just reading in this phase, but it improves students' writing abilities by receiving linguistic knowledge from reading others' written work, and increasing their critical thinking abilities by giving comments to each other. As a result, the students' writing abilities could be possibly developed, which could be found in the quantitative consequences in this study.

However, the students' perceptions concerning the instructor's feedback and the peer's feedback were quite different according to the information collected in the interviews. Most of the interview subjects agreed with the efficacy of my comments that improved their writing abilities significantly. They further figured out that those comments helped them understand their grammatical mistakes and understand how to modify their essays, and therefore they were able to avoid making the same mistakes in their future writing samples. In contrast, fewer interview subjects believed that their peers' feedback would be helpful to their writing development because they were sometimes sceptical about their peers' writing abilities, or they could not provide them with critical comments.

The other issue about the effectiveness of peers' comments is regarding the form of it. In other words, the students in the control group were more in favour of the efficacy of peers' feedback than the students in the other group. The students in the experimental group indicated that their peers' comments were not really helpful to their writing samples since they tended to giving compliments, which were not really constructive for their writing samples. The findings also confirmed Aljumah's (2012), Lin's et al. (2013), and Wu's (2006) findings.

I therefore inferred the phenomenon to two possible aspects: first, the participants did not feel confident and comfortable enough to comment in English, especially in an open blogosphere setting; and second, giving feedback on blogs was unilateral, which was not as interactive as giving feedback in class in which the students were allowed to discuss or clarify their contents verbally. They could have been afraid that they would offend the writers if they gave too many comments, which was likely to make their peers feel ashamed and embarrassed. Therefore, in order to avoid undermining the friendships or causing misunderstandings, the students tended to provide encouraging words rather than offering critical comments.

In addition, giving comments on blogs was not as effective as writing them on a sheet of paper for me, because this required scrolling up and down windows on the screen while reading the students' essays and leaving comments on their blogs. In addition, a great deal of time and energy was spent on having to arrange and leave comprehensible comments on

the students' blogs in order to prevent them from misunderstanding the comments. Although correcting and rewriting essays on blogs are more convenient because blogs save writers' time, and this is more efficient and productive for writers to compose essays (Chen et al., 2011), students may fail to respond to instructors' comments while revising their writing samples due to their having limited English abilities (Wu, 2006).

Therefore, it was found that the students sometimes copied the first writing sample to the revised one simply and effortlessly in order to submit their assignments, which did not serve to develop their writing abilities. Owing to the students' deficiency of English abilities, they sometimes misunderstood, mistook, and misinterpreted my comments about revising their essays. It was concluded that giving feedback on blogs was not as effective as what had been thought, although it is without time and place restrictions.

#### **7.1.1.5 Final Drafting and Publication**

The last step of the instructional procedures of the PGA is "final drafting and publication" in which students work on their final draft before submitting it. The previous four stages are also involved in this final step to ensure that students understand the genres, writing structures, writing purposes, and linguistic features, among similar considerations (Gao, 2012). Therefore, they can finish their final essays according to the contents learned in the first stage, with ideas gathered in the second stage, linguistic knowledge and writing skills then applied in the third stage, and finally comments received in the fourth stage to make their writing samples as well-constructed as possible.

Before the students finalised and submitted their final essays, they had an opportunity to go through all the previous stages again so that they could scrutinise their writing samples holistically. By doing so, the students could review the contents in the provided model articles, link their current writing tasks with the ideas collected in the group discussion phase, understand their writing weaknesses and mistakes based on the received feedback as well as think about the demonstrated essays written by their peers. The quantitative results therefore demonstrated significant differences in terms of the students' writing performances in both groups, which indicates that their writing abilities were enhanced significantly because of applying these procedures in their writing process.

The results in the current study were quite similar to Arslan and Şahin-Kızıll's (2010) findings in which they concluded that the writing approach was helpful to the students in both a control group and an experimental group. However, the students in the blog-based writing classroom outperformed the others. In this study, there were statistically significant differences in both groups in terms of their English writing performances, but the mean score of the post-test in the experimental group was greater than that in the control group (mean score = 70.7222 > 68.4063). The difference of 2.3159 between the two groups was not conspicuous, but it was greater than the results in the pre-test in which the difference was only 0.6493 (experimental group = 53.8056 > control group = 53.1563). Therefore, it was suggested that the students in the blog-based writing classroom performed better than those who were in the paper-pencil-based writing classroom. The possible reasons for this result were the students in the experimental group: (a) could perceive the senses of ownership and readership, so they might pay more attention to their writing samples in order to make them more comprehensible; (b) had more chances to be exposed to language input because they could retrieve required information on the Internet, and refer to others' writing samples on blogs easily; and (c) had lower levels of apprehension and anxiety while they were writing because they had more resources, and could interact and communicate with others on blogs. This finding also conformed to Lin's et al. study (2014) in which they explained that the students might release the senses of apprehension when writing on blogs, and this finding could not be found in the other group of the students.

It was therefore concluded that: (a) the students' senses of ownership and readership helped them understand "writing for interaction and communication," and not simply for the purpose of assignment completion; (b) the retrievable online information helped the students gather useful linguistic knowledge as well as writing ideas to compose their essays; and (c) the sense of feeling ease helped the students write in a comfortable status so that they would compose better essays.

### **7.1.2 Concluding Remark for Research Question One**

As what have been widely discussed in the previous sections, the application of the PGA increased the EFL college students' writing abilities significantly. In PGA-based writing classrooms, instructors have to provide as many similar social contexts as possible for

learners, and offer sufficient information for them to compose writing samples (GRA). Students then use their language knowledge and skills to respond to writing tasks (PCA). The PGA therefore helps students use writing skills (PCA), realise more linguistic knowledge (GRA), and understand writing purposes (GRA) (Badger & White, 2000).

The findings of this study also conformed to Badger and White's (2000) arguments in that the provision of the model articles along with the instructor's explanations developed the students' understanding about the writing structures, writing directions, writing purposes and linguistic knowledge. The students then were able to start their writing samples and focus on the writing topics more easily, and therefore their writing abilities could be enhanced simultaneously. Also, the PGA performed well in both groups, so its employment could be effective in either conventional paper-pencil writing classrooms or technological computer-based writing classrooms.

However, the students might benefit more from both the PGA and blogs, because the students who received the web-based writing instruction along with the traditional writing instruction might perform better than those who were only instructed in the traditional writing classroom (Al-Jarf, 2004). I, therefore, maintained that the students in the experimental group could: (a) have sense of collaborative learning; (b) have more opportunities to be exposed to language input; (c) learn from others; (d) create senses of ownership and readership; (e) perceive they were writing for interaction and communication; and (f) decrease their levels of writing apprehension and anxiety. Although there are potential disadvantages about offering feedback on blogs, it is suggested that providing online comments together with oral feedback could compensate for the defect of it.

Finally, how the integration of the PGA and blog facilitates the EFL college students' writing abilities is drawn up in Figure 17 in which instructional suggestions to each step are provided according to the research findings.

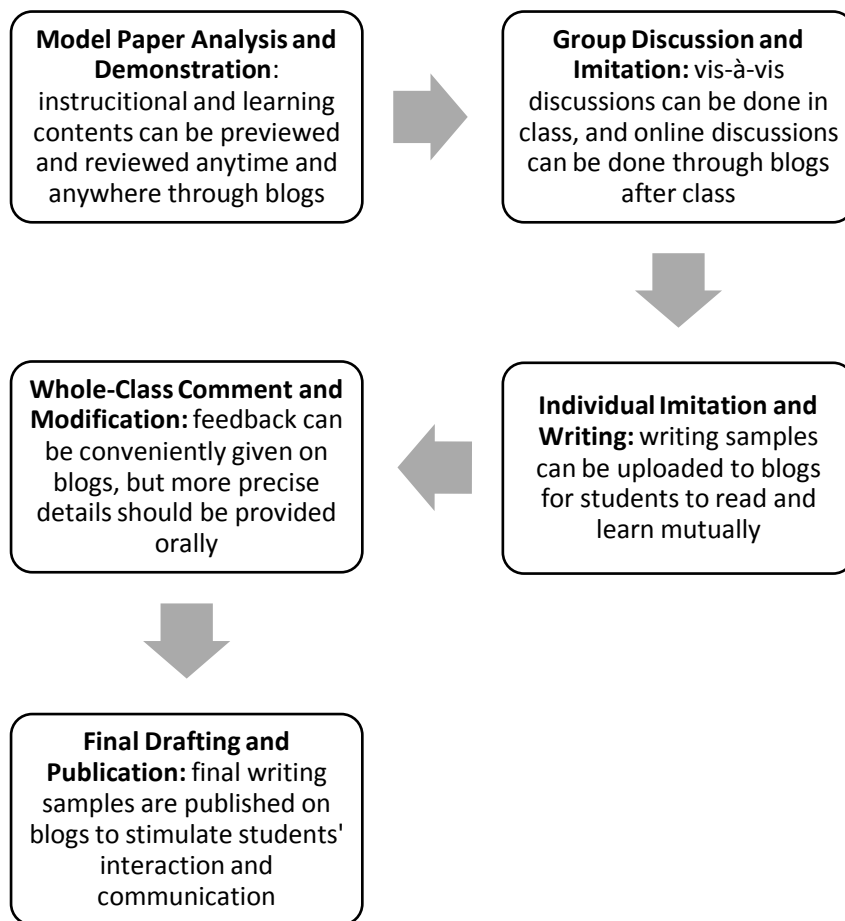


Figure 17. The Instructional Procedures of the Integration of the PGA and Blog

## 7.2 Discussions and Findings for Research Question Two

The quantitative results of the QPGA and qualitative consequences of the interview as well as observational data were used to answer the second RQ: *Are there any statistically significant differences in terms of the participants' perceptions of the PGA after the treatments, and are there any inter-relationships among the participants' conceptions in the PGA? If there are, are there any differences between the two groups?* The purposes of the RQ were to examine how the participants perceived the writing approach, the PGA, and whether there were any inter-relationships among the participants' conceptions in the PGA in order to determine how the PGA benefited the participants' writing performances. Therefore, the discussions are presented in section 7.2.1 and are summarised in section 7.2.2.

### 7.2.1 Thematic Discussions on the Research Findings

The extracted dimensions in the QPGA were used to respond to the RQ, which include teacher's facilitation (section 7.2.1.1), learning with peers (section 7.2.1.2), understanding for writing (section 7.2.1.3), and model article enhanced writing (section 7.2.1.4). They were all answered in both quantitative and qualitative perspectives.

In the quantitative results, the Wilcoxon signed-rank test demonstrated that only a significant difference was found in each group. In the control group, the dimension of "learning with peers" showed a statistically significant difference at  $p = .046 < .05$ , and the outcome for "understanding for writing" was  $p = .008 < .05$  in the experimental group (see section 5.6.1). However, there were several significant correlations in the Spearman's correlation coefficient between the two groups after the treatments. In the control group, "understanding for writing" was significantly correlated to "learning with peers" and "model article enhanced writing." "Teacher's facilitation" was also significantly correlated to "model article enhanced writing." Nevertheless, all dimensions were significantly correlated to each other in the experimental group after the treatments (see section 5.7.1).

As for the qualitative consequences, it was found that the provision of the explanations, examples, and markings developed the students' writing abilities by understanding writing directions and linguistic knowledge, among similar considerations. The students then had a wider range of opportunities to discuss with their peers regarding their writing tasks so that they had more resources to gather ideas, exchange opinions, or learn from each other, apart from receiving input from me unilaterally. During the students' writing process, however, they had the model articles to follow, which prevented them from digressing from the writing topics, and they had to write and revise their essays repetitively, which also improved their understanding about their writing tasks. Finally, the use of the model articles navigated their writing path and provided references for their writing samples, so English writing became more easily than their previous writing tasks.

The four extracted themes were used to discuss the RQ and further to point out the research findings.

### **7.2.1.1 Teacher's Facilitation**

In PGA-based writing classrooms, instructors play important roles to guide students to understand writing tasks. Unlike in a PCA-based writing classroom, students have to explore writing through the process (Tuffs, 1993), which is more learner-centred (Matsuda, 2003; Nordin & Mohammad, 2006; Tuffs, 1993). In contrast, instructors who adopt the PGA need to help students understand what is learned and evaluated in classrooms because realising how writers construct a written text, and understanding why they construct patterns in certain ways are important (Hyland, 2007). With the provision of teacher's assistance, it would be easier for students to understand what linguistic structures they need to compose essays in the process of self-development (Maybin, 1994).

According to the quantitative results shown in the Wilcoxon signed-rank test, there was not any statistically significant difference in terms of the students' perceptions of the teacher's facilitation in both groups after the treatments. A possible reason of having sufficient instruction was raised to explain the insignificant results. As mentioned earlier, Taiwanese students usually depend on their instructors greatly in classrooms, and they are not really engaged in class discussions. In other words, instructors usually provide lectures unilaterally, and students usually receive the given contents merely, which have been widely applied in Taiwanese language classrooms. It was therefore inferred that the participants were quite used to what their instructors did in their previous English writing classes, and they usually had adequate writing instruction before participating in this study, so the results did not differentiate the differences after the treatments in the two groups.

In spite of the insignificantly quantitative results, the interview results demonstrated that teacher's facilitation was conducive to their writing development because the given explanations, examples, and markings developed their writing abilities by understanding how to compose their essays and what grammatical weaknesses they had. As a result, they were able to start writing more easily with clear ideas and correct grammar. Although the results between the quantitative and qualitative were discrepant, I maintained that teacher's facilitation improved the students' writing abilities a great deal in terms of the



qualitative points of view, and it was difficult to find out a statistically significant difference in a quantitative test in this research context where teachers are depended on greatly.

According to my teaching experience and observations, Taiwanese students expect their instructors to tell them what to do and how to do without thinking of “why.” In other words, they possess insufficient critical thinking abilities, so providing them with sufficient and appropriate instruction seems helpful and necessary to develop their English writing competence.

In light of the interview subjects’ responses, the instruction helped the students determine what to write and how to write it. The students had clearer ideas to the writing topics, which helped them understand what to write, which in turn led to understanding writing structures, which also helped them understand how to write. When they were writing, they were more able to provide examples, which helped them think of “why.” Consequently, their critical thinking abilities were likely to be enhanced through this writing process.

However, the Spearman’s correlation coefficient showed several significances between the two groups after the treatments. The results illustrated that “teacher’s facilitation” was significantly correlated to “model article enhanced writing” in the control group, while all dimensions were significantly correlated to “teacher’s facilitation” in the experimental group. According to the research findings, model articles and instructor’s teaching are inseparable because the provision of the model articles might not solve the students’ writing difficulties completely, and the instructor’s teaching might not fully clarify the students’ understanding about completing writing tasks. Therefore, the effectiveness of using model articles could be maximised along with providing a sufficient amount of instruction time, and instruction could meet students’ needs greatly with appropriate model articles. Accordingly, this could be the possible reason to explain their correlations in both groups. Nevertheless, the students’ perceptions of “learning with peers” and “understanding for writing” were also significantly correlated to “teacher’s facilitation” in the experimental group.

Since the students and I used blogs as the means to interact and communicate with each other, the students might find they were all doing the same things while collaborating with me. That is teaching and learning on blogs might make the students perceive that they not only acted as a peer but also a teacher to read others' written work and give feedback. Once the sense is developed, students are very likely to pay more attention to their written work because they realise there are some other people reading their writing samples.

In addition, because all of the instructional and learning materials were uploaded to the blogs, the students were able to have access to them without time and place constraints. This made "teacher's facilitation" significantly correlated to "understanding for writing" in the experimental group. In other words, the instruction could be delivered through blogs, which supplemented the students' learning. The possible reasons are: (a) computer technology compensates for insufficient time of language exposure in traditional language classrooms (Motteram, 2011), so teacher's instruction is no longer confined to face-to-face instruction (Johnson, 2004); and (b) teachers are able to observe the students' performances anytime and anywhere, and provide appropriate assistance instantly in blog-based writing classrooms (Arslan & Şahin-Kızıl, 2010), because blogs are complementary to traditional classrooms for FL learning (Normand-Marconnet & Cordella, 2012). Hence, the significant correlation between "teacher's facilitation" and "understanding for writing" could be found in the experimental group, and not in the control group.

#### **7.2.1.2 Learning with Peers**

According to Vygotsky's sociocultural theory, learning is a participation in a social context in which "learning is a relational activity, not an individual process of thought" (Elkjaer, 2006, ¶ 21). Bandura (1977) also claimed that "most human behaviour is learned observationally through modelling" (p. 22). Therefore, interaction is important to develop one's cognitive and linguistic abilities (Turuk, 2008) because people have to interact with others to enhance learning, and then one's cognitive ability could be developed (Hall, 2007).

In quantitative research results, only a significant difference in terms of "learning with peers" was found in the control group. This might have been because the students in the control group had "genuine" interaction with their peers at all times. They were also able to

compare their learning experience in this programme with their previous experience, both of which were completed through paper-pencil instruction, so they could find the differences of “learning with peers” conspicuously. In contrast, the students in the experimental group were expected to read others’ work, read others’ feedback, or leave comments for others on blogs, which did not arouse their sense of “genuine” interaction because all of the interactions were conveyed through computers, rather than the students in person. Consequently, they did not perceive they were interacting or communicating with others, but, in fact, they performed the same tasks as the students in the control group. This could be a possible reason why the results in the Wilcoxon signed-rank test were significant in the control group and insignificant in the experimental group.

Many interview subjects pointed out that they had more opportunities to interact with their peers from which they learned each other. For example, some of them mentioned that they learned something that they did not know when reading others’ writing samples, or reading others’ essays recalled their memory to their current knowledge. Lin et al. (2013) had pointed out similar findings in their blog-based research. In this study, however, the consequence had been found in both groups, which means the PGA increased the participants’ interaction as well as writing abilities in the process. For example, interview subject #13 mentioned: *“We had scarce opportunities to discuss with the classmates or instructors in previous writing classes, but we have a great number of discussions in this programme. I think my writing abilities have been developed a great deal.”* Accordingly, increasing the frequency of student’s interaction and communication may enhance their writing competence and sense of collaborative learning.

According to the observational data, however, the students were quite reticent and passive during the class periods, and they were not as active and positive as what they described in the interviews. This could have been due to there being different standards toward interaction and communication between the students and me. In other words, the students agreed that they were given ample interactive and communicative opportunities in the process because they had very rare experience of this kind before, but in fact, they were not really engaged in the discussions in class. Therefore, how to motivate students’ “real”

interactive and communicative abilities becomes another issue in a PGA-based writing classroom, which will be discussed in the pedagogical implications in the next chapter.

In terms of the results in the Spearman's correlation coefficient, some statistical differences were found between the two groups. In the control group, the factor of "learning with peers" only correlated to "understanding for writing," while it was related to the other three dimensions in the experimental group. It was thus suggested that the PGA facilitated the participants' interaction and communication with others. Through this process, the students were able to read others' work, give comments to each other, learn something new from others, or recall something what they have already known, so significant correlations in terms of the relationship between "learning with peers" and "understanding for writing" were found in both groups.

Nevertheless, there were two more significant correlations in the experimental group, following how the relationship between "learning with peers" and "teacher's facilitation" that had been discussed in section 7.2.1.1. Another factor is its relationship with "model article enhanced writing." Since all of the instructional materials were uploaded to the tutor blog, the students were able to preview, review, or retrieve the contents wherever they were and whenever they needed. In other words, the students could talk about their writing tasks with their peers in conjunction with the provided model articles anytime and anywhere. For example, the students could discuss the essays or model articles over the phone, skype, or any other technological communication devices by reading the same thing on the computer screens at the same time, so it not only shortened the students' distance, but also simplified their discussions. Consequently, the provision of the model articles on blogs facilitated their interaction and communication.

### **7.2.1.3 Understanding for Writing**

The creation of the PGA helps students understand the writing process and realise writing purposes and contexts toward certain genres. It not only strengthens students' awareness of writing process, but also develops their knowledge toward different types of genres (Yan, 2005). Hence, students' understanding for writing is possibly enhanced through this process.

In the Wilcoxon signed-rank test, only the result in the experimental group showed a significant difference in terms of the students' "understanding for writing" after the treatments. However, it cannot be denied that the PGA developed the participants' writing competence in both groups greatly according to the results in the descriptive and inferential statistics demonstrated in sections 5.3 and 5.4. Based on the students' statements in the interviews, it was found that the employment of the PGA made writing tasks easier because the students were allowed to refer to the model articles during their writing process, which prevented them from digressing from the writing topics, and they had to write and revise their essays repetitively, which also improved their understanding about their writing tasks. However, the experimental group students' writing skills were much more greatly strengthened than the students in the control group, because the use of blogs provided them with the opportunity of learning ubiquitously, and therefore they were able to have a wider range of interaction and communication as well as being exposed to language input, which made them understand the writing tasks conspicuously.

However, the students sometimes were tired of repetitive writing because they felt like they were writing the same contents at all times, which demotivated their writing interests and could be one of the potential disadvantages of the PGA. In order to compensate for the drawback, how instructors deliver courses becomes a key point, which will be suggested in the pedagogical implications in the subsequent chapter.

Regarding the results in the Spearman's correlation coefficient, the factor of "understanding for writing" was correlated to "learning with peers" and "model article enhanced writing" in the control group, while it was significantly related to the other three factors in the experimental group. The relationship between "understanding for writing" and "learning with peers" in the two groups had been discussed in section 7.2.1.2 in which the effectiveness of collaborative learning on the students' understanding toward their writing tasks was mainly argued. Likewise, the discussion about the correlation between "understanding for writing" and "teacher's facilitation" in the experimental group has been elaborated in section 7.2.1.1 where the feasibility of ubiquitous teaching and learning in blog-based writing classrooms was maintained. Possible reasons for the relationship

between “understanding for writing” and “model article enhanced writing” in both groups were discussed as follows.

According to the information gathered in the interviews, the provision of the model articles increased the students’ understanding about their writing tasks, so writing was not as excessively difficult as their previous writing experience. The provided articles helped them understand the writing purposes, structures, and directions as well as linguistic knowledge, so they could start writing and focus on the writing topics more easily. Meanwhile, the students were allowed to refer to the contents in the model articles when they had difficulties in their writing process. Consequently, the offer of the model articles was very likely to improve their understanding about the writing tasks.

#### **7.2.1.4 Model Article Enhanced Writing**

The purpose of the offer of model articles is to help teachers structure more targeted lecture contents with relevant and supporting information, so that students can be able to produce written texts based on teachers’ instructions (Hyland, 2007). Offering model articles therefore facilitated the students’ writing abilities in certain aspects by navigating their writing directions and providing them with related references.

However, there was not any significant difference in terms of the students’ perceptions of “model article enhanced writing” between the two groups in the Wilcoxon signed-rank test. This could have been because the writing topics used in this study were too challenging for the participants. Although I claimed that the topics were closely related to the issues in the students’ daily lives, the students still had difficulties to write about them. According to their previous writing experience, they usually wrote narrative essays, such as about someone they admire, and therefore they were insufficiently experienced in writing argumentative essays. Based on the interview information, the levels of difficulty of the writing topics was much beyond their writing abilities although they benefited a great deal from the approach, the PGA. It was argued that the difficult writing topics might have been a possible reason that resulted in the discrepancy in research findings between both groups.

By scrutinising the results in the interviews, however, it could be found that the model articles helped the students a great deal to complete their writing tasks because the use of the model articles: (a) helped them find out the writing directions that made them understand the writing purposes, structures and topics; and (b) helped them gather a wider range of related references that increased their linguistic knowledge as well as ideas, thoughts, or opinions for their writing samples. Although the two sets of results were contradictory to each other, I maintained that the provision of the model article developed the students' writing abilities because: (a) the quantitative results showed significant differences between the two groups (see sections 5.3 and 5.4); and (b) the qualitative results seemed logical to explain the students' improvement in terms of their writing consequences.

Finally, the results in the Spearman's correlation coefficient demonstrate that the factor of "model article enhanced writing" significantly correlated with "teacher's facilitation" (see section 7.2.1.1) and "understanding for writing" (see section 7.2.1.3) in the control group, while it was significantly related to the other three dimensions in the experimental group, which were respectively elaborated in sections 7.2.1.1, 7.2.1.2, and 7.2.1.3.

## **7.2.2 Concluding Remark for Research Question Two**

Yan (2005) proposed that the PGA helps students understand the writing process and realise the writing purposes and contexts toward certain genres because the PCA motivates students' learning and provides learning opportunities through the writing process, while the GRA helps them determine what linguistic structures are required for a particular genre (Maybin, 1994).

Although only one significant difference was found in each group in the Wilcoxon signed-rank test, I maintained that different instructional media might incur different consequences in terms of the students' perceptions of the PGA. In other words, the differences of the students' perceptions of the PGA could be results of the use of different instructional methods. Therefore, the students in the two groups demonstrated different outcomes in the QPGA after the treatments.

Moreover, there were more significant correlations in the experimental group, in which every dimension was significantly correlated to each other. This demonstrates that the use of blogs might influence how the students perceive the PGA effectively. In a blog-based writing classroom, an instructor's instruction is not confined to face-to-face instruction, and instructors and learners can have contact with each other whenever and wherever necessary (Arslan & Şahin-Kızıl, 2010), so the students could receive the lecture contents easily. The students also had more opportunities to interact and communicate with their peers in a blogosphere setting, because they can easily read others' writing samples, share their comments, and come to understand how to edit each other's contents (Chen et al., 2011). Therefore, they could be more able to understand their writing tasks through understanding the analysis and demonstration on the model articles posted on the tutor blog and through frequently interacting and communicating with their peers and me on their own blogs.

Unfortunately, it has to be noted that the PGA is not without its disadvantages. It was found that there could be limited creativity, lengthy instruction time, reticent students, and repetitive assignments that might be potential hazards for instructors who intend to apply the PGA in EFL writing classrooms. First, the students' writing creativity might be confined to the provided model articles. Because reading and analysing model articles are to be conducted during the first instructional stage, students must understand model articles before commencing their writing. However, their written work may be limited to the contents in the provided model articles, especially if they depend on the model articles excessively. Second, it takes time to process all of the pedagogical procedures. I found time was pressing while attempting to carry out the instructional steps thoroughly because teaching, learning, and either the model articles or the students' writing samples form an interactive relationship in which the three elements need to be involved in every single stage. Third, students might be reticent and even silent in EFL writing classrooms, which applies to Asian students in particular because they usually lack learning motivations and class engagement (Szanajda & Chang, 2015). It could take time and be difficult for instructors to encourage students to engage in in-class activities. Finally, writing about the same topics repetitively may discourage students' writing motivations. In PGA-based writing classrooms, the students have to write several pieces of written work about the same topic



until it is completely finished in order to satisfy the requirements, so they may get tired of writing subsequent drafts.

I also would like to address another issue on the heterogeneity between the two groups. A statistically significant difference at  $p = .011 < .05$  in the post-test was found in the Mann-Whitney *U*-test between the two groups, which indicates that the students' perceptions of the PGA were different after the eight-week period of instruction. In other words, the result corroborated the earlier argument about the influence of the instructional tools in which the use of the different instructional tools had impact on the students' perceptions of the PGA, and the integration of the PGA and blog was more effective in developing their writing abilities.

Finally, as can be seen in Figure 18, every dimension of the PGA correlates to each other to improve EFL college students' writing performances. "Teacher's facilitation" helps students understand the genres through the process of analysis and demonstration. "Learning with peers" develops students' interaction and communication with others through the collaborative learning process of group discussion and whole-class comment. "Understanding for writing" helps students understand how to write and what to write by thinking of "why" in their individual writing process. "Model article enhanced writing" facilitates instructor's teaching, enhances interaction, and develops linguistic knowledge and writing skills. As a result, one can finalise his writing tasks in this interactive process.



Figure 18. The Interactive Model of the PGA

### 7.3 Discussions and Findings for Research Question Three

The quantitative results of the QWS and qualitative consequences of the interview data were used to answer the third RQ: *Are there any statistically significant differences in terms of the participants' use of the writing strategies after the treatments, and are there any inter-relationships among the participants' conceptions in the writing strategies? If there are, are there any differences between the two groups?* The purposes of the RQ were to examine whether there were any differences in terms of the participants' use of the writing strategies in the two groups, and whether there were any inter-relationships among the participants' conceptions in the writing strategies in order to determine how the integration of the PGA and blog influenced the participants' learning. The RQ is answered based on the extracted themes and presented in section 7.3.1, and a summary of the section is provided in section 7.3.2.

### **7.3.1 Thematic Discussions on the Research Findings**

In order to understand the students' use of the writing strategies, the factors of cognition (section 7.3.1.1), known-knowledge using (section 7.3.1.2), pressure reducing (section 7.3.1.3), and self-enhancement (section 7.3.1.4) were applied to answer the RQ in both quantitative and qualitative manners.

In terms of the quantitative results, the Wilcoxon signed-rank test demonstrated that neither the control group nor the experimental group showed any significant difference in any dimension between the pre-test and the post-test (see section 5.6.2), and therefore it was claimed that the employments of the PGA and blog did not change how the students wrote in this study. The insignificant results were attributed to two main reasons: ingrained habits and time constraints. It is difficult to change commonly infused habits. All of the participants had been learning English at least seven years, so they had become accustomed to their own ways and patterns to learn English. Also, the period of the experimental instruction was only for eight weeks, so it was very difficult to change their nurtured habits within this period. The study is to investigate whether there were any significant differences in terms of the students' application of the writing strategies after they were treated differently, rather than how the writing strategies improved their writing performances, regardless of how writing strategies were applied.

Although no statistical significant difference was found in the Wilcoxon signed-rank test, the Spearman's correlation coefficient demonstrated different results between the two groups after the treatments. In the control group, the factor of "cognition" was correlated to "known-knowledge using" and "pressure reducing," and the factor of "pressure reducing" was also correlated to "self-enhancement," while all of the factors were related to each other in the experimental group (see section 5.7.2).

In terms of the qualitative points of view, cognitive strategies have been found as the mostly used one among the four proposed strategies. Taiwanese students usually learn English through reiterative recitation and rote memorisation (Yang & Chen, 2007) because they do not have a genuine environment for interaction and communication, and the subject of

English is imposed on their curriculum. Therefore, they recite and memorise English for academic purposes, such as passing exams. The subjects applied their known-knowledge to compose their essays as well, but using different vocabulary to avoid word repetitions and increase readers' attention and interests was the most common one among them. Some students took a break to help them reduce their writing anxiety while some others were not anxious about their writing tasks. Finally, although some of the students did not practise English writing in particular due to their lower levels of motivations, there were some others who enhanced their writing abilities through reading English novels or magazines and even through watching movies.

To elaborate on these results, the discussions were divided into the subsequent sections to address the abovementioned outcomes.

#### **7.3.1.1 Cognition**

The term of cognition here involves both cognitive strategies and memory strategies based on Oxford's definitions. Cognitive strategies, which refer to the use of conscious methods (e.g. note-taking) to enhance learning (Cook, 1991), are required and have been found as the most common strategies that language learners apply (Oxford, 1990). Memory strategies explain how students remember languages (Griffiths & Parr, 2001) because they help students store and retrieve input, and they have been used since ancient time (Oxford, 1990).

According to the quantitative results in the Wilcoxon signed-rank test, there was not statistically significant difference in cognitive strategies after the treatments between the two groups. Although no significant difference was found in the quantitative results, the cognitive strategies were the most commonly used strategies among the participants in terms of the qualitative perspectives. According to the information provided in the interviews, memorising was widely used followed by note taking when the students were learning English writing. The most probable reasons were they had rare opportunities to practise English outside of classrooms, and the scores are greatly emphasised in the Taiwanese educational system. A study conducted by Chen (2014) reported that using English in different occasions among Taiwanese in their daily lives is rare, and they spend

very little time using English every day because English is very seldom used as a tool for cognition or socialisation in Taiwan. In addition, the Taiwanese educational system is results-driven and score-oriented, so most Taiwanese students are usually pursuing “scores” at schools. In other words, many of them learn English for academic purposes to get higher scores or pass exams, so they rely on taking notes and memorising language input, rather using the language in practical situations. Therefore, how difficult it is Taiwanese students practise English outside of classrooms could be envisaged.

In addition, the interview subjects mentioned they seldom wrote in English in their daily lives. They wrote in English simply to take notes, write memos, or chat with their friends on some social networks, such as Facebook, but only a few words or short sentences were used in this instance. The main reason to write in English for the participants was because English involves writing fewer strokes, which makes writing faster and easier. The participants did not otherwise write in English very often in their daily lives. Although the cognitive strategies were widely used by the participants, they mostly used them in classroom-based contexts.

The relationships between “cognition” and other strategies in the two groups are to be addressed following the results. In the control group, the strategy of “cognition” was significantly correlated to “known-knowledge using” and “pressure reducing,” while these factors were significantly related to each other in the experimental group according to the results shown in the Spearman’s correlation coefficient.

The cognitive strategies could be one of the major strategies that the students applied while they were learning English writing. They knew how to convert texts in a FL or apply the skills that they learned into their knowledge of a subject, and then used it when it was necessary. The findings were confirmed by the interview subjects’ statements, in which many of them mentioned they memorised or took notes because they might use them in their writing samples someday. In other words, the students used the cognitive strategies to help them learn English writing, and the input then became their already-known knowledge, which would be applied in their future writing. The cognitive strategies were therefore related to known-knowledge using in the two groups.

Since the Taiwanese educational system is results-driven and score-oriented, many students learn English for academic purposes, such as getting higher scores or passing exams rather than for practical uses. Most Taiwanese students tend to memorise instructional contents that relates to their school exams. Therefore, it is claimed that the more the students memorise, the less pressure they think they have because the more they memorise, the more confidence they have in getting higher scores or passing exams. This could be the possible answer to explain the correlations between “cognition” and “pressure reducing” in both groups.

Nevertheless, the relationship between “cognition” and “self-enhancement” was only found in the experimental group, which could have been because the students in this group had more opportunities to receive language input, interact with others, and have access to other methods to improve their writing abilities. It has been pointed out that students who receive web-based writing instruction along with traditional writing instruction may perform better than those whose writing skills are only cultivated in a traditional writing classroom, because the Internet supplies supplementary language input that helps students write more effectively and perform better (Al-Jarf, 2004). The students in the experimental group therefore knew how to take advantage of computer technology to facilitate their English writing competence, which could not be accomplished through paper-pencil writing. For example, they were able to retrieve others’ written work or required information easily when writing on blogs, and therefore they had more choices and methods to upgrade their English writing abilities.

#### **7.3.1.2 Known-Knowledge Using**

The strategy of known-knowledge using in this study is parallel to Oxford’s (1990) compensation strategy because both claim students use other ways to make up for their insufficient language abilities. For example, learners may adjust their message or use synonym in their writing process, and this is often employed by less proficient learners in particular (Oxford, 1990).

The quantitative results in the Wilcoxon signed-rank test were not significant between the two groups. The possible reason could have been the participants usually followed the same

methods to compose their essays. For example, they used dictionaries to find the words they needed, they wrote with others ways to compensate for their inability, they asked instructors or peers when they had difficulties in writing, or they searched for online information for essay topics.

According to the information gathered in the interviews, using different words to compose essays to avoid word repetitions and improve the clarity of the essays was widely applied among the participants. I reasoned this was the result of having the easy and rapid convenience of varying the contents of the writing samples. They could simply think of a synonym to replace another word, or they could look words up in a dictionary to find the words they needed. They also expressed with simpler ways that they did not know how to write in English exactly. However, very few of them would make efforts to use various grammatical usages because of lacking confidence. In other words, the students were afraid of making mistakes, so they would avoid using something they were not quite sure about, rather than potentially facing lower scores or making revisions. Asking their peers or instructors was thought to be an effective way to solve their problems, because they could get the answers conveniently and easily, which was usually used for grammatical difficulties. Due to the commonplace of using computers, searching online information to enrich their writing ideas, thoughts, or opinions was also used for these purposes. It was found that the students used quite similar strategies in both the control group and the experimental group. This indicates that their use of the writing strategies was not influenced by the use of the writing tools.

Regarding the results in the Spearman's correlation coefficient, they were different between the two groups. In the control group, "known-knowledge using" was related to "cognition," while all correlated to the dimension of "known-knowledge using" in the experimental group. The relationship between "known-knowledge using" and "cognition" is detailed in section 7.3.1.1. The correlations of "known-knowledge using" between "pressure reducing" and between "self-enhancement" in the experimental group are discussed hereafter.

Thanks to the use of computer technology in the experimental group, the students had more authentic teaching and learning materials (Tsou et al., 2006; Warschauer, 1996) and

real interaction with others (Chapelle, 2010a; Sarica & Cavus, 2009; Yang & Chen, 2007; Zhytska, 2012). The students could have been more able to search for the information on the Internet, or discuss their writing tasks with their peers through the online communication software when they were writing. Since they could have felt more secure and less anxious while they were writing on blogs, their pressure toward writing could possibly have decreased. A study related to the use of blogs in EFL classrooms conducted by Noytim (2010) demonstrated that EFL learners could write more freely with lower levels of pressure and anxiety when blogging, and this finding was also corroborated by Lin's et al. (2014) research consequences. In this study, the students also revealed lower levels of apprehension and anxiety while they were blogging because they could take advantage of computer technology in their writing tasks, which improved their writing competence by reducing their levels of pressure, apprehension, and anxiety.

Moreover, computer technology allowed for the students to be exposed to real language input, connect outside world where the language was used for real tasks to compensate for insufficient time of language exposure in traditional language classrooms (Motteram, 2011), and the students were able to exchange knowledge and practise language skills (Lin et al., 2015). In this study, the students in the experimental group were more able to receive language input and interact with someone else to enhance their writing abilities, and the enlightened contents they learned in the process could possibly become their own knowledge. Hence, the relationship between "known-knowledge using" and "self-enhancement" was significant in the experimental group, which was not found in the control group.

### **7.3.1.3 Pressure Reducing**

The concept of pressure reducing involves applying both affective strategies and social strategies in accordance with Oxford's SILL. Affection means emotions, attitudes, motivations, and values (Oxford, 1990), which are related to one's emotional status involving a wide range of personality factors (Brown, 2000), while social strategies is the behaviour of interacting with others (Cohen, 1998; Cook, 1993; O'Malley & Chamot, 1990).



In terms of the affective issue, some of the students did not feel anxious when they were doing their writing tasks according to the information collected in the interviews because they thought feeling anxious could impede their writing progress, and there was nothing worthwhile to worry about. On the contrary, those who were worried about their writing tasks would take breaks when they were full of stress, which could reduce their sense of anxiety.

In addition, some students would reward themselves to motivate and encourage their performances on English writing, which could possibly make them write better. However, some others would not do it because they usually had negative and uncertain attitudes toward English writing. Interview subject #1 pointed out that there was nothing worthwhile to reward, because English writing was merely for assignments. Interview subject #11 mentioned he never had a piece of good writing, so he never rewarded himself. Regarding social strategy, it is also an effective manner to reduce one's pressure because one's writing difficulties could be worked out through the interactive and communicative process. However, the participants usually practised English writing in class only, in which they asked for corrections and suggestions, or discussed how to write contents, so their interaction and communication regarding English writing after class were very limited. In addition, the course instructor was usually the only person who read their written work, so they had few opportunities to interact with others, and they did not know how other readers thought about their writing samples.

These were what the students usually did concerning in this respect in this study, and some of them even did nothing to alleviate the levels of anxiety. Therefore, the results in the Wilcoxon signed-rank test turned out with insignificance in both groups.

Nevertheless, the Spearman's correlation coefficient demonstrated the factor of "pressure reducing" was correlated to "cognition" and "self-enhancement" in the control group, while it was related to the other three factors in the experimental group. The discussions on the relationship between "pressure reducing" and "cognition" are presented in section 7.3.1.1, while section 7.3.1.2 indicates the relationship between "pressure reducing" and "known-

knowledge using.” The relationship between “pressure reducing” and “self-enhancement” in the two groups is explained hereafter.

I inferred that the more the students improved their efforts, the less pressure they had to explain the relationship between “pressure reducing” and “self-enhancement.” Once again, it is results-driven and score-oriented in the Taiwanese educational system, and the students are quite concerned about their evaluation results, so they would enhance themselves to cope with their course requirements, such as exams. In order to pass the courses, they study to prepare for their exams, and it could relieve their sense of anxiety about the exams. This statement is also confirmed by the interview subjects’ responses about learning English writing in which they mentioned they studied for exams so as to pass the courses. In short, the more they study, the more confidence they have, which in turn leads to less stress.

#### **7.3.1.4 Self-Enhancement**

The strategy of “self-enhancement” was based on Oxford’s (1990) metacognitive strategies because both of them examine how one arranges and plans their own learning.

According to the quantitative results shown in Wilcoxon signed-rank test, there was not significant difference in the two groups in terms of the students’ perception of “self-enhancement” after the treatments. It could have been because the students’ lower levels of learning motivations. Writing was usually deemed assignment completion, and the students scarcely practised it in their daily lives because they were generally lazy and passive toward it as well as they could not value the importance of writing. Although some of them would practise it, but it was purposive, such as passing exams. In other words, they no longer did it once they achieved the objectives or finished the tasks. As a result, the students did not really enhance their writing abilities.

According to the interview results, reading was widely applied by the students to enhance their writing abilities. Although most of the students were passive to English writing, some others read novels and magazines to increase the amount of vocabulary, phrases, or idioms as well as enhance their grammatical abilities so as to reinforce their writing abilities. More

interestingly, watching movies was also thought to be a way to improve writing competence. Some interview subjects claimed that watching movies increased their critical thinking abilities and language abilities both of which are undeniably important to one's writing development. By doing so, they also felt less stress and more enjoyment about learning English writing.

However, the results in the Spearman's correlation coefficient were different between the two groups. That is to say "self-enhancement" was significantly related to "pressure reducing" in the control group, while it was significantly correlated to the other three factors in the experimental group, which have been discussed thoroughly in the previous sections. Although the results in the Wilcoxon signed-rank test were not significant in terms of the perceptions of "self-enhancement" in the two groups, the results in the Spearman's correlation coefficient showed significant relationships.

### **7.3.2 Concluding Remark for Research Question Three**

According to the quantitative and qualitative results, I maintained that one's writing strategies are difficult to change because they involve one's habit formation that require time to be modified, so the results in the Wilcoxon signed-rank test were not significant in this study. Another possible reasons is the students' attitudes and motivations toward English writing were generally passive and low. It was found that since the participants usually treated English writing as assignment completion, most of them did not practise or improve their English writing abilities. They usually used similar ways to complete their English writing samples, or so-called assignments.

However, this does not mean that the students did not apply strategies in their writing process, as most of them simply used what they usually did. For example, they looked up words in a dictionary to replace words, avoid word repetitions, or increase the clarity. They asked their peers or instructors about grammatical problems, and they searched for the information they needed on the Internet. These were the ways the participants usually employed to complete their essays, which means they rarely explored new strategies to compensate for their insufficient abilities.

It was assumed that if the students were treated with different instructional and learning methods, they might find some other strategies to improve their writing competence. For example, the students might learn how to apply computer networks to complete their essays, so not only could their linguistic knowledge be increased, but their sense of collaborative learning is also likely to be developed. The integration of the PGA and blog is therefore possible to help students discover other writing strategies, but they need much more time to have the training in order to fully understand the benefits of the integration of the PGA and blog.

Additionally, the students in the two groups remained homogeneous in terms of the use of the writing strategies after the treatments. The results indicate that the two groups of the students still had similar strategies to complete their writing tasks. Nevertheless, the differences in terms of the correlations with other dimensions in the QWS were quite conspicuous between the two groups. Golonka et al. (2014) mentioned that language learners are fond of using computer technology in their language learning, and they prefer using it to the traditional ones. Therefore, language learners might engage more in their language learning process, and they might present more positive attitudes toward language learning. This could be the possible reason to explain more significant relationships in the experimental group. Finally, how the proposed strategies connected to Oxford's (1990) definitions of learning strategies is summarised in Table 51.

Table 51. *Equivalence between the Proposed Strategies and Oxford's Strategies*

<b>Proposed strategies</b>	<b>Oxford's strategies</b>	<b>Communality</b>
Cognition	Cognitive Strategies Memory Strategies	To explain language learners learn a language by applying conscious methods
Known-Knowledge Using	Compensation Strategies	To explain language learners use other methods they know to make up for their learning
Pressure Reducing	Affective Strategies Social Strategies	To explain how language learners learn a language through self-emotion controlling and socialising
Self-Enhancement	Meta-Cognitive Strategies	To explain how language learners arrange plans to enhance their learning

## **7.4 Discussions and Findings for Research Question Four**

The quantitative results of the QBW and qualitative consequences of the interview as well as observational data were used to answer the final RQ: *Are there any statistically significant differences in terms of the participants' perceptions of blog writing after the treatments, and are there any inter-relationships among the participants' conceptions in the use of blog writing in the experimental group?* The purposes of the RQ were raised to examine the participants' perceptions of the affordance of blogs in the English writing classroom, and whether there were any inter-relationships among the participants' conceptions in blog writing in order to determine how using blog facilitated the participants' writing performances in a PGA-based writing classroom. Likewise, the thematic discussions for the RQ are presented in section 7.4.1, and the section is summarised in section 7.4.2.

### **7.4.1 Thematic Discussions on the Research Findings**

To understand the students' perceptions of blog writing, "blog vs. paper-pencil writing" (section 7.4.1.1), "blog enhanced writing" (section 7.4.1.2), "blog for socialisation" (section 7.4.1.3), "attitudes toward blog writing" (section 7.4.1.4), and "affections toward blog writing" (section 7.4.1.5) were used to answer the RQ in both quantitative and qualitative perspectives.

In the quantitative results, there were statistically significant differences in terms of the participants' "attitudes toward blog writing" at  $p = .027 < .05$  and "affections toward blog writing" at  $p = .027 < .05$  in the Wilcoxon signed-rank test (see section 5.6.3), so it was assumed that the affordance of blogs in the EFL college students' writing classrooms improved the students' mental status toward English writing. In terms of the correlations among the dimensions in the QBW, "blog enhanced writing" were significantly correlated with "blog for socialisation" and "attitudes toward blog writing" after the treatments (see section 5.7.3). Although there were limited significant differences and correlations in both the Wilcoxon signed-rank test and Spearman's correlation coefficient, I asserted that the employment of the blog enhanced the participants' writing performances according to their writing outcomes presented in sections 5.3 and 5.4.

For the qualitative results, the differences and similarities between blog writing and paper-pencil writing were proposed in which the students described that both of them were helpful to their writing development, and they both had advantages and disadvantages. However, they were allowed to retrieve more writing samples and online resources while blogging, which helped them receive different perspectives for their writing samples. In addition, they could share their writing samples to each other so that they were able to receive feedback from others and give comments to their peers as well. In terms of mental status, blog writing facilitated the students' positive attitudes by providing much convenience and less stress, so they would think about continuing using blogs in the future.

The elaborated discussions are reported subsequently to answer the RQ in both quantitative and qualitative manners.

#### **7.4.1.1 Blog vs. Paper-Pencil Writing**

The advantages of blog writing have been cited by many researchers (Aljumah, 2012; Armstrong & Retterer, 2008; Arslan & Şahin-Kızıl, 2010; Bloch, as cited in Kitchakarn, 2012; Chen et al., 2011; Chuang, 2008; Godwin-Jones, 2003; Habul-Šabanović, 2015; Huang, 2015; Johnson, 2004; Kervin & Derewianka, 2011; Lin et al., 2013; Lin et al., 2014; Lin et al., 2015; Normand-Marconnet & Cordella, 2012; Silviyanti & Yusuf, 2014; Top, 2012; Warschauer & Liaw, 2011). This is because blogs are potential pedagogical alternatives in FL writing classrooms, and they effectively develop students' writing abilities in a collaborative manner (Normand-Marconnet & Cordella, 2012; Silviyanti & Yusuf, 2014; Warschauer & Liaw, 2011), which serve a complement to traditional (face-to-face) classrooms for FL learning (Normand-Marconnet & Cordella, 2012).

However, the quantitative consequence pointed out that the difference for the students' perceptions of blog writing vs. paper-pencil writing showed insignificantly, which means there was not difference between blog writing and paper-pencil writing after the treatments. In light of the interview results, I found that no matter what kind of writing tools were being used in writing classrooms, writing was usually deemed assignments for the students. This indicates that they were not really engaged in the blogging process, but they treated it as

assignment completion. For example, interview subject #10 mentioned: *"I don't think there is a great difference between blog writing and paper-pencil writing."*

In spite of the insignificance, most of the students approved the effectiveness of the blogs on their writing development. Interview subject #13 explained: *"I can read my classmates' writing samples on blogs, and I think it improves my writing abilities,"* and she further indicated that she was able to learn something she did not know via reading others' writing samples. Similarly, both interview subjects #8 and #11 described that the peers' writing samples must be different from theirs, so they were allowed to refer to others' perspectives through reading others' written work on blogs.

However, this does not indicate that the affordance of blogs in EFL writing classrooms will result in better consequences in terms of the students' writing performances than those who are in traditional writing classrooms. Computers are not problem solvers to all troubles, and they will never replace instructors in education (Lee, 2000). They could be made to work well only under instructors' sufficient preparation of materials, their carefully laid out lesson plans and classroom management, and a well-trained user's operation (Gündüz, 2005; Johnson, 2002). Similarly, Lin et al. (2013) proposed that blogs should not be taken as a panacea to promote FL writers' learning, but they should be applied as a complementary role to traditional (face-to-face) classrooms for FL learning (Normand-Marconnet & Cordella, 2012).

I therefore suggested the discrepant results as superficiality. In other words, the use of blogs brought in different writing experience to the students, which made them feel something new to attract their attention to their writing tasks. In reality, however, their concept toward writing was not changed, which still remained passive and inactive. As a result, blogs are not all-purpose. In contrast, how it can achieve its highest efficacy depends on how it is used.

Since the quantitative outcomes in both tests turned out to be insignificantly different and correlated, I attributed the consequences to the students' attitudes toward English writing. According to the interview information, English writing was usually deemed assignments

among the participants, they usually wrote in English in class, and scarcely did it in their daily lives. As was represented by interview subject #9 who explained that she never wrote in English in her daily life, but she did it for the assignments only. She further elucidated: *“any topics can be done through paper-pencil writing, so there is not difference between blog writing and paper-pencil writing.”* Therefore, attitudes toward English writing could have been a possible reason for the insignificant outcomes in both tests.

#### **7.4.1.2 Blog Enhanced Writing**

The effectiveness of blogs on English writing development has been proved in many studies (Aljumah, 2012; Armstrong & Retterer, 2008; Arslan & Şahin-Kızıl, 2010; Fageeh, 2011; Kitchakarn, 2012; Lin et al, 2013; Lin et al., 2014; Liu & Chang, 2010; Noytim, 2010; Silviyanti & Yusuf, 2014), and many researchers have forwarded the advantages. For example, Bloch (as cited in Kitchakarn, 2012) has clearly listed the benefits, which are presented in section 2.3.3.

Indeed, the participants' writing performances had been enhanced according to the results shown in the paired-sample *t*-test reported in sections 5.3 and 5.4. However, the Wilcoxon signed-rank test showed that there was not significant difference in terms of the students' perceptions of “blog enhanced writing” after the treatments. This insignificance could have been owing to the ineffectiveness of the peers' feedback, the low comment response rate, and scepticism to the peers' opinions. First, most of the students' feedback was prone to be encouraging and complimentary, which did not contribute to constructing and developing their writing competence. Second, the students rarely replied to the comments left on their blogs. In other words, they might not have paid attention to those comments, or the comments did not function well. Lastly, the participants were also sceptical about their peers' writing abilities, so they could have chosen to dismiss their opinions as potential references for making modifications.

However, the merits of using blogs to improve students' writing performances cannot be denied. According to the information gathered in the interviews, having more reading samples, learning different perspectives, and retrieving online resources all enhanced their writing abilities in the blogging process. Many students mentioned that they could have



access to more written work other than the provided model articles through linking or cross-linking to their peers' blogs. By doing so, they not only had more ideas for their writing samples, but also they could learn different perspectives via reading others' work, which could possibly help them understand their writing tasks. In addition to the peers' work, retrieving online resources could be very easily. The nature of providing information in computer technology has been pointed by many researchers (Al-Jarf, 2004; Bloch, as cited in Kitchakarn, 2012; Boulos et al., 2006; Chen et al., 2011; Chin, 2004; Huang, 2015; Selwyn 2011; Sharples, 2000), so learners have greater opportunities to be exposed to target language (Amaral & Meurers, 2011; Arslan & Şahin-Kızıl, 2010; Habul-Šabanović, 2015; Huang, 2015; Liu, 2005). The interview subjects figured out that they could learn more knowledge when they were writing on blogs because they had greater chances to search for the information they needed when they were writing, in addition to helping students' review class contents. For example, interview subject #12 indicated: *"..... we need to search for some online information when we are writing. We can learn something we don't know in the process, which may be useful to our future writing."*

As for the results in the Spearman's correlation coefficient, the factor of "blog enhanced writing" was significantly correlated with "blog for socialisation" and "attitudes toward blog writing" after the treatments. The significant correlation between "blog enhanced writing" and "blog for socialisation" demonstrated that the more interactions the students had, the better understanding toward their writing tasks they might have. The interview subjects pointed out that they had a wider range of learning and interactive opportunities with others when writing on blogs, so they were allowed to learn from their peers, refer to others' writing samples, gather writing ideas, and improve writing skills. One of the interview subjects mentioned that learning something they did not know from reading the peers' blogs was a viable option for improving writing skills. The other interview subjects reported that everyone's points of views were different, so blog writing allowed them to have different perspectives about their writing samples. These findings thus confirmed what have been discovered in Noytim's (2010) and Silviyanti and Yusuf's (2014) studies. I therefore suggested that using blogs to develop students' interaction and communication could be an effective manner to improve their writing abilities, since they would acquire more knowledge for their writing through this interactive and communicative process.

In terms of the relationship between “blog enhanced writing” and “attitudes toward blog writing,” it was argued that blog writing provided the students with different writing experiences that they scarcely had had, so the students’ attitudes toward writing had been improved through this programme. The students found blog writing was more convenient and easier because they could directly write and submit their assignments through using computers or even smartphones. This also confirmed Lin’s et al. (2013) research findings of the convenience of blogging. Additionally, the students were able to read the peers’ writing samples, share their writing samples, or leave comments for each other, so they were likely to perceive that they were writing collaboratively and writing for communication, rather than writing individually and writing for assignments. This increased the students’ writing interests and motivations because their positive attitudes toward writing were developed while blogging. This finding is also in accordance with Lin’s et al. (2014), Noytim’s (2010), Silviyanti and Yusuf’s (2014), and Sun’s (2010) conclusions. Golonka et al. (2014) mentioned that language learners are fond of using computer technology in their language learning, and they prefer using it to the traditional ones. Therefore, language learners might engage more in their language learning process, and they might present more positive attitudes toward language learning when drafting their writing samples by using this means. Although the previous discussions indicated that the positive attitudes would be superficial, I suggested that changing students’ concept toward English writing is the first step that writing instructors should do.

#### **7.4.1.3 Blog for Socialisation**

According to Vygotsky’s sociocultural theory, the social aspect is one of the most important elements in language learning, as one needs to interact with others to learn a language in social contexts no matter where they learn it (Cook, 2008). Language learning involves in a collaborative process in which learners use the language for the purpose of interaction to gain grammatical, expressive, and cultural abilities (Ohta, 2000), and language learning is a type of social interaction with others, and not an individual information process (Donato, 2000). As a result, the launch of Web 2.0 provides language learners with a greater range of opportunities to communicate and interact in target languages with others, and helps students to learn collaboratively (Huang, 2015).

Although many studies (Al-Jarf, 2004; Aydin, 2014; Chapelle, 2010a; Fageeh, 2011; Golonka et al., 2014; Habul-Šabanović, 2015; Kervin & Derewianka, 2011; Noytim, 2010; Rashtchi & Hajihassani, 2010; Sarica & Cavus, 2009; Yang & Chen, 2007; Zhytska, 2012) have proposed that the use of computer technology in language classrooms could develop students' real interaction with others, the quality of the interaction should be considered. Indeed, the participants who were in the blog-based writing classroom had greater amount of interaction, which was helpful to their language development, but it did not mean their interaction and communication were successful in terms of language development. According to these observations, it was found that the participants' interactions on blogs were not really effective because they usually offered compliments about other's writing samples to each other, which did not necessarily enhance one's writing performances, apart from perhaps being sources of encouragement. The students in the experimental group also confessed that the peers' comments were not really helpful to their writing samples. For example, interview subject #9 mentioned: *"My classmates' feedback is "very good" at all times. They neither provide specific criticisms, nor provide any grammatical or writing suggestions for me."* This could be the possible reason to explain the insignificant difference in the Wilcoxon signed-rank test.

It was therefore inferred that the participants might not have felt confident and comfortable enough to comment in English, and furthermore, giving feedback on blogs was unilateral, which was not as interactive as giving feedback in class, where the students were allowed to discuss or clarify their contents verbally. They might have been afraid that they would offend the writers if they gave too many comments, which were likely to make their peers feel ashamed and embarrassed. Therefore, in order to avoid undermining the friendships or causing misunderstandings, the students tended to provide encouragements rather than offering critical comments.

To increase effective interaction and communication on blogs, instructors should not rely on computer technology excessively because the quality of the interaction and communication might be questioned. On the other hand, computer technology should be a subsidiary role that reduces the learners' time restrictions and distance limitations, while it should not replace vis-à-vis interaction. Therefore, both in-class face-to-face discussions and after-class

online discussions could be integrated to enhance students' language learning (Huang, 2015). By doing so, students are allowed to read others' writing samples on blogs, which might improve their collaborative learning, increase their critical thinking abilities, and also develop the senses of ownership and readership. They should have the opportunities to discuss their contents with others or clarify their contents verbally, so they might feel more confident about giving feedback to their peers without thinking of undermining friendships or causing misunderstandings.

Although the results of "blog for socialisation" in the Wilcoxon signed-rank test were insignificant, there was a correlation between "blog for socialisation" and "blog enhanced writing," which had been discussed in section 7.4.1.2.

#### **7.4.1.4 Attitudes toward Blog Writing**

Many studies (Aljumah, 2012; Aydin, 2014; Fageeh, 2011; Golonka et al., 2014; Habušabanović, 2015; Huang, 2015; Lai & Kritsonis, 2006; Lin et al., 2013; Lin et al., 2014; Lin et al., 2015; Noytim, 2010; Sarica & Cavus, 2009; Silviyanti & Yusuf, 2014; Sun, 2010; Zhytska, 2012) have shown that the use of computer technology is conducive to increase students' language learning motivations and develop their positive attitudes toward language learning. By incorporating computer technology in language classrooms, some flexible tools, such as blogs, could develop students' language abilities via communication, collaboration, networking, and scaffolding (Warschauer & Liaw, 2011), so learners might have positive attitudes and perceptions of writing, and have collaborative interactions and active participation in writing process (Aydin, 2014).

The result in the Wilcoxon signed-rank test showed a significant difference at  $p = .027 < .05$  in terms of the students' "attitudes toward blog writing" after the treatments, which demonstrates that the students' attitudes toward blog writing were improved after this eight-week period of instruction. According to the information given in the interviews, almost 43% of the participants preferred blog writing to paper-pencil writing because they found it convenient and easy. Interview subject #9 mentioned: *"I can type on a computer directly. I don't need to write by hand. Also, I don't need to print out assignments. Blog writing is more convenient because the Internet is very common nowadays, and I even*

*submit my assignments through using a smartphone.*” Interview subject #11 explained that writing on blogs was easier and involved lower degree of stress.

Golonka et al. (2014) indicated computer technology has greatly changed how language instructors deliver courses in order to increase language learners’ learning motivations, target language exposures, interactive opportunities, and feedback provisions, so students might enjoy using computer technology in their language learning, and prefer using it to the traditional ones. The interview subjects therefore pointed out that they had more interaction and communication with their peers and me, were more able to have access to online resources and reading samples, could learn something new from their peers, or felt easier and more convenient while they were blogging. Therefore, the students’ attitudes toward blog writing could be enhanced through this interactive and technological approach.

Aljumah (2012) also suggested that the students had very positive attitudes toward the use of blogs in English writing classrooms, so they believed that blogs were useful, motivational, and effective to develop their writing abilities. Silviyanti and Yusuf (2014) presented that 87.5% of the participants enjoyed the blog writing programme because they had more opportunities to read others’ work, to give comments and feedback to each other, to share ideas, and learn from others, so the students’ writing motivations had been increased after the instruction. Fang (2010) figured out that the majority of the students in the study were quite satisfied with the blog writing programme, and there was a positive effect on the development of the learners’ writing skills. Habul-Šabanović’s (2015) and Huang (2015) also demonstrated similar outcomes in their studies. I, as a result, maintained that the use of blogs not only reinforced the students’ writing abilities, but also developed their positive attitudes toward English writing. Based on the students writing scores presented in sections 5.3 and 5.4, the students’ writing abilities were increased significantly, and the subjects in the experimental group outperformed the participants in the control group. Furthermore, their attitudes toward blog writing was improved as well according to the quantitative and qualitative outcomes. The significant correlation between “attitudes toward blog writing” and “blog enhanced writing” had been detailed in section 7.4.1.2.

#### 7.4.1.5 Affections toward Blog Writing

Affection is one of the most powerful factors to determine one's success or failure in language learning because successful language learners are able to control their emotions and attitudes toward their learning (Oxford, 1990). Similarly, Khaldieh (2000) demonstrated affective factors influence one's FL development and performances.

The results in the Wilcoxon signed-rank test demonstrated a significant difference at  $p = .027 < .05$  in terms of the participants' "affections toward blog writing" after the treatments, so the participants' had lower levels of apprehension and anxiety when they were writing on blogs. According to the information gathered in the interviews, it was found that the students had plenty of time to complete their writing samples, and writing on blogs was easier for them, which made them feel less stress. It was therefore inferred that the students were allowed to retrieve online resources, read others' written work, and leave comments for each other, so they found writing on blogs was easier than paper-pencil writing. The feature of the Internet helped the students retrieve the information they needed for their writing samples, blogging allowed them to have access to others' written work, and leaving messages to each other increased their perceptions of collaborative learning and enhanced their ownership and readership, so these could be the possible reasons to explain the improvement of the participants' affections toward blog writing.

In terms of Oxford's (1990) definition, affection indirectly influences how successful one acquires a language because it controls one's emotions, attitudes, motivations, and values toward the language. Since the participants usually treated English writing as assignment completion, and they had negative attitudes toward English writing, how to transform the students' perceptions of English writing becomes an important issue. It has been pointed out that the affordance of blog might improve the students' affections toward English writing. Habul-Šabanović (2015) determined that the students might be able to construct their own knowledge, and might be more responsible for their own learning when blogging. They are also allowed to exchange their ideas with their peers or learn from their peers, which are likely to enhance their learning experience, increase their senses of being a part in the community, and help them enjoy learning. Moreover, Noytim (2010) found that the

students could write more freely with lower levels of pressure and anxiety when blogging, which increased their learning motivations and confidence. Lin et al. (2014) pointed out that blog writing brought in lower levels of anxiety and better performance among the EFL learners because they might release the senses of apprehension when writing on blogs. I, therefore, claimed that the use of blog may possibly transform the students' perceptions of English writing. Although it was pointed out in the earlier section (see section 7.4.1.1) that the participants' still treated English writing as assignment completion, their perception of it had been improved slightly after the eight-week period of blog-based instruction.

However, there was not significant correlation in this dimension. It might have been because there were only eight weeks of instruction. In other words, the students did not have sufficient time to experience blog writing and further to build up its relationships with other factors, so a significant correlation could not be found in this study.

#### **7.4.2 Concluding Remark for Research Question Four**

According to both the quantitative and qualitative results, using blogs had greatly improved the students' writing competence directly and indirectly. In terms of the direct dimension, the students were allowed to read others' work, share personal writing samples, retrieve information, and give comments and feedback. As for the indirect perspective, both the students' attitudes and affections could be improved through blogging because they had more interactive and communicative opportunities with others, which helped them learn collaboratively. Therefore, I suggested that English writing is not merely related to one's English language abilities, but one's mental status is also involved in the writing process. For example, the more confidence one has, the better one's writing ability might be.

Inevitably, some disadvantages regarding blog writing have been raised by the interview subjects as well. First, paper-pencil was easier for students to edit, and they could take notes on paper directly as reminders for further modifications, which could not be achieved in blog writing. Second, the advantage of allowing all people to read the writing samples might be a disadvantage to some others, because some students had lower senses of security when writing on blogs. Interview subject #12 mentioned that the writing samples on blogs meant having reduced privacy. Many Taiwanese students are not used to sharing

their writing samples with someone else other than their writing instructors. When they were writing on blogs in this programme, they conspicuously perceived that their written work could be read by anyone in public, which might result in feeling self-conscious about sharing personal contents. In addition to mental stress, there could also be a physical effect. The students found reading and writing on computers might be harmful to their eyes when they exposed themselves in front of the computer screens for a long period of time. Some technical issues were also raised. For example, computers with a connection to the Internet should be confirmed prior to their writing, or they are unable to use blogs if there is a power outage.

Furthermore, in terms of the teaching perspectives, I also found that the students became easily distracted in class when blog contents were used in the classroom because passive learners were uninterested. Neither were they able to take notes on the computers, and nor did they take notes voluntarily on paper, so it made it difficult for them to concentrate on the instruction in progress. Marking essays on blogs was also another potential disadvantage for instructors because it was time consuming. In the marking process, I had to scroll up and scroll down the windows on the screen at all times while reading the students' writing contents and leaving comments on their blogs. I spent a great deal of time and energy thinking of how to arrange and leave comprehensible comments on the students' blogs while they were being marked, because it was impossible to provide written comments directly at the points where revisions on the students' blogs were needed. Although I provided careful feedback to keep the students from misunderstanding them, they sometimes did not really understand those comments, and their revised writing samples were unsatisfactory due to their misunderstanding the comments on their blogs.

In spite of the potential drawbacks, the effectiveness of blog on the EFL college students' writing performances is clear in view of the evidence. Moreover, by virtue of the formation of the integrative CALL, which is underpinned by Vygotsky's sociocultural theory, collaboration has become trend in language education. One's effective learning may be due to the participation and interaction with others' modelling behaviour and thought, which lead to one's success in language learning (Pawan et al., 2003). Hence, blog learning conforms to Garrison's et al (2000) model of Col (see Figure 8), which maintained that



“learning occurs within the Community through the interaction of three core elements” (Garrison et al., 2000, p. 88), the cognitive presence, social presence, and teaching presence. To adopt the Col model, each presence is intertwined with the other two presences, and the three presences are also integrated to form blog writing, which can be seen in Figure 19.

Finally, Lin et al. (2013) concluded that blogs should not be taken as a panacea to promote FL writers’ performances, but they should be applied as a complementary role to traditional (face-to-face) classrooms for FL learning (Normand-Marconnet & Cordella, 2012). I also agreed with this argument according to the research results in which blogs can be a subsidiary tool to compensate for insufficient vis-à-vis instruction so that it can achieve its highest effectiveness in developing students’ writing abilities directly and indirectly.

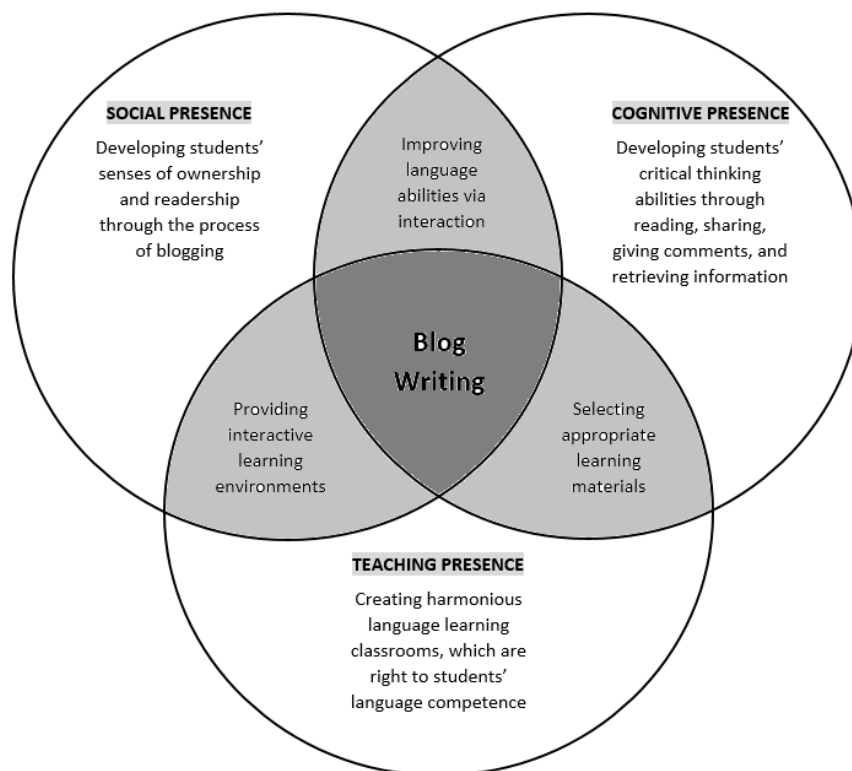


Figure 19. Blog Writing in the Col Model

## 7.5 Chapter Summary

The RQs raised in this study led to different conclusions. The first RQ was about the participants’ writing performances in which the quantitative results showed significant

differences in terms of the overall and componential English writing scores in both groups after the treatments. Therefore, the efficacy of the PGA was proved in the EFL college students' writing classrooms. Moreover, to widely determine how the PGA developed the students' writing abilities, Gao's (2012) instructional model was discussed, so it may be helpful to practitioners who would like to apply this approach in their EFL writing classrooms.

The second RQ dealt with the instructional approach, the PGA. This was raised to examine how the participants perceived the application of the PGA in their writing classrooms, and to determine whether there were any differences between the two groups. The approach is relatively new in the field, so I intended to bridge the research gap by discussing the factors of "teacher's facilitation," "learning with peers," "understanding for writing," and "model article enhanced writing." Since two different instructional tools (blog and paper-pencil) were used, the differences in terms of the students' perceptions of the PGA and the correlations among the four dimensions were found.

The third RQ talked about the students' learning strategies while they were writing. It was to examine whether there were any differences in terms of their application of the writing strategies after the treatments, and to determine whether there were any differences between the two groups. Although there were not significant differences in the use of the writing strategies, the correlations regarding the use of the writing strategies were different between the two groups, which means the employment of the different teaching and learning tools might influence the students' use of the writing strategies.

The final RQ discussed the affordance of the blog in the EFL college students' writing classroom, which was to examine how the students perceived the employment of blog in their writing classroom. It was found that the students' mental stances toward English writing were improved in this blog-based writing programme, so it was encouraging to witness how the use of blog might be conducive to developing EFL learners' writing attitudes and affections so that their writing competence might be increased accordingly.

The next chapter presents a summary of this study, limitations of this study, suggestions for future application and research, as well as a conclusion of this study.

## **CHAPTER EIGHT: CONCLUSIONS**

The summary of this study summarises this research work, as found in section 8.1. The next section outlines the limitations of this study, which explains the difficulties in conducting the research (section 8.2). In section 8.3, the pedagogical implications provide instructional suggestions for EFL instructors, educators, and practitioners who would like to apply the techniques in writing classrooms. Suggestions for future research are presented in section 8.4 followed by the conclusion of this study in section 8.5.

### **8.1 Summary of this Study**

The major purposes of this study are to determine whether the integration of the PGA and blog improved the EFL college students' writing performances, and to determine their use of the English writing strategies after the treatments. This quasi-experimental study was conducted at a university in central Taiwan where both the control group (paper-pencil writing) and the experimental group (blog writing) were involved in this study. The participants in both groups received the questionnaires, and completed a writing essay before the treatments, which served as the pre-test. The PGA-based instruction was respectively administered for the two groups by the same instructor with the same materials for eight weeks. I, as the instructor of the programme, observed the classes while delivering the teaching contents. The identical questionnaires and writing essay employed in the pre-test were utilised again after the treatments, which helped me collect data in the post-test. Finally, seven students were randomly recruited from each group to carry out the retrospective semi-structured interviews after the post-test. To analyse the quantitative data, IBM SPSS Statistics version 22 was used to calculate both the descriptive statistics and the inferential statistics, so the independent *t*-test, paired-sample *t*-test, Mann-Whitney *U*-test, Wilcoxon signed-rank test, Spearman's correlation coefficient, and Pearson correlation coefficient were applied. For the qualitative data analysis, thematic analysis entailed analysing, categorising, and defining the data to determine greater amount of in-depth information to support the quantitative research consequences.

In order to achieve the primary research purposes mentioned above, four RQs were proposed in this study. The first RQ was to examine the participants' English writing performances. This was used to examine whether the students' writing abilities were

improved in the two groups after the treatments, and determine how the instruction influenced their writing performances. Consequently, a paired-sample *t*-test was applied to analyse the writing results gathered from the two groups in both the pre-test and the post-test. The quantitative results showed significant differences in the overall and sub-componential writing scores in both groups, and therefore the outcomes indicated that the PGA was conducive to the participants' writing development in both kinds of classrooms. Because of there being the provision of the model articles together with the analysis, the students could understand the purposes of the writing, and the genres as well as the required linguistic knowledge for their writing tasks. The students then used what they learned to discuss with their peers, so they not only received the input from the model articles and the analysis, but also obtained new information from their peers through an interactive and communicative process. Therefore, the students found that drafting writing samples was not as difficult as they had experienced, and it became easier to start, along with writing directions being clearer, writing structures being a greater amount of understandable, and generating writing ideas and examples being more attainable. After finishing the writing samples, the students received the comments and feedback, so their sense of collaborative learning was increased, and their critical thinking abilities could also have been fostered through the process of reading, sharing, giving comments, and retrieving information. However, it was found that giving vis-à-vis comments would be more effective than leaving comments on blogs because the students would have a greater number of opportunities to communicate and discuss matters in person. Interestingly, the students in the blog-based writing classroom were more careful with their essays before posting them on blogs, because they understood that their writing samples could be read by anyone, which increased their senses of ownership and readership.

The second RQ was to examine how the participants perceived the PGA in which I tried to examine whether there were any significant differences in terms of the students' perceptions of the PGA, and whether there were any inter-relationships among the conceptions in the PGA in the two groups after the treatments. According to the results showed in the Wilcoxon signed-rank test, the dimension of "learning with peers" presented a statistically significant difference in the control group, while the outcome of the "understanding for writing" had a significant difference in the experimental group. A

potential cause was the students in the control group having “genuine” interactions with their peers at all times. However, they were assigned with reading others’ work, reading others’ feedback, or leaving comments for others on blogs in the experimental group, which could not have aroused the students’ senses of “real” interaction because all of the interactions were conveyed through computers, rather than in person. In addition, the students in the control group were able to compare their learning experience in this programme with their previous learning experiences, both of which were completed through paper-pencil instruction, and therefore the differences of “learning with peers” were more evident. With regards to the consequence in the experimental group, the students were allowed time for previewing and reviewing the teaching contents, reading their peers’ work, and retrieving required information whenever they wanted and wherever they were, so they had a greater number of opportunities to be involved in the learning context, which was likely to improve their understanding regarding the writing tasks. Moreover, there were several statistical significances in the Spearman’s correlation coefficient after the treatments between the two groups. In the control group, “understanding for writing” was correlated to “learning with peers” and “model article enhanced writing.” “Teacher’s facilitation” was also correlated to “model article enhanced writing.” As for the results in the experimental group, all of the factors were correlated to each other. Besides, the students in the two groups were no longer homogeneous, but they were heterogeneous in terms of the perceptions of the PGA after they were treated with different interventions. Consequently, it was determined that different teaching and learning tools could lead to different consequences in terms of the students’ perceptions of the PGA.

The third RQ was to examine whether there were any differences in terms of the participants’ use of the writing strategies, and to examine whether there were any inter-relationships among the conceptions in the writing strategies in the two groups after the treatments. After the data analysis, however, no significant difference was found in the Wilcoxon signed-rank test between the two groups. The results were attributed to two main reasons: ingrained habits and time constraints. All of the students had been learning English for at least seven years, so they had their own accustomed methods to learn English. Also, since the period of the experimental instruction was merely eight weeks, it was very difficult

to change their nurtured habits within this time period. Above all, the RQ was to find whether there were any significant differences in terms of the students' application of the writing strategies after they were treated differently, rather than how the writing strategies improved the students' writing performances because the writing strategies in this study were not the interventions. Nevertheless, the Spearman's correlation coefficient demonstrated different results between the two groups. In the control group, the factor of "cognition" was significantly correlated to "known-knowledge using" and "pressure reducing," and the factor of "pressure reducing" was also correlated with "self-enhancement." In contrast, all of the factors were significantly related to each other in the experimental group. It was assumed that if the students were treated with different instructional and learning methods, they would find different strategies to improve their writing competence. For example, the students could understand how to apply computer networks to complete their essays if computer technology was introduced in their writing classrooms, so not only could their linguistic knowledge be increased, but their sense of collaborative learning was also likely to be developed. As a result, the integration of the PGA and blog became feasible as a means to help the students explore writing strategies, but they needed much greater amount of time to undergo the training in order to fully benefit the integration of the PGA and blog. Finally, the students in the two groups were still homogeneous in terms of the use of the writing strategies after the treatments. It indicates that the two groups of students still had similar strategies to complete their writing tasks.

The last RQ was to examine the participants' perceptions of the affordance of blogs in the EFL writing classroom, and to examine whether there were any inter-relationships among the conceptions in blog writing after the treatments. After the data analysis, the Wilcoxon signed-rank test reported that the participants' "attitudes toward blog writing" and "affections toward blog writing" had statistically significant differences, so it was claimed that the affordance of blogs improved the students' mental status toward English writing. It was maintained that English writing is not merely related to one's English language abilities, since one's psychological factors are also involved in writing process. For example, the more confidence one has, the better one's writing ability might be. Based on the results in the current study, one's attitudes and affections toward English might be enhanced via blogging because the students experienced different kinds of writing instruction in which they had a

greater number of opportunities to interact with others, be exposed to language input, and retrieve online resources. In terms of the correlations among the dimensions in the QBW, only “blog enhanced writing” was significantly correlated with “blog for socialisation” and “attitudes toward blog writing.” Although limited significances were found in both the Wilcoxon signed-rank test and Spearman’s correlation coefficient, I claimed that the employment of blog enriched the participants’ writing performances according to the statistical outcomes presented in sections 5.3 and 5.4. Lastly, it was suggested that the affordance of blogs in English writing education developed the students’ English writing competence directly and indirectly. In terms of the direct aspect, the students were allowed to read others’ work, share personal writing samples, retrieve information, and give comments and feedback. As for the indirect perspective, both the students’ attitudes and affections might be improved through blogging process because they had a greater number of interactive and communicative opportunities with others, which increased their sense of collaborative writing. As a result, both the direct and indirect dimensions were interwoven together in one’s writing development when blogs were applied in EFL writing classrooms.

## **8.2 Limitations of this Study**

In spite of designing this study deliberately and cautiously, I still encountered several difficulties during the process, which impeded providing a greater number of complete outcomes and empirical findings. I therefore synthesised the limitations of this study to six dimensions.

First, a very small number of the participants (sixteen students in the control group and eighteen students in the experimental group) participated in this study, so the generalisability of this study somewhat limited to a certain degree. The results of the research could not be able to fully ascertain the phenomena in general in terms of EFL college students’ perceptions of the PGA, the use of the writing strategies, as well as the conceptions toward blog writing. Considering the similar characteristics in the participants, only two classes of the students could be obtained. Because the research was based on the students’ willingness to cooperate as volunteers, it was very difficult for me to control the students’ attendance, and some of them dropped out halfway through the course. In order to ensure the research validity and reliability, I had to calculate the students’ attendance

rate in order to select the most attentive subjects, so some students with low attendance rates were eliminated from this study, which also decreased the numbers of the participants.

Second, there are two semesters in an academic year, and there are eighteen weeks in each semester in light of the Taiwanese educational system. This study was only conducted in a single semester due to the time constraint and the participants' willingness to cooperate, while my availability did not fit in with the class schedule during the second semester. In addition, the longer experimental instruction, the higher there could be the possibility of negative results appearing since the students also complained that they needed to submit two writing assignments every week. As a result, this study added to their workloads, and therefore the duration of this study was to be carried out during only one semester.

Third, due to the influences of the Taiwanese educational system and culture, the participants were prone to be reticent and passive in class, so it was very difficult for me to collect data through the observations. The students usually listened to the lectures and followed the instruction in class, but there were shortcomings in terms of insufficient questioning, criticising, or debating abilities. Because they usually tended to be receivers in classrooms, they were silent and were not confident enough to voice their views in class. Although I, as the instructor of the programme, attempted to motivate and encourage them to speak continually, the efficacy was quite limited. Therefore, the observational data was not as ideal as could have been expected, which in turn limited to providing a wider range of precise results to answer the RQs.

Fourth, the research was not conducted in a computer lab. Since the writing course was not directly related to computer subjects, the use of a computer lab was not permitted according to the regulations at the target university. This was a potential shortcoming since this study concerned the affordance of computer technology in English writing, and it was hoped that this study could be conducted in a computer lab in order to potentially increase the students' real sense of computer operation in an English writing classroom. Although Lin et al. (2013) pointed out the use of a computer lab hindered the students' interaction with the instructor due to the classroom settings, and the utilisation of computers in class might also distract the students from the course contents, it would nevertheless be useful carry



out a study in a computer lab to observe whether the consequences would be the same or different from the previous research's.

Fifth, on account of ethical and practical considerations, the application of video recording was not feasible. As collecting observational data was complicated, I had very limited observational data. It was assumed that a greater amount of observational data would be gathered if video recordings were implemented in the process, which could have contributed to collecting a greater amount of details. Collecting observational data was therefore undertaken while delivering course contents, so missing data could be expected as a result of the multitasking that was entailed while gathering necessary evidence.

Finally, the students' reflective journals toward blogging in English writing classrooms could be considered for future use since a greater number of students' thoughts, ideas, or opinions to the research other than the interview data might be obtained. However, to decrease the students' workloads and increase their participatory willingness, the reflective journals were not employed. The participants complained that they had too many writing assignments because they needed to submit two writing assignments every week (one submitted to me and the other to the course instructor). The students were very likely to reject to take part in this study, withdraw from this study, or have very negative perceptions of this study if they were asked to consistently write the reflective journals over a long term period of time. Consequently, they were not executed in order to remain within the scope of a reciprocal relationship with the participants, and motivate their willingness to participate.

### **8.3 Pedagogical Implications**

The main purposes of this study are to examine whether the integration of the PGA and blog developed the EFL college students' writing performances, and also to determine the use of their English writing strategies after the treatments. According to the quantitative and the qualitative research findings, I have listed several pedagogical implications for future instruction and application.

1. The effectiveness of the PGA on the students' writing development was confirmed. Nevertheless, it was further suggested that model article and instruction should be

deemed to be the same. The provision of model articles might not solve students' writing difficulties completely, and instruction might not fully clarify students' understanding about completing writing tasks. Therefore, the effectiveness of using model articles could be maximised along with providing a sufficient amount of instruction time, and instruction could greatly meet students' needs along with providing appropriate model articles. When these two techniques are integrated, it is very likely to maximise EFL college students' writing performances. In other words, writing instructors are recommended to provide model articles to their students, but they cannot depend on them excessively. It is necessary to provide students with sufficient brainstorming and discussions so that they would have more personal points of view toward the writing topics, and decrease the possibility of being confined to the contents in the model articles.

2. The PGA increased the students' sense of collaborative learning and critical thinking abilities through the interaction and communication with others during the process. However, the practitioners who would like to apply the PGA should spend time motivating and encouraging students who are reticent in order to have them engage in the course contents. Therefore, I suggested that writing instructors talk about the teaching contents briefly for the upcoming class and ask the students to preview them and search for the related information in advance. Then, they can exchange their information, ideas, and opinions in class by applying group discussions before whole-class discussions. This might be helpful to motivate students' engagements because they would be more confident and have a greater number of ideas to express themselves or raise issues during discussions.
3. Giving writing assignment is a pivotal practice to train students' writing abilities. In order to avoid students becoming tired of writing about the same topic, it was suggested finishing each instructional procedure as soon as possible, so students could experience different types of genres by having new model articles and new writing topics. Moreover, writing in pairs or group writing might decrease the students' levels of negative attitudes because it would reduce their workloads by applying these techniques.
4. In terms of the writing strategies, it was claimed that one's writing strategies are difficult to change because they involve one's habit formation which needs time to

be modified. In order to create students' writing strategies while the PGA and blog are integrated, it is suggested conducting a longer period of instruction so that students are more able to benefit from it to develop their writing strategies.

5. It is asserted that the use of different pedagogical tools would make students explore different writing strategies, so blogs could be a potential tool in EFL writing classrooms. By doing so, not only would students' writing strategies be developed through the use of different instructional means, but it could also possibly decrease their pressure and sense of apprehension toward English writing. The effects might be more obvious among college-level students whose cognitions and behaviour are mature enough to find a variety of strategies to overcome writing difficulties by themselves.
6. Many participants did not value the importance of English writing. For example, one of the interview subjects mentioned that speaking is more important, and writing is for written reports only. It was consequently argued that how to motivate students' writing interests is also an important issue because they would explore and apply different strategies to facilitate their English writing abilities once they are motivated. Many studies (Aljumah, 2012; Aydin, 2014; Fageeh, 2011; Golonka et al., 2014; Habul-Šabanović, 2015; Huang, 2015; Lai & Kritsonis, 2006; Lin et al., 2013; Lin et al., 2014; Lin et al., 2015; Noytim, 2010; Sarica & Cavus, 2009; Silviyanti & Yusuf, 2014; Sun, 2010; Zhytska, 2012) have shown that the use of computer technology could increase students' language learning motivations and also develop their positive attitudes toward language learning. The effects of blogs to develop students' writing motivations have also been proved by some studies (Aljumah, 2012; Noytim, 2010; Silviyanti & Yusuf, 2014; Sun, 2010). Therefore, it is recommended that understanding how EFL college students perceive writing tasks is also crucial to help them create, explore, and develop strategies for their writing, which would be more effective if computer technology is used in classrooms.
7. It was asserted that students could have a greater number of opportunities to be exposed to language input when blog writing is implemented (Arslan & Şahin-Kızıl, 2010). Due to the features in blogs, students are able to read others' writing samples, share writing samples with others, and give and receive feedback to each other anytime and anywhere, which not only contribute to constructing students' writing

skills and abilities, but also generate their sense of collaborative learning. In addition, they might understand that writing could be a collaborative task in an online social network in which they learn, imitate, and modify mutually. Therefore, they would realise that writing is for communication with others, and their senses of ownership and readership might be developed accordingly. Nevertheless, I suggested that a vis-à-vis feedback session should be provided after giving online comments to each other, because students could then have opportunities to discuss with their peers or clarify their contents verbally. Therefore, not only could the efficacy of the interaction, communication, and socialisation on blogs be reinforced, but also their sense of “real” interaction, communication, and socialisation could be developed.

8. In addition to attainable peers’ writing samples on blogs, students can gather a greater deal of online information for their writing samples. A recent report that investigated Taiwanese college students’ media usage behaviour pointed out that the Internet was the most commonly used medium among Taiwanese university students, with there being a 98.9% utility rate, while using the Internet 6.8 days a week for an average of 6.8 hours per day (Liu, 2015, July 24). Due to the very high usage demands, it is recommended that language instructors incorporate using the Internet in classrooms to provide students with a wider range of opportunities to be exposed to language and cultural input, have in-depth discussions, and learn collaboratively in order to contributing to helping them become more proficient in using both oral and written English (Liu, 2005). By using Internet technology in writing classrooms, students would have a greater number of references for their writing samples. For example, they will be able to refer to other written examples, learn writing skills, and acquire linguistic knowledge, so their writing competence may be strengthened significantly if Internet technology is incorporated with their writing tasks.
9. However, instructors who introduce blogs in writing classrooms need to pay attention to students’ revised writing samples because they may take advantage of easy copying and pasting functions in blogs to complete their revised work. Furthermore, to increase students’ understanding toward instructor’s feedback, providing oral comments is also recommended. By doing so, instructors can explain students’ general problems in their writing samples in class, so they will be more

able to revise their essays, which also decrease the possibility of copying and pasting. In addition, to save instructors' time and energy and simplify the marking process, having access to students' account could make marking more easily because instructors then will be able to mark their essays on the mistakes directly by using different colour fonts to highlight and emphasise the comments. Therefore, the feedback might be more understandable and effective to the students.

#### **8.4 Suggestions for Future Research**

The major purposes of this study are to examine whether the integration of the PGA and blog developed the EFL college students' writing performances, and to determine the use of their English writing strategies after the treatments. This research was thereby designed to gratify the research purposes and determine the answers for the RQs. However, several suggestions are provided for future research extension to corroborate the effectiveness of the PGA as well as blog writing.

1. Due to there being difficulties in the process of locating participants, the population in the current study was quite limited, and they were not selected randomly, so an experimental study with larger population is suggested to be carried out in future studies. To provide a wider range of representative research results and achieve research generalisability, it was recommended that participants in further studies can be on a randomly-selected basis with a greater number. Therefore, the research results will be more able to be extensively applied in some other EFL learning contexts.
2. Studies with longer treatment phases are recommended. Although the effects of the PGA employment and the blog application were corroborated in this study, there were not significant differences in terms of the students' utilisation of the writing strategies in the two groups. It is worth investigating whether the implementation of the PGA and blog results in students' different application of writing strategies because it is likely to help instructors and learners understand how to utilise different strategies to cope with different learning situations in order to stimulate and maximise students' writing performances effectively. Above all, changing one's nurtured habits in writing takes a great deal of time.

3. The current study did not examine the instructor's perspectives toward the integration of the PGA and blog in EFL college students' writing classrooms because the purpose of this study was to deal with its effectiveness on students' writing development. Nevertheless, the efficacy of the integration had been verified, so how writing instructors perceive this form of integration is a separate issue. By discussing teachers' perspectives, those who would like to apply both the PGA and blog in EFL writing classrooms will be more able to have preparations, suggestions, and expectations for their students.
4. To further investigate the impact of the PGA, a third group without any treatments can be included in future studies. It was found the students' writing performances were significantly improved after the treatments in both the control group and the experimental group, but claiming that their improvement was all because of the execution of the PGA is not completely justifiable. On the other hand, some other factors might also develop their writing abilities. For example, as time elapsed, the students might learn something new in other classes, which was likely to develop their writing abilities as well. However, if a third group without any treatments is involved in future studies, further evidence can be obtained to judge the effects of the PGA, which is outside of the scope of the current study.
5. Owing to the regulations at the target university, conducting the research in a computer lab was infeasible, so I had to make a concession by carrying out this study in a non-computer classroom, which could have influenced the research results. The classroom settings in computer labs are completely different from non-computer classrooms, and the students' sense of presence might be different if they were writing in a computer lab, so these external factors might bring about different research results. It is therefore suggested to undertake a similar study in a computer lab, which may be useful for practitioners to decide what kind of learning settings will be more appropriate for their students.
6. On account of the practical difficulties, the use of video recordings in the classrooms, and the students' reflective journals were not implemented. However, it is maintained that video recordings can help researchers to capture some observational data, which may be easily dismissed during the process. The students' reflective journals can also provide researchers with a greater amount of extensive

perspectives, opinions, or suggestions in terms of students' viewpoints. Thus, the employments of the two techniques are recommended for future studies.

7. The current study integrated the PGA and blog in an EFL writing classroom, and its effectiveness was also confirmed. However, there remain many applications in Web 2.0, such as twitter or wikis. In order to expand the employment of the PGA through using current computer technology, other Web 2.0 applications could be incorporated with the PGA, so it may have a greater range of applications in EFL writing education, and its related research will be therefore emerging to transform the EFL writing education.

### **8.5 Conclusion of this Study**

Compared with the PDA, PCA, or GRA, the PGA is relatively new in the field of English writing education, and studies relating to this topic are relatively scarce. Also, I was encouraged to conduct a study related to blog writing because blogs are user-friendly, there is ease of use, and they allow for collaborative learning. This study therefore integrated both the PGA and blog to examine its effects on EFL college students' writing development and their utilisation of the writing strategies.

Following the research design, data collection, and data analysis, I proposed that the integration of the PGA and blog strengthened the EFL college students' writing performances conspicuously and significantly, because the students:

- obtained a greater number of ideas, thoughts, and examples in the model articles as well as being able to read their peers' writing samples
- received a greater deal of linguistic knowledge through the model articles as well as the instructor's analysis
- were involved in an interactive and communicative writing context that allowed for exchanging or stimulating ideas for their writing samples
- were able to access online information or language usages to help them construct writing samples, so they became more autonomous while being engaged in English writing
- wrote collaboratively in which they read and shared writing samples with their peers, and gave and received feedback from their peers

- could understand the senses of ownership and readership, so they realised that writing was for the purpose of communication
- could increase their critical thinking abilities through the process of reading and sharing writing samples, as well as giving and receiving comments
- improved their attitudes toward English writing because they understood writing could be interactive and communicative, and not merely a task to be completed in isolation
- facilitated their affections toward English writing through the interactive and communicative writing, so they felt more secure and less anxious
- finally had a greater amount of interests and motivations in English writing, so their writing abilities were therefore developed

It was consequently maintained that the students could greatly benefit from both the PGA and blog for their English writing development. Golonka et al. (2014) mentioned that language learners are fond of using computer technology in their language learning, and they prefer using it to the traditional ones, so language learners might be more engaged in their language learning process, and they are likely to present more positive attitudes toward language learning, which is also in accordance with Fang's (2010) findings. Nevertheless, innovating students' writing strategies is also important, which might enhance their writing abilities, strengthen their confidence in English writing, and encourage their writing motivations. As a result, it is highly recommended that computer technology be incorporated into EFL writing classrooms because students' writing strategies may be generated as a result if they use different tools to write new samples.

Nowadays, an increasingly greater number of studies regarding mobile-assisted language learning are emerging (e.g. learning with smartphones). However, I questioned its appropriateness and effectiveness on EFL college students' writing development, although they have brought a great number of benefits, such as facilitating ubiquitous learning. One reason is that learning with smartphones relates to informal individualised learning (Godwin-Jones, 2011), but Kitchakarn (2012) and Myles (2002) advocated that writing should be learned and practised in formal learning contexts. Another reason is the use of smartphones is often forbidden in formal classroom settings, because it is very difficult for



instructors to control and oversee students' in-class participation. Therefore, the application of smartphones in EFL writing classrooms might be inappropriate, but it would be effective for those who are self-regulated and can function independently in informal learning contexts.

Finally, it was concluded that the integration of the PGA and blog develops the students' writing performances through the reading, sharing, giving, and receiving process in which they are writing interactively with reading audiences in mind. As a result, the students' writing attitudes and affections toward English writing are improved in this collaborative writing process, which strengthens their writing competence by increasing their writing interests and motivations. The research consequences demonstrate that the integration of the PGA and blog results in an intricate relationship in which each dimension intertwines with one another to enrich the students' writing performances directly and indirectly. A circulated cycle (Figure 20) is formed to explain how the amalgamation of the PGA and blog facilitates EFL college students' writing performances.

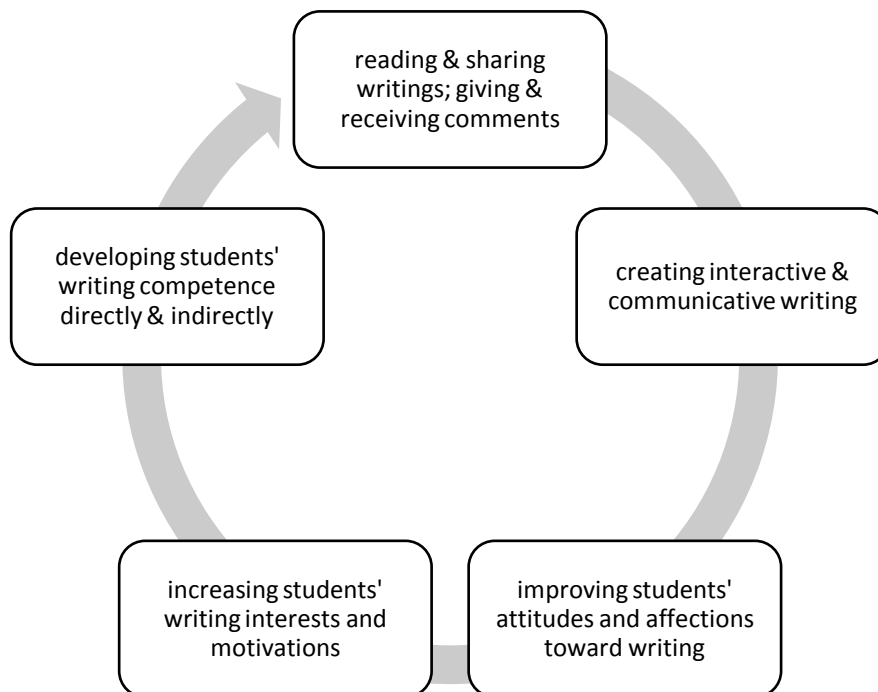


Figure 20. A Circulated Cycle for the Integration of the PGA and Blog Writing

## REFERENCES

- Ahmad, K., Corbett, G., Rogers, M., & Sussex, R. (1985). *Computers, language learning and language teaching*. Cambridge: Cambridge University Press.
- Ahmed, A. H. M. A. H. (2011). *The EFL essay writing difficulties of Egyptian student teachers of English: Implications for essay writing curriculum and instruction*. Unpublished doctoral dissertation, University of Exeter, Exeter, UK.
- Ahn, H. (2012). Teaching writing skills based on a genre approach to L2 primary school students: An action research. *English Language Teaching*, 5(2), 2-16.
- Al-Jarf, R. S. (2004). The effects of web-based learning on struggling EFL College Writers. *Foreign Language Annals*, 37(1), 49-57.
- Al-Jarf, R. S. (2005). *Use of CALL in no-tech EFL classrooms*. Paper presented at the International Conference on English Language Studies 3 (ICELS 3), Yogyakarta, Indonesia. Retrieved December 7, 2011, from [https://www.researchgate.net/profile/Reima\\_AlJarf/publication/267999586\\_Use\\_of\\_CALL\\_in\\_No-Tech\\_EFL\\_Classrooms/links/5549e5cf0cf205bce7ac4908.pdf](https://www.researchgate.net/profile/Reima_AlJarf/publication/267999586_Use_of_CALL_in_No-Tech_EFL_Classrooms/links/5549e5cf0cf205bce7ac4908.pdf)
- 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), 100-116.
- Alonso, F., López, G., Manrique, D., & Viñes, J. M. (2005). An instructional model for web-based e-learning education with a blended learning process approach. *British Journal of Educational Technology*, 36(2), 217-235.
- Amaral, L. A., & Meurers, D. (2011). On using intelligent computer-assisted language learning in real-life foreign language teaching and learning. *ReCALL*, 23(1), 4-24.
- Armstrong, K., & Retterer, O. (2008). Blogging as L2 writing: A case study. *Association for the Advancement of Computing In Education Journal*, 16(3), 233-251.
- Arslan, R. Ş., & Şahin-Kızıl, A. (2010). How can the use of blog software facilitate the writing process of English language learners? *Computer Assisted Language Learning*, 23(3), 183-197.
- Ary, D., Jacobs, L. C., Sorensen, C., & Walker, D. A. (2014). *Introduction to research in education* (9th ed.). Belmont, CA: Wadsworth Cengage Learning.
- Aydin, S. (2014). The Use of Blogs in Learning English as a Foreign Language. *Mevlana International Journal of Education*, 4(1), 244-259.

- Babalola, H. A. L. (2012). Effects of process-genre based approach on the written English performance of computer science students in a Nigerian Polytechnic. *Journal of Education and Practice*, 3(6), 1-6.
- Bach, L. A. (2008). Blogging during terminal care: Communication, color schemes, and creating a community. *Journal of Clinical Oncology*, 26(27), 4504-4506.
- Badger, R., & White, G. (2000). A process genre approach to teaching writing. *ELT Journal*, 54(2), 153-160.
- Bandura, A. (1977). *Social learning theory*. Englewood Cliffs: Prentice-Hall.
- Basit, T. N. (2010). *Conducting research in educational contexts*. London: Continuum.
- Beatty, K. (2003). *Teaching and researching computer-assisted language learning*. Essex: Pearson Education Limited.
- Bell, J. (2005). *Doing your research project: A guide for first-time researchers in education, health and social science* (4th ed.). Buckingham: Open University Press.
- Bijami, M., & Raftari, S. (2013). Product, process, and genre approaches to writing: A comparison. *The Iranian EFL Journal*, 9(15), 9-18.
- Black, R. W. (2005). Access and affiliation: The literacy and composition practices of English-language learners in an online fanfiction community. *Journal of Adolescent & Adult Literacy*, 49(2), 118-128.
- Blake, R. J. (2009). The use of technology for second language distance learning. *The Modern Language Journal*, 93, 822-835.
- Bollen, K. A. (1989). *Structural equations with latent variables*. New York: Wiley.
- Bordbar, F. (2010). English teachers' attitudes toward computer-assisted language learning. *International Journal of Language Studies*, 4(3), 27-54.
- Bot, K. d., Lowie, W., & Verspoor, M. (2005). *Second language acquisition: An advanced resource book*. London: Routledge.
- Boudah, D. J. (2011). *Conducting educational research: Guide to completing a major project*. Thousand Oaks, CA: Sage.
- Boulos, M. N. K., Maramba, I., & Wheeler, S. (2006). Wikis, blogs and broadcasts: A new generation of web-based tools for virtual collaborative clinical practice and education. *BMC Medical Education*, 6(41), 61-68.
- Brace, N., Kemp, R., & Snelgar, R. (2012). *SPSS for psychologists* (5th ed.). Basingstoke: Palgrave Macmillan.

- Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, 3, 77-101.
- British Council. (2013). *The English Effect: The impact of English, what it's worth to the UK and why it matters to the world*. British Council. Retrieved November 20, 2015, from <https://www.britishcouncil.org/sites/default/files/english-effect-report-v2.pdf>
- Brown, H. D. (1994). *Teaching by principles: An interactive approach to language pedagogy*. Englewood Cliffs, NJ: Prentice Hall Regents.
- Brown, H. D. (2000). *Principles of language learning and teaching* (4th ed.). New York: Addison Wesley Longman, Inc.
- Brown, H. D. (2007). *Principles of language learning and teaching* (5th ed.). White Plains, NY: Pearson Longman.
- Bryman, A. (2012). *Social research methods* (4th ed.). Oxford: Oxford University Press.
- Callaghan, M., Knapp, P., & Noble, G. (1993). Genre in practice. In B. Cope & M. Kalantzis (Eds.), *The powers of literacy: A genre approach to teaching writing* (pp. 179-202). London: The Falmer Press.
- Campbell, A. (2005). Weblog applications for EFL/ESL classroom blogging: A comparative review. *The Electronic Journal for English as a Second Language*, 9(3). Retrieved June 30, 2012, from <http://www.tesl-ej.org/wordpress/issues/volume9/ej35/ej35m1/>
- Carballo-Calero, M. V. F. (2001). The EFL teacher and the introduction of multimedia in the classroom. *Computer Assisted Language Learning*, 14(1), 3-14.
- Caudery, T. (1995). What the "process approach" means to practising teachers of second language writing skills. *The Electronic Journal for English as a Second Language*, 1(4). Retrieved March 20, 2012, from <http://www.tesl-ej.org/wordpress/issues/volume1/ej04/ej04a3/?wscr=>
- Chamot, A. U. (2004). Issues in language learning strategy research and teaching. *Electronic Journal of Foreign Language Teaching*, 1(1), 14-26. Retrieved May 14, 2012, from <http://e-flt.nus.edu.sg/v1n12004/chamot.htm>
- Chamot, A. U. (2005). Language learning strategy instruction: Current issues and research. *Annual Review of Applied Linguistics*, 25, 112-130.
- Chang, C. S., Liu, E. Z. F., Sung, H. Y., Lin, C. H., Chen, N. S., & Cheng, S. S. (2014). Effects of online college student's Internet self-efficacy on learning motivation and performance. *Innovations in Education and Teaching International*, 51(4), 366-377.

- Chang, K. C. Y. (2007). *The relationships between individual learning styles and learning strategies when using electronic materials for practising EFL listening*. Unpublished doctoral dissertation, University of Newcastle-upon-Tyne, Newcastle, UK.
- Chapelle, C. A. (2001). *Computer applications in second language acquisition: Foundations for teaching, testing and research*. Cambridge: Cambridge University Press.
- Chapelle, C. A. (2010a). Computer assisted language learning. In B. Spolsky & F. M. Hult (Eds.), *The handbook of educational linguistics* (pp. 585-595). Oxford: Wiley-Blackwell.
- Chapelle, C. A. (2010b). The spread of computer-assisted language learning. *Language Teaching*, 43(1), 66-74.
- Chen, C. H. (2013). *全民英檢一路通: 中級寫作能力測驗* [A pathway to the General English Proficiency Test: Writing proficiency test for the intermediate level]. Taipei: Crane Publishing.
- Chen, S. J. (2014). 全球化下的臺灣英文教育: 政策、教學及成果 [The English education in Taiwan in globalisation: Policy, teaching and performance]. *教育人力與專業發展* [Educator and Professional Development], 31(2), 7-20.
- Chen, Y. L., Liu, E. Z. F., Shih, R. C., Wu, C. T., & Yuan, S. M. (2011). Use of peer feedback to enhance elementary students' writing through blogging. *British Journal of Educational Technology*, 42(1), E1-E4.
- Chen, Z. H. (2015, August 11). 台灣雅思成績世界第 18 [Taiwanese IELTS scores ranked 18th in the world]. *聯合報* [United Daily News]. Retrieved September 7, 2015, from <http://udn.com/news/story/9/1114134%E5%8F%B0%E7%81%A3%E9%9B%85%E6%80%9D%E6%88%90%E7%B8%BE%E4%B8%96%E7%95%8C%E7%AC%AC18>
- Chin, P. (2004). *Using C & IT to support teaching* London: RoutledgeFalmer.
- Chuang, H. H. (2008). Perspectives and issues of the creation for weblog-based electronic portfolios in teacher education. *British Journal of Educational Technology*, 39(1), 170-174.
- Coe, R. M. (1987). An apology for form; or, who took the form out of the process? *College English*, 49(1), 13-28. Retrieved March 22, 2012, from <http://www.jstor.org/stable/377786>
- Cohen, A. D. (1998). *Strategies in learning and using a second language*. London: Addison Wesley Longman.
- Cohen, L., Manion, L., & Morrison, K. (2011). *Research methods in education* (7th ed.). London: Routledge.

- Cook, V. (1991). *Second language learning and language teaching*. London: Edward Arnold.
- Cook, V. (1993). *Linguistics and second language acquisition*. Basingstoke: Macmillan.
- Cook, V. (2008). *Second language learning and language teaching* (4th ed.). London: Hodder Education.
- Cope, B., & Kalantzis, M. (1993). Introduction: How a genre approach to literacy can transform the way writing is taught. In B. Cope & M. Kalantzis (Eds.), *The powers of literacy: A genre approach to teaching writing* (pp. 1-21). London: The Falmer Press.
- Creswell, J. W. (2002). *Educational research: Planning, conducting, and evaluating quantitative and qualitative research*. New Jersey: Prentice Hall.
- Creswell, J. W. (2012). *Educational research: Planning, conducting, and evaluating quantitative and qualitative research* (4th ed.). Boston: Pearson.
- Creswell, J. W., & Clark, V. L. P. (2011). *Designing and conducting mixed methods research* (2nd ed.). London: Sage.
- Donato, R. (2000). Sociocultural contributions to understanding the foreign and second language classroom. In J. P. Lantolf (Ed.), *Sociocultural theory and second language learning* (pp. 27-50). Oxford: Oxford University Press.
- Dooly, M. (2008). Constructing knowledge together. In M. Dooly (Ed.), *Telecollaborative language learning: A guidebook to moderating intercultural collaboration online* (pp. 21-45). Bern: Peter Lang.
- Dörnyei, Z. (2003). *Questionnaires in second language research: Construction, administration, and processing*. Mahwah, NJ: Lawrence Erlbaum Associates, Inc.
- Dörnyei, Z. (2005). *The psychology of the language learner: Individual differences in second language acquisition*. New York: Routledge.
- Dörnyei, Z. (2007). *Research methods in applied linguistics: Quantitative, qualitative, and mixed methodologies*. Oxford: Oxford University Press.
- Dörnyei, Z., & Taguchi, T. (2010). *Questionnaires in second language research : Construction, administration, and processing* (2nd ed.). New York: Routledge.
- Dudeny, G., & Hockly, N. (2007). *How to teach English with technology*. Harlow: Pearson Education Limited.
- Durako, J. A., Stanchi, K. M., Edelman, D. P., Amdur, B. M., Brown, L. S. C., & Connelly, R. L. (1996). From product to process: Evolution of a legal writing program. *University of Pittsburgh Law Review*, 58, 719-726.

- Dwyer, C. (1993). Multimedia in education. *Educational Media International*, 30(4), 193-198.
- Education First. (2015). *EF English Proficiency Index*. Education First. Retrieved November 21, 2015, from <http://media.ef.com/~media/centralefcom/epi/downloads/full-reports/v5/ef-epi-2015-english.pdf>
- Ehsani, F., & Knodt, E. (1998). Speech technology in computer-aided language learning: Strengths and limitations of a new CALL paradigm. *Language Learning & Technology*, 2(1), 45-60.
- Elkjaer, B. (2006). Social learning theory: Learning as participation in social processes. In M. Easterby-Smith & M. A. Lyles (Eds.), *Handbook of organizational learning and knowledge management*. Chichester, UK: Blackwell Publishing. Retrieved February 9, 2012, from Retrieved from <http://www.blackwellreference.com/subscriber/uid=42/book?id=g97806312267279780631226727>
- Ellis, R. (1997). *Second language acquisition*. Oxford: Oxford University Press.
- 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 and Literature*, 2(1), 31-48.
- Fang, Y. C. (2010). Perceptions of the computer-assisted writing program among EFL college learners. *Educational Technology & Society*, 13(3), 246-256.
- Field, A. (2013). *Discovering statistics using IBM SPSS statistics: And sex and drugs and rock 'n' roll* (4th ed.). London: Sage.
- Fraenkel, J. R., Wallen, N. E., & Hyun, H. H. (2012). *How to design and evaluate research in education* (8th ed.). New York: Mc-Graw-Hill.
- Gall, M. D., Gall, J. P., & Borg, W. R. (2010). *Applying educational research: How to read, do, and use research to solve problems of practice* (6th ed.). Boston: Pearson.
- Gao, F. (2012). Probing into problems of writing approach of argumentations for in-service masters of education: From the angle of process genre pedagogy. *Higher Education of Social Science*, 2(3), 15-21.
- Garrett, N. (2009). Computer-assisted language learning trends and issues revisited: Integrating innovation. *The Modern Language Journal*, 93, 719-740.
- Garrison, R., Anderson, T., & Archer, W. (2000). Critical inquiry in a text-based environment: Computer conferencing in higher education. *The Internet and Higher Education*, 2(2-3), 87-105.

- Gay, L. R., & Airasian, P. (2000). *Educational research: Competencies for analysis and application* (6th ed.). Upper Saddle River, NJ: Prentice Hall.
- Gay, L. R., Mills, G. E., & Airasian, P. (2009). *Educational research: Competencies for analysis and applications* (9th ed.). Upper Saddle River, NJ: Merrill.
- Godwin-Jones, R. (2003). Blogs and wikis: Environments for on-line collaboration. *Language Learning & Technology*, 7(2), 12-16.
- Godwin-Jones, R. (2011). Emerging Technologies: Mobile APPs for language learning. *Language Learning & Technology*, 15(2), 2-11.
- Golafshani, N. (2003). Understanding reliability and validity in qualitative research. *The Qualitative Report*, 8(4), 597-607.
- Goldberg, A., Russell, M., & Cook, A. (2003). The effect of computers on student writing: A metaanalysis of studies from 1992 to 2002. *The Journal of Technology, Learning, and Assessment*, 2(1), 1-51.
- Golonka, E. M., Bowles, A. R., Frank, V. M., Richardson, D. L., & Freynik, S. (2014). Technologies for foreign language learning: A review of technology types and their effectiveness. *Computer Assisted Language Learning*, 27(1), 70-105.
- Green, J. M., & Oxford, R. (1995). A closer look at learning strategies, L2 proficiency, and gender. *TESOL Quarterly*, 29(2), 261-297.
- Grenfell, M., & Harris, V. (1999). *Modern languages and learning strategies: In theory and practice*. London: Routledge.
- Griffiths, C., & Parr, J. M. (2001). Language-learning strategies: Theory and perception. *ELT Journal*, 55(3), 247-254.
- Gruba, P. (2004). Computer assisted language learning (CALL). In A. Davies & C. Elder (Eds.), *The handbook of applied linguistics* (pp. 623-648). Malden, MA: Blackwell Publishing Ltd.
- Gündüz, N. (2005). Computer assisted language learning (CALL). *Journal of Language and Linguistics Studies*, 1(2), 193-214.
- Habul-Šabanović, I. (2015). Using blogs to promote student interaction and learning in EFL classes. *Journal of Transdisciplinary Studies*, 8(2), 9-22.
- Hall, A. (2007). *Vygotsky goes online: Learning design from a socio-cultural perspective*. Paper presented at the Learning and Socio-cultural Theory: Exploring Modern Vygotskian Perspectives International Workshop 2007, New South Wales, Australia. Retrieved August 11, 2012, from <http://ro.uow.edu.au/llrg/vol1/iss1/6/>



- Hammersley, M. (2010). Reproducing or constructing? Some questions about transcription in social research. *Qualitative Research, 10*(5), 553-569.
- Han, J. (2001). Teaching writing: A process genre approach. *Foreign Language World, 4*, 35-40.
- Harklau, L. (2002). The role of writing in classroom second language acquisition. *Journal of Second Language Writing, 11*(4), 329-350.
- Harmer, J. (2007). *The practice of English language teaching* (4th ed.). Harlow: Pearson Longman.
- Haythornthwaite, C., & Andrews, R. (2011). *E-learning theory and practice*. London: Sage.
- Hennink, M., Hutter, I., & Bailey, A. (2011). *Qualitative research methods*. London: Sage.
- Higgins, J., & Johns, T. (1984). *Computers in language learning*. London: Collins.
- Hinton, P. R., McMurray, I., & Brownlow, C. (2014). *SPSS explained* (2nd ed.). East Sussex: Routledge.
- Ho, M. C., & Savignon, S. J. (2007). Face-to-face and computer-mediated peer review in EFL writing. *CALICO Journal, 24*(2), 269-290.
- Hokanson, B., & Hooper, S. (2000). Computers as cognitive media: Examining the potential of computers in education. *Computers in Human Behavior, 16*(5), 537-552.
- Howitt, D., & Cramer, D. (2014). *Introduction to SPSS in psychology: For version 22 and earlier* (6th ed.). Harlow: Pearson Education.
- Hsiao, T. Y., & Oxford, R. L. (2002). Comparing theories of language learning strategies: A confirmatory factor analysis. *The Modern Language Journal, 86*(3), 368-383.
- Huang, H. C. (2015). From web-based readers to voice bloggers: EFL learners' perspectives. *Computer Assisted Language Learning, 28*(2), 145-170.
- Hughey, J. B., Wormuth, D. R., Hartfiel, V. F., & Jacobs, H. L. (1983). *Teaching ESL composition: Principles and techniques*. Rowley, Massachusetts: Newbury House Publishers, Inc.
- Hyland, K. (2002). *Teaching and researching: Writing*. Harlow: Longman.
- Hyland, K. (2003a). Genre-based pedagogies: A social response to process. *Journal of Second Language Writing, 12*(1), 17-29.
- Hyland, K. (2003b). *Second language writing*. Cambridge: Cambridge University Press.

- Hyland, K. (2007). Genre pedagogy: Language, literacy and L2 writing instruction. *Journal of Second Language Writing*, 16(3), 148-164.
- Intratrat, C. (2004). *Investigation on advantages and disadvantages in using English CALL according to the opinions of Thai university students and lecturers*. Paper presented at the International Conference in Use of New Technologies in Foreign Language Teaching, L'Université de Technologie de Compiègne, France. Retrieved December 5, 2011, from [http://digital.lib.kmutt.ac.th/journal/kmuttv30n1\\_1.pdf](http://digital.lib.kmutt.ac.th/journal/kmuttv30n1_1.pdf)
- Johnson, E. M. (2002). The role of computer-supported discussion for language teacher education: What do the students say? *CALICO Journal*, 20(1), 59-79.
- Johnson, A. (2004). Creating a writing course utilizing class and student blogs. *The Internet TESL Journal*, 10(8). Retrieved May 15, 2012, from <http://iteslj.org/Techniques/Johnson-Blogs/>
- Johnson, B., & Christensen, L. (2012). *Educational research: Quantitative, qualitative, and mixed approaches* (4th ed.). Thousand Oaks, CA: Sage.
- Johnson, B., & Christensen, L. (2014). *Educational research: Quantitative, qualitative, and mixed approaches* (5th ed.). Thousand Oaks, CA: Sage.
- Kaiser, H. F. (1970). A second generation little jiffy. *Psychometrika*, 35(4), 401-415.
- Kaiser, H. F. (1974). An index of factorial simplicity. *Psychometrika*, 39(1), 31-36.
- Kelm, O. R. (1996). *The application of computer networking in foreign language education: Focusing on principles of second language acquisition*. In M. Warschauer (Ed.), *Telecollaboration in Foreign Language Learning* (pp. 19-28). Honolulu, Hawai'i: Second Language Teaching & Curriculum Center, University of Hawai'i. Retrieved February 24, 2012, from, <https://books.google.co.uk/books?hl=en&lr=&id=ijVjT4aAtpQC&oi=fnd&pg=PA19&dq=The+application+of+computer+networking+in+foreign+language+education:+Focusing+on+principles+of+second+language+acquisition&ots=kV7fG0KRiX&sig=HmBzSNqG60GveQW5VC6ZM62sS4#v=onepage&q=The%20application%20of%20computer%20networking%20in%20foreign%20language%20education%3A%20Focusing%20on%20principles%20of%20second%20language%20acquisition&f=false>
- Kervin, L., & Derewianka, B. (2011). New technologies to support language learning. In B. Tomlinson (Ed.), *Materials development in language teaching* (2nd ed., pp. 328-351). Cambridge: Cambridge University Press.
- Khaldieh, S. A. (2000). Learning strategies and writing processes of proficient vs. less-proficient learners of Arabic. *Foreign Language Annals*, 33(5), 522-533.
- Kitchakarn, O. (2012). Using blogs to improve students' summary writing abilities. *Turkish Online Journal of Distance Education*, 13(4), 209-219.

- Lai, C. C., & Kritsonis, W. A. (2006). The advantages and disadvantages of computer technology in second language acquisition. *National Journal for Publishing and Mentoring Doctoral Student Research*, 3(1), 1-6.
- Lam, Y. (2000). Technophilia vs. technophobia: A preliminary look at why second-language teachers do or do not use technology in their classrooms. *Canadian Modern Language Review*, 56(3), 389-420.
- Lantolf, J. P. (2000). Introducing sociocultural theory. In J. P. Lantolf (Ed.), *Sociocultural theory and second language learning* (pp. 1-26). Oxford: Oxford University Press.
- Learning-Theories.com (n.d.). *Social Learning Theory (Bandura)*. Learning-Theories.com. Retrieved August 9, 2012, from <http://www.learning-theories.com/social-learning-theory-bandura.html>
- Lee, K. W. (2000). English teachers' barriers to the use of computer-assisted language learning. *The Internet TESL Journal*, 6(12). Retrieved December 8, 2011, from <http://iteslj.org/Articles/Lee-CALLbarriers.html>
- Lee, Y. J. (2006). The process-oriented ESL writing assessment: Promises and challenges. *Journal of Second Language Writing*, 15(4), 307-330.
- Lehtinen, E. (2003). Computer-supported collaborative learning: An approach to powerful learning environments. In E. D. Corte, L. Verschaffel, N. Entwistle, & J. V. Merriëboer (Eds.), *Powerful learning environments: Unravelling basic components and dimensions*. Boston: Pergamon.
- Levy, M. (1997). *Computer-assisted language learning: Context and conceptualization*. Oxford: Clarendon Press.
- Li, Z. Q. (2010, June 29). 英語充電站: 大學英文寫作歷練的核心策略 [English charging station: The core strategies for university English writing practice]. *台灣立報* [Taiwan Lih Pao]. Retrieved November 22, 2015, from <http://www.lihpao.com/?action-viewnews-itemid-29370>
- Li, Z. Q. (2012). 台灣英語教育的演進與前瞻思維 [The evolution and vision of Taiwan's English education]. *台灣教育* [Taiwan Education Review], 674, 31-40.
- Liaw, S. S., Hatala, M., & Huang, H. M. (2010). Investigating acceptance toward mobile learning to assist individual knowledge management: Based on activity theory approach. *Computers & Education*, 54(2), 446-454.
- Lin, C. F. C., Yu, W. C. W., Wang, J., & Ho, M. H. (2015). Learning English Writing via A Web Digital Platform: A case of Taiwanese aboriginal nursing students' participation and learning outcomes. *The Online Journal of Distance Education and e-Learning*, 3(1), 38-56.

- Lin, M. H. (2014). Effects of classroom blogging on ESL student writers: An empirical reassessment. *The Asia-Pacific Education Researcher*, 23(3), 577-590.
- Lin, M. H. (2015). Learner-centered blogging: A preliminary investigation of EFL student writers' experience. *Educational Technology & Society*, 18(4), 446-458.
- Lin, M. H., Groom, N., & Lin, C. Y. (2013). Blog-assisted learning in the ESL writing classroom: A phenomenological analysis. *Educational Technology & Society*, 16(3), 130-139.
- Lin, M. H., Li, J. J., Hung, P. Y., & Huang, H. W. (2014). Blogging a journal: Changing students' writing skills and perceptions. *ELT Journal*, 68(4), 422-431.
- Lincoln, Y. S., & Guba, E. G. (1985). *Naturalistic inquiry*. Newbury Park: Sage.
- Lindsay, G. (2010). Ethical considerations and legal issues in educational research. In D. Hartas (Ed.), *Educational research and inquiry: Qualitative and quantitative approaches* (pp. 110-127). London: Continuum.
- Litwin, M. S. (1995). *How to measure survey reliability and validity*. Thousand Oaks, CA: Sage.
- Liu, E. Z. F., & Chang, Y. F. (2010). Gender differences in usage, satisfaction, self-efficacy and performance of blogging. *British Journal of Educational Technology*, 41(3), E39-E43.
- Liu, G. Z. (2005). The trend and challenge for teaching EFL at Taiwanese universities. *Regional Language Centre Journal*, 36(2), 211-221.
- Liu, K. Y. (2015, July 24). 大學生網路使用率 幾乎達百分百 [College students' Internet utility rate almost reaches 100%]. 聯合報 [United Daily News]. Retrieved November 26, 2015, from <http://udn.com/news/story/9/1076386%E5%A4%A7%E5%AD%B8%E7%94%9F%E7%B6%B2%E8%B7%AF%E4%BD%BF%E7%94%A8%E7%8E%87%E5%B9%BE%E4%B9%8E%E9%81%94%E7%99%BE%E5%88%86%E7%99%BE>
- Liu, M., Moore, Z., Graham, L., & Lee, S. (2003). A look at the research on computer-based technology use in second language learning: A review of the literature from 1990-2000. *Journal of Research on Technology in Education*, 34(3), 250-273.
- Liu, W., Liu, T., Liu, F., & Yang, S. (2011). *Computer assisted language learning*. Paper presented at the 2011 International Conference on E-Business and E-Government (ICEE2011), Shanghai, China. Retrieved December 7, 2011, from <http://ieeexplore.ieee.org/xpl/articleDetails.jsp?reload=true&arnumber=5881478&punumber%3D5779818>
- Lodico, M. G., Spaulding, D. T., & Voegtler, K. H. (2010). *Methods in educational research: From theory to practice*. San Francisco, CA: Jossey-Bass.

- Macaro, E. (2006). Strategies for language learning and for language use: Revising the theoretical framework. *The Modern Language Journal*, 90(3), 320-337.
- Marcus, S. (1993). Multimedia, hypermedia and the teaching of English. In M. Monteith (Ed.), *Computers and language* (pp. 21-43). Oxford: Intellect Ltd.
- Marshall, C., & Rossman, G. B. (2016). *Designing qualitative research* (6th ed.). Thousand Oaks, California Sage.
- Martin, J. R. (1993). A contextual theory of language. In B. Cope & M. Kalantzis (Eds.), *The powers of literacy: A genre approach to teaching writing* (pp. 116-136). London: Falmer.
- Martin, J. R. (2009). Genre and language learning: A social semiotic perspective. *Linguistics and Education*, 20(1), 10-21.
- Matsuda, P. K. (2003). Process and post-process: A discursive history. *Journal of Second Language Writing*, 12(1), 65-83.
- Maybin, J. (1994). Teaching writing: Process or genre? In S. Brindley (Ed.), *Teaching English* (pp. 186-194). London: Routledge.
- Mazdayasna, G., & Tahririan, M. H. (2001). Peer-review, teacher feedback and EFL learners' writing development. *Iranian Journal of Applied Linguistics*, 5(1), 55-67.
- McMillan, J. H. (2012). *Educational research: Fundamentals for the consumer* (6th ed.). Boston, MA: Pearson.
- McMillan, J. H., & Schumacher, S. (2006). *Research in education: Evidence-based Inquiry* (6th ed.). Boston, MA: Pearson.
- McMillan, J. H., & Schumacher, S. (2010). *Research in education: Evidence-based inquiry* (7th ed.). Boston, MA: Pearson.
- Mertens, D. M. (2010). *Research and evaluation in education and psychology: Integrating diversity with quantitative, qualitative, and mixed methods* (3rd ed.). Thousand Oaks, CA: Sage.
- Mertens, D. M. (2015). *Research and evaluation in education and psychology: Integrating diversity with quantitative, qualitative, and mixed methods* (4th ed.). Thousand Oaks, CA Sage.
- Miller, P. H. (2002). *Theories of developmental psychology* (4th ed.). New York: Worth Publishers.

- Ministry of Education. (2008). *中小學資訊教育白皮書* [A white book for information technology education in primary and secondary schools]. Ministry of Education. Retrieved November 26, 2015, from <http://epaper.edu.tw/files/topical/%E6%95%99%E8%82%B2%E9%83%A8%E4%B8%AD%E5%B0%8F%E5%AD%B8%E8%B3%87%E8%A8%8A%E6%95%99%E8%82%B2%E7%99%BD%E7%9A%AE%E6%9B%B82008-2011.doc>
- Ministry of Education. (2009a). *歲出機關別預算表* [Yearly budget form 2008 ]. Ministry of Education. Retrieved November 27, 2015, from [http://www.edu.tw/userfiles/9720001\\_bcme3420.pdf](http://www.edu.tw/userfiles/9720001_bcme3420.pdf)
- Ministry of Education. (2009b). *歲出機關別預算表* [Yearly budget form 2009 ]. Ministry of Education. Retrieved November 27, 2015, from <http://www.edu.tw/userfiles/98歲出機關別預算表.pdf>
- Ministry of Education. (2010). *歲出機關別預算表* [Yearly budget form 2010 ]. Ministry of Education. Retrieved November 27, 2015, from <http://www.edu.tw/userfiles/url/20120927094642/2.%E6%AD%B2%E5%87%BA%E6%A9%9F%E9%97%9C%E5%88%A5%E9%A0%90%E7%AE%97%E8%A1%A8.pdf>
- Ministry of Education. (2011). *歲出機關別預算表* [Yearly budget form 2011]. Ministry of Education. Retrieved November 27, 2015, from <http://www.edu.tw/userfiles/url/20120926174416/%E6%AD%B2%E5%87%BA%E6%A9%9F%E9%97%9C%E5%88%A5%E9%A0%90%E7%AE%97%E8%A1%A8.pdf>
- Ministry of Education. (2012). *歲出機關別預算表* [Yearly budget form 2012 ]. Ministry of Education. Retrieved November 27, 2015, from <http://www.edu.tw/userfiles/url/20121226094014/101%e5%b9%b4%e5%ba%a6%e6%b3%95%e5%ae%9a%e9%a0%90%e7%ae%97%e6%9b%b8.pdf>
- Ministry of Education. (2013). *歲出機關別預算表* [Yearly budget form 2013]. Ministry of Education. Retrieved November 27, 2015, from <http://www.edu.tw/userfiles/url/20130402112648/102%E5%B9%B4%E5%BA%A6%E6%B3%95%E5%AE%9A%E9%A0%90%E7%AE%97%E6%9B%B8%E9%9B%BB%E5%AD%90%E6%AA%94.pdf>
- Ministry of Education. (2014). *歲出機關別預算表* [Yearly budget form 2014]. Ministry of Education. Retrieved November 27, 2015, from <http://www.edu.tw/userfiles/url/20140310095731/%E6%95%99%E8%82%B2%E9%83%A8%103%E5%B9%B4%E5%BA%A6%E5%96%AE%E4%BD%8D%E6%B3%95%E5%AE%9A%E9%A0%90%E7%AE%97%E6%9B%B8.pdf>

- Ministry of Education. (2015a). 歲出機關別預算表 [Yearly budget form 2015]. Ministry of Education. Retrieved November 27, 2015, from [http://www.edu.tw/userfiles/url/20150310164807/104%E5%B9%B4%E5%BA%A6%E6%95%99%E8%82%B2%E9%83%A8%E6%B3%95%E5%AE%9A%E9%A0%90%E7%AE%97\(pdf%E6%AA%94\).pdf](http://www.edu.tw/userfiles/url/20150310164807/104%E5%B9%B4%E5%BA%A6%E6%95%99%E8%82%B2%E9%83%A8%E6%B3%95%E5%AE%9A%E9%A0%90%E7%AE%97(pdf%E6%AA%94).pdf)
- Ministry of Education. (2015b). 歲出機關別預算表 [Yearly budget form 2015]. Ministry of Education. Retrieved November 27, 2015, from [http://www.edu.tw/userfiles/url/20150907114400/105%E5%B9%B4%E5%BA%A6%E6%95%99%E8%82%B2%E9%83%A8%E9%A0%90%E7%AE%97%E6%A1%88\(pdf%E6%AA%94\)%20.pdf](http://www.edu.tw/userfiles/url/20150907114400/105%E5%B9%B4%E5%BA%A6%E6%95%99%E8%82%B2%E9%83%A8%E9%A0%90%E7%AE%97%E6%A1%88(pdf%E6%AA%94)%20.pdf)
- Ministry of Education. (2015c). 世界咖啡館暢談資訊教育 十年總藍圖啟航 [Talking information technology education in a world cafe: The start of a 10-year blueprint]. 教育部電子報 [E-paper of Ministry of Education]. Retrieved November 27, 2015, from [http://epaper.edu.tw/topical.aspx?topical\\_sn=896](http://epaper.edu.tw/topical.aspx?topical_sn=896)
- Mitchell, R., & Myles, F. (2004). *Second language learning theories* (2nd ed.). London: Arnold.
- Miyazoe, T., & 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, 185-199.
- Morgan, G. A., Leech, N. L., Gloeckner, G. W., & Barrett, K., C. (2013). *IBM SPSS for introductory statistics: Use and interpretation* (5th ed.). London: Routledge Academic.
- Morse, J. M. (2003). Principles of mixed methods and multimethod research design. In A. Tashakkori & C. Teddlie (Eds.), *Handbook of mixed methods in social and behavioral research* (pp. 189-208). Thousand Oaks, CA: Sage.
- Motteram, G. (2011). Developing language-learning materials with technology. In B. Tomlinson (Ed.), *Materials development in language teaching* (2nd ed., pp. 303-327). Cambridge: Cambridge University Press.
- Muijs, D. (2011). *Doing quantitative research in education with SPSS* (2nd ed.). London: Sage.
- Muncie, J. (2002). Process writing and vocabulary development: Comparing lexical frequency profiles across drafts. *System*, 30(2), 225-235.
- Murray, L., & Hourigan, T. (2008). Blogs for specific purposes: Expressivist or socio-cognitivist approach? *ReCALL*, 20(1), 82-97.
- Myles, J. (2002). Second language writing and research: The writing process and error analysis in student texts. *The Electronic Journal for English as a Second Language*, 6(2). Retrieved March 19, 2012, from <http://www.tesl-ej.org/wordpress/issues/volume6/ej22/ej22a1/?wscr>

- Nardi, B. A., Schiano, D. J., Gumbrecht, M., & Swartz, L. (2004). Why we blog. *Communications of the ACM*, 47(12), 41-46.
- Nation, I. S. P. (2009). *Teaching ESL/EFL reading and writing*. New York: Routledge.
- Nerbonne, J. (2002). Computer-assisted language learning and natural language processing. In R. Mitkov (Ed.), *Handbook of computational linguistics* (pp. 670-698). Oxford: Oxford University Press.
- Newby, P. T. (2014). *Research methods for education* (2nd ed.). London: Routledge.
- Nisbet, D. L., Tindall, E. R., & Arroyo, A. A. (2005). Language learning strategies and English proficiency of Chinese university students. *Foreign Language Annals*, 38(1), 100-107.
- Noar, S. M. (2003). The role of structural equation modeling in scale development. *Structural Equation Modeling: A Multidisciplinary Journal*, 10(4), 622-647.
- Nordin, S. M., & Mohammad, N. b. (2006). The best of two approaches: Process/genre-based approach to teaching writing. *The English Teacher*, 35, 75-85.
- Normand-Marconnet, N., & Cordella, M. (2012). Spanish and French foreign learners' blogging experience: Motivation and attitude. *The JALT CALL Journal*, 8(1), 3-16.
- Noytim, U. (2010). Weblogs enhancing EFL students' English language learning. *Procedia Social and Behavioral Sciences*, 2, 1127-1132.
- Nunan, D. (1992). *Research methods in language learning*. New York: Cambridge University Press.
- O'Malley, J. M., & Chamot, A. U. (1990). *Learning strategies in second language acquisition*. Cambridge: Cambridge University Press.
- Ohta, A. S. (2000). Rethinking interaction in SLA: Developmentally appropriate assistance in the zone of proximal development and the acquisition of L2 grammar. In J. P. Lantolf (Ed.), *Sociocultural theory and second language learning* (pp. 51-78). Oxford: Oxford University Press.
- Olivares-Cuhat, G. (2002). Learning strategies and achievement in the Spanish writing classroom: A case study. *Foreign Language Annals*, 35(5), 561-570.
- Osin, L. (1998). Computers in education in developing countries: Why and how? *Education and Technology Series*, 3(1), 1-14.
- Oxford, R. (1990). *Language learning strategies: What every teacher should know*. New York: Newbury House.



- Paulus, T. M. (1999). The effect of peer and teacher feedback on student writing. *Journal of Second Language Writing, 8*(3), 265-289.
- Pawan, F., Paulus, T. M., Yalcin, S., & Chang, C. F. (2003). Online learning: Patterns of engagement and interaction among in-service teachers. *Language Learning & Technology, 7*(3), 119-140.
- Punch, K. F. (2009). *Introduction to research methods in education*. London: Sage.
- Rashtchi, M., & Hajihassani, H. (2010). Blog-assisted language learning: A possibility in teaching reading to Iranian EFL learners. *International Journal of English Studies, 4*(4), 1-18.
- Reiser, R. A. (2001). A history of instructional design and technology: Part I: A history of instructional media. *Educational Technology Research and Development, 49*(1), 53-64.
- Riley, J., & Reedy, D. (2000). *Developing writing for different purposes: Teaching about genre in the early years*. London: Paul Champman Publishing Ltd.
- Rossmann, G. B., & Wilson, B. L. (1994). Numbers and words revisited: Being "shamelessly eclectic". *Quality & Quantity, 28*, 315-327.
- Rost, M. (2001). *Teaching and researching listening*. New York: Longman.
- Ryu, H. (2006). Is the process-oriented writing instruction really process-oriented? *The Linguistic Association of Korea Journal, 14*(1), 203-221.
- Sarica, G. N., & Cavus, N. (2009). New trends in 21st century English learning. *Procedia Social and Behavioral Sciences, 1*, 439-445.
- Saville-Troike, M. (2006). *Introducing second language acquisition*. Cambridge: Cambridge University Press.
- Schaffert, S., & Schwalbe, C. (2010). Future media adoption in learning and teaching: Current study design from the perspective of cultural studies. In M. Ebner & M. Schiefner (Eds.), *Looking toward the future of technology-enhanced education: Ubiquitous learning and the digital native* (pp. 1-11). Hershey PA: Information Science Reference.
- Selwyn, N. (2011). *Education and technology: Key issues and debates*. London: Continuum.
- Seow, A. (2002). The writing process and process writing. In J. C. Richards & W. A. Renandya (Eds.), *Methodology in language teaching: An anthology of current practice* (pp. 315-320). Cambridge: Cambridge University Press.

- Sharples, M. (2000). The design of personal mobile technologies for lifelong learning. *Computers & Education*, 34, 177-193.
- Shmais, W. A. (2003). Language learning strategy use in Palestine. *The Electronic Journal for English as a Second Language*, 7(2). Retrieved September 29, 2015, from <http://www.tesl-ej.org/wordpress/issues/volume7/ej26/ej26a3/>
- Silva, T. (1990). Second language composition instruction: Developments, issues, and directions in ESL. In B. Kroll (Ed.), *Second language writing: Research insights for the classroom* (pp. 11-23). Cambridge: Cambridge University Press.
- Silviyanti, T. M., & Yusuf, Y. Q. (2014). A one-stop class blog to promote collaborative writing activities. *Malaysian Journal of ELT Research*, 10(1), 31-45.
- Singhal, M. (1997). The Internet and foreign language education: Benefits and challenges. *The Internet TESL Journal*, 3(6). Retrieved December 26, 2011, from <http://iteslj.org/Articles/Singhal-Internet.html>
- Slater, P., & Varney-Burch, S. (2001). *Multimedia in language learning*. London: Centre for Information on Language Teaching.
- Son, J. B. (2007). Learner experiences in web-based language learning. *Computer Assisted Language Learning*, 20(1), 21-36.
- Stahl, G., Koschmann, T., & Suthers, D. (2006). Computer-supported collaborative learning: An historical perspective. In R. K. Sawyer (Ed.), *Cambridge handbook of the learning sciences* (pp. 409-426). Cambridge: Cambridge University Press.
- Steele, V. (2004, May 3). *Product and process writing: A comparison*. British Council. Retrieved September 28, 2015, from <http://www.teachingenglish.org.uk/article/product-process-writing-a-comparison>
- Sugar, W., Crawley, F., & Fine, B. (2004). Examining teachers' decisions to adopt new technology. *Educational Technology and Society*, 7(4), 201-213.
- Suleiman, M. F. (2000). *The process and product of writing: Implications for elementary school teachers*. Paper presented at the California Association for Bilingual Education Conference, San Francisco, CA. Retrieved June 23, 2012, from <http://files.eric.ed.gov/fulltext/ED442299.pdf>
- Sun, Y. C. (2010). Extensive writing in foreign-language classrooms: A blogging approach. *Innovations in Education and Teaching International*, 47(3), 327-339.
- Szanajda, A., & Chang, W. Y. (2015). Encouraging student engagement in ESL writing classes in Asian classrooms: Recommendations for actions to be taken. *Journal of Linguistics and Language Teaching*, 6(2), 259-274.

- Teddle, C., & Tashakkori, A. (2009). *Foundations of mixed methods research: Integrating quantitative and qualitative approaches in the social and behavioral sciences*. Thousand Oaks: Sage.
- Tekinarslan, E. (2008). Blogs: A qualitative investigation into an instructor and undergraduate students' experiences. *Australasian Journal of Educational Technology and Society*, 24(4), 402-412.
- Tolmie, A., Muijs, D., & McAteer, E. (2011). *Quantitative methods in educational and social research using SPSS*. Maidenhead: McGraw Hill/Open University Press.
- Tompkins, G. E. (1994). *Teaching writing: Balancing process and product* (2nd ed.). Englewood Cliffs: Macmillan Publishing Company.
- Top, E. (2012). Blogging as a social medium in undergraduate courses: Sense of community best predictor of perceived learning. *Social Media in Higher Education*, 15(1), 24-28.
- Torut, B. (2000). Computer-assisted language learning: An overview. *Silpakorn University International Journal*, 1(1), 130-153.
- Tsou, W., Wang, W., & Li, H. (2002). How computers facilitate English foreign language learners acquire English abstract words. *Computers & Education*, 39(4), 415-428.
- Tsou, W., Wang, W., & Tzeng, Y. (2006). Applying a multimedia storytelling website in foreign language learning. *Computers & Education*, 47(1), 17-28.
- Tu, C. H. (2000). On-line learning migration: From social learning theory to social presence theory in a CMC environment. *Journal of Network and Computer Applications*, 23(1), 27-37.
- Tufekci, Z. (2008). Grooming, gossip, facebook, and myspace. *Information, Communication & Society*, 11(4), 544-564.
- Tuffs, R. (1993). A genre approach to writing in the second language classroom: The use of direct mail letters. *Revue belge de philologie et d'histoire*, 71(3)699-718.
- Turuk, M. C. (2008). The relevance and implications of Vygotsky's sociocultural theory in the second language classroom. *ARECLS*, 5, 244-262. Retrieved March 15, 2012, from <http://research.ncl.ac.uk/ARECLS/>
- Urbaniak, G. C., & Scott, P. (1997). Research Randomizer. Retrieved January 4, 2014, from <http://www.randomizer.org/>
- Walker, A., & White, G. (2013). *Technology enhanced language learning: Connecting theory and practice*. Oxford: Oxford University Press.
- Walliman, N. (2011). *Research methods: The basics*. London: Routledge.

- Wang, B. J. (2006). *英文視窗版 SPSS 與行為科學研究* [SPSS for English windows version and behavioural science research] (3rd ed.). Taipei, Taiwan: Psychological Publishing.
- Wang, L. (2005). The advantages of using technology in second language education. *THE Journal*, 32(10), 38-42.
- Warschauer, M. (1996a). Computer assisted language learning: An introduction. In S. Fotos (Ed.), *Multimedia language teaching* (pp. 3-20). Tokyo: Logos International.
- Warschauer, M. (1996b). Motivational aspects of using computers for writing and communication. In M. Warschauer (Ed.), *Telecollaboration in foreign language learning* (pp. 29-46). Honolulu, Hawai'i: Second Language Teaching & Curriculum Center, University of Hawai'i.
- Warschauer, M. (2000). The death of cyberspace and the rebirth of CALL. *English Teachers' Journal*, 53, 61-67.
- Warschauer, M. (2002). A developmental perspective on technology in language education. *TESOL Quarterly*, 36(3), 453-475.
- Warschauer, M. (2007). Technology and writing. In C. Davison & J. Cummins (Eds.), *The International Handbook of English Language Teaching* (pp. 907-912). Norwell, MA: Springer.
- Warschauer, M., & Healey, D. (1998). Computers and language learning: An overview. *Language Teaching*, 31, 57-71.
- Warschauer, M., & Liaw, M. L. (2011). Emerging technologies for autonomous language learning. *Studies in Self-Access Learning Journal*, 2(3), 107-118.
- Warschauer, M., & Meskill, C. (2000). Technology and second language teaching. In J. Rosenthal (Ed.), *Handbook of undergraduate second language education* (pp. 303-318). Mahwah, NJ: Lawrence Erlbaum.
- Williams, J. D. (2003). *Preparing to teach writing: Research, theory, and practice* (3rd ed.). Mahwah, NJ: Lawrence Erlbaum.
- Wolff, D. (2000). Second language writing: A few remarks on psycholinguistic and instructional issues. *Learning and Instruction*, 10(1), 107-112.
- Wright, C. (2000). *Education, technology and development revised*. London: Common Secretariat.
- Wu, W. C. V., Yen, L. L., & Marek, M. (2011). Using online EFL interaction to increase confidence, motivation, and ability. *Educational Technology & Society*, 14(3), 118-129.

- Wu, W. S. (2006). The effect of blog peer review and teacher feedback on the revisions of EFL writers. *Journal of Education and Foreign Languages and Literature*, 3, 125-139.
- Yan, G. (2005). A process genre model for teaching writing. *English Teaching Forum*, 43(3). Retrieved March 15, 2012, from <http://eca.state.gov/forum/vols/vol43/no3/p18.htm>
- Yang, S. C., & Chen, J. J. (2014). Fostering foreign language learning through technology-enhanced intercultural projects. *Language Learning & Technology*, 18(1), 57-75.
- Yang, S. C., & Chen, Y. J. (2007). Technology-enhanced language learning: A case study. *Computers in Human Behavior*, 23(1), 860-879.
- Yasuda, S. (2011). Genre-based tasks in foreign language writing: Developing writers' genre awareness, linguistic knowledge, and writing competence. *Journal of Second Language Writing*, 20(2), 111-133.
- You, X. (2004). "The choice made from no choice": English writing instruction in a Chinese university. *Journal of Second Language Writing*, 13(2), 97-110.
- Yu, J. (2015, September 30). *The historical development of CALL*. TextESOL IV. Retrieved January 1, 2016, from <http://textesoliv.org/the-historical-development-of-call-jingbo-yu/>
- Zha, S., Kelly, P., Park, M. K., & Fitzgerald, G. (2006). An investigation of communicative competence of ESL students using electronic discussion boards. *Journal of Research on Technology in Education*, 38(3), 349-367.
- Zhao, Y. (2003). Recent developments in technology and language learning: A literature review and meta-analysis. *CALICO Journal*, 21(1), 7-27.
- Zhytska, S. A. (2012). Computer assisted language learning. *Information Technology and Security*, 2(2), 25-33.

APPENDICES

Appendix A. English as a Second Language Composition Profile

FORM B		ESL COMPOSITION PROFILE	
TOPIC		STUDENT	DATE
COMPONENTS	RANGE	DESCRIPTION	
CONTENT	30-27	<i>EXCELLENT TO VERY GOOD</i> : well-reasoned thesis • related ideas • specific development (personal experience—illustration—examples—facts—opinions) • good use of description/comparison-contrast	
	26-22	<i>GOOD</i> : adequate reasoning • thesis partly developed • occasionally unrelated ideas	
	21-17	<i>FAIR TO POOR</i> : poor reasoning • unnecessary information • very little development	
	16-13	<i>VERY POOR</i> : irrelevant • no development • (or) not enough to evaluate	
ORGANIZATION	20-18	<i>EXCELLENT TO VERY GOOD</i> : effective thesis • strong topic sentences • introductory and concluding sentences/paragraphs • use of transitions • organized	
	17-14	<i>GOOD</i> : clear topic sentences • no concluding sentences or paragraph • weak transitions • incomplete sequencing/organization	
	13-10	<i>FAIR TO POOR</i> : no topic sentence • lacks transitions • little or no sequencing/organization	
	9-7	<i>VERY POOR</i> : does not communicate one idea • no evidence of organization • (or) not enough to evaluate	
VOCABULARY	20-18	<i>EXCELLENT TO VERY GOOD</i> : correct use of idioms/word forms (prefixes—suffixes—roots—compounds) in context • effective word choice • word meaning precise	
	17-14	<i>GOOD</i> : mostly effective and correct idioms/word forms/word choice in context • meaning clear	
	13-10	<i>FAIR TO POOR</i> : frequent errors in idioms/word forms/word choice • some translation • meaning confused	
	9-7	<i>VERY POOR</i> : little knowledge of English vocabulary • mostly translation • (or) not enough to evaluate	
LANGUAGE USE	25-22	<i>EXCELLENT TO VERY GOOD</i> : sentence variety • correct verb tenses • few errors in subject-verb agreement, number, word order/use, articles, pronouns, prepositions	
	21-18	<i>GOOD</i> : effective but simple constructions • mostly correct verb tenses • several errors in subject-verb agreement, number, word order/use, articles, pronouns, prepositions, but meaning clear	
	17-11	<i>FAIR TO POOR</i> : ineffective simple constructions • frequent errors in verb tense, subject-verb agreement, number, word order/use, articles, pronouns, prepositions	
	10-5	<i>VERY POOR</i> : limited mastery of sentence rules • many errors in verb tense, subject-verb agreement, number, word order/use, articles, pronouns, prepositions	
MECHANICS	5	<i>EXCELLENT TO VERY GOOD</i> : few errors in spelling, punctuation, capitalization, paragraphing	
	4	<i>GOOD</i> : occasional errors in spelling, punctuation, capitalization, paragraphing	
	3	<i>FAIR TO POOR</i> : frequent errors in spelling, punctuation, capitalization, paragraphing • handwriting unclear	
	2	<i>VERY POOR</i> : dominated by errors in spelling, punctuation, capitalization, paragraphing • illegible handwriting	
TOTAL SCORE	READER	COMMENTS	

Reprint from Hughey, Wormuth, Hartfiel, & Jacobs, (1983). *Teaching ESL composition: Principles and techniques*, p. 240. Rowley, Massachusetts: Newbury House Publishers, Inc.

## Appendix B. The Questionnaires

### B.1. Mandarin Chinese Version

#### 作答說明:

- 一、本問卷共有 3 份量表，分別為「過程/文體法寫作量表」、「英文寫作策略量表」及「部落格寫作量表」。
- 二、每份量表的每一題目皆請您仔細閱讀，並按照您「實際情形」作答。
- 三、每個人的想法與感覺皆不同，因此您的回答並無好壞對錯之分。
- 四、作答時間並無限制，但請您依「第一直覺」在選項上勾選作答，不需思考太久。
- 五、每一題目皆有 5 個等級選項，分別為(1)非常不同意、(2)不同意、(3)沒意見、(4)同意及(5)非常同意。
- 六、請在每一題目勾選一個選項，請勿勾選 2 個(或以上)的選項及未作答。

謝謝您的合作!!!

以下資訊請您提供，以協助本研究更完整。

- 姓名: \_\_\_\_\_ (學號: \_\_\_\_\_)
- 性別: 男 女
- 歲數: \_\_\_\_\_
- 學習英文到目前總共幾年?  
7 年以下(不含 7 年) 7 年 8 年 9 年 10 年以上

若您有任何疑問或意見，請與我聯繫，謝謝。

研究生: 張偉鈺

電話: 0988-xxxxxx

Email: [weixxx.xxxxx@durham.ac.uk](mailto:weixxx.xxxxx@durham.ac.uk)

## 過程/文體法寫作量表

編 號	問 題	(1) 非常 不同 意	(2) 不 同 意	(3) 沒 意 見	(4) 同 意	(5) 非 常 同 意
1	英文寫作後，我會閱讀同學的文章並討論彼此文章內容。					
2	我會藉由閱讀同學的文章來學習優缺點。					
3	老師會和我們一起擬定草稿，如此可以加強我的寫作能力。					
4	英文寫作前，老師通常會先講解範文，如此可以幫助我了解寫作題目。					
5	英文寫作前，老師通常會先給一篇範文並加以討論，如此可以幫助我了解寫作目的。					
6	範文的閱讀和討論提高我對英文寫作的興趣。					
7	英文寫作前，我會先了解寫作目的。					
8	範文的閱讀和討論提升我對英文寫作題目的了解。					
9	老師範文的指導提升我的寫作能力。					
10	老師會先和我們一起構思想法，如此可以加強我的寫作能力。					
11	老師提供的範文加強我的英文寫作能力。					
12	英文寫作前，我會先了解讀者需求。					
13	與同學討論不僅建立同儕關係，也幫助我在英文寫作上獲得更多想法。					
14	英文寫作時，我會適時檢視所寫的內容，以確認符合讀者需求。					

**第一份量表作答結束，請繼續作答第二份量表，謝謝。**



## 英文寫作策略量表

編 號	問 題	(1) 非常 不同意	(2) 不 同意	(3) 沒 意見	(4) 同 意	(5) 非 常 同 意
1	英文寫作遇到不會寫的時候，我會尋求其他同學的幫助。					
2	我試著成為一位優秀的英文寫作學習者。					
3	我會留意自己曾出現的錯誤，以提升自己英文寫作能力。					
4	我試著盡可能學習許多的寫作知識。					
5	我會練習英文寫作以幫助自己習慣英文寫作。					
6	我會模仿英語母語人士的文章，來提升自己英文寫作能力。					
7	我會閱讀英文小說、雜誌或報紙來提升自己英文寫作能力。					
8	當不知道如何用英文寫時，我會用其它方式表達我的想法。					
9	我試著學習英語母語人士的文化，以幫助我的英文寫作更貼近母語人士所寫的文章。					
10	我試著盡可能時常用英文書寫。					
11	對於英文寫作，我會思考新的課程內容和已學過的課程內容的關聯性。					
12	當我的英文寫作表現很好時，我會犒賞自己。					
13	我會將我知道的寫作技巧用不同的方式表達在我的英文寫作裡。					
14	英文寫作時，我會先快速擬定大綱，再細寫文章，如此我會感到比較自在。					
15	我會盡可能找機會以英文書寫。					
16	我會盡可能使用許多不同的寫作技巧。					
17	在日常生活中，我會用英文書寫(如:備忘錄、留言、訊息等等)。					
18	我會用英文寫備忘錄、訊息、信件或報告。					
19	當有人以英文書寫時，我會更加留意。					
20	當我害怕寫英文時，我會試著放輕鬆。					
21	我會將新學的寫作技巧用在我的英文寫作裡。					
22	我會尋找能和我練習英文寫作的伙伴。					

**第二份量表作答結束，請繼續作答第三份量表，謝謝。**

## 部落格寫作量表

編號	問題	(1) 非常不同意	(2) 不同意	(3) 沒意見	(4) 同意	(5) 非常同意
1	自從使用英文部落格後，我的英文文法能力提升。					
2	當我以英文在部落格發表文章時，我不擔心同學如何看待我的英語能力。					
3	英文部落格寫作比紙筆寫作更能表達我的想法。					
4	即使課程結束，未來我仍會繼續使用英文部落格。					
5	閱讀同學的英文部落格文章時，我學到更多新單字。					
6	當我在英文部落格寫作時，寫得比紙筆寫作更有創意。					
7	我認為使用英文部落格練習英文寫作是個好主意。					
8	我喜歡老師對我的英文部落格文章發表意見。					
9	使用英文部落格時，我更小心謹慎看待我的寫作。					
10	我喜歡在同學的英文部落格上留言。					
11	文章發表於英文部落格前，我都會仔細檢查句子。					
12	我喜歡在我的英文部落格發表許多文章、照片或小短片。					
13	我喜歡以部落格方式繳交作業勝過於紙筆方式。					
14	我喜歡在英文部落格練習寫作勝過於在課堂上。					
15	我認為英文部落格寫作，提升我的組織能力。					
16	當我在英文部落格寫作時，我並不擔心犯錯。					
17	我喜歡同學對我的英文部落格文章發表意見。					
18	我覺得我在英文部落格寫作比紙筆寫作更有自信。					
19	使用英文部落格時，我更積極查艱深難懂的單字。					
20	我享受透過英文部落格與同學溝通的方式。					
21	回應我的英文部落格留言可以提升我的英文寫作能力。					
22	我覺得我在英文部落格上寫作的內容比紙筆寫作還要多。					
23	看同學的英文部落格文章能增進我的英文寫作能力。					
24	英文部落格寫作時，我會使用不同形式的英文單字 (如時態: eat, ate, eaten)。					
25	更新我的英文部落格資料既快速又方便。					

所有量表作答結束。最後，請您再次確認是否完成每一題目作答。

感謝您的配合與協助。

## B.2. English Version

### **Instruction:**

1. There are 3 questionnaires in this booklet, which are “Questionnaire for Process/Genre Approach,” “Questionnaire for Writing Strategies,” and “Questionnaire for Blog Writing.”
2. Please carefully read every question in the questionnaires, and tick answers based on the “real situation of yours.”
3. Everyone’s perceptions are different, so there are neither better nor worse answers.
4. There is no time limitation for you to answer the questionnaires, but you do not need to think too much. Please tick the answers with your “first intuition.”
5. There are five responding scales for each question. They are (1) Strongly Disagree, (2) Disagree, (3) Neither Agree Nor Disagree, (4) Agree, and (5) Strongly Agree.
6. Please tick one answer for each question. Do not tick two or more answers, and do not skip any questions.

Thank you for your cooperation!!!

Please provide the information below to help complete the research.

. Name: \_\_\_\_\_ (Student No.: \_\_\_\_\_)

. Sex:  Male  Female

. Age: \_\_\_\_\_

.How many years have you been learning English?

less than 7 years (not including 7 years)  7 years

8 years  9 years  more than 10 years

If you have any queries or comments, please feel free to contact me. Thank you.

Ph.D. Student: Chang, Wei-Yu

Mobile Phone: 0988-xxxxxx

Email: [weixxx.xxxxx@durham.ac.uk](mailto:weixxx.xxxxx@durham.ac.uk)

## Questionnaire for Process/Genre Approach

No.	Questions	(1) Strongly Disagree	(2) Disagree	(3) Neither Agree Nor Disagree	(4) Agree	(5) Strongly Agree
1	After writing my samples, I read my classmates' samples and discuss them with each other.					
2	I learn my classmates' strengths and weaknesses by reading their samples.					
3	The teacher writes the drafts with us, which reinforces my writing abilities.					
4	The teacher usually explains model articles before my commencing English writing and that helps me understand writing topics.					
5	The teacher usually provides model articles and discusses them with us before my commencing English writing and that help me understand writing purposes.					
6	Reading and discussing model articles increase my interests in English writing.					
7	I understand writing purposes before commencing English writing.					
8	Reading and discussing model articles improve my understandings toward English writing topics.					
9	The teacher's guidance on model articles develops my writing abilities.					
10	The teacher generates writing ideas with us, which reinforces my writing abilities.					
11	The teacher's provision of model articles enhances my English writing abilities.					
12	I understand readers' demands before commencing English writing.					
13	Discussing with my classmates not only builds up our peer relationships, but also helps me get further ideas about English writing.					
14	During English writing, I examine the contents duly in order to confirm if they meet readers' demands.					

**This is the end of the 1<sup>st</sup> questionnaire. Please go to the 2<sup>nd</sup> one. Thank you.**

## Questionnaire for Writing Strategies

No.	Questions	(1) Strongly Disagree	(2) Disagree	(3) Neither Agree Nor Disagree	(4) Agree	(5) Strongly Agree
1	When I do not know how to write in English, I seek helps from my classmates.					
2	I try to be an excellent English writing learner.					
3	I pay attention to the mistakes I have made to improve my English writing abilities.					
4	I try to learn as much writing knowledge as possible.					
5	I practise English writing to make me accustomed to it.					
6	I imitate articles written by native English speakers to improve my English writing abilities.					
7	I improve my English writing abilities through reading English novels, magazines, or newspapers.					
8	I use other ways to express my thoughts that I do not know how to write in English.					
9	I try to learn native English speakers' culture to help my English writing samples be closer to articles written by native English speakers.					
10	I try to write in English as often as possible.					
11	For English writing, I think about the connections between the new curriculum and the courses I have already learned.					
12	When I do well on English writing, I reward myself.					
13	I use already-known writing skills with different ways in my English writing samples.					
14	I start with a quick outline and then write the samples elaborately, which make me feel better when doing English writing.					
15	I look for as many opportunities as possible to write in English.					
16	I try to use as many different writing skills as possible.					
17	In daily life, I write in English (e.g. memos, comments, and messages...etc.).					
18	I take notes, write messages, letters, or reports in English.					
19	When someone writes in English, I pay more attention to it.					
20	When I am afraid of writing English, I try to relax.					
21	I use writing skills I newly learn in my English writing samples.					
22	I look for partners who can practise English writing with me.					

**This is the end of the 2<sup>nd</sup> questionnaire. Please go to the 3<sup>rd</sup> one. Thank you.**

## Questionnaire for Blog Writing

No.	Questions	(1) Strongly Disagree	(2) Disagree	(3) Neither Agree Nor Disagree	(4) Agree	(5) Strongly Agree
1	My English grammatical abilities have been improved since I have used English blogs.					
2	When I post entries in English on my blog, I do not worry about how the classmates think of my English abilities.					
3	English blog writing expresses my thoughts better than paper-pencil writing.					
4	I will keep using my English blog after the programme is completed.					
5	I learn more new words when I read the entries on my classmates' English blogs.					
6	I am more creative when writing on my English blog than on paper.					
7	I think using English blogs to practise English writing is a good idea.					
8	I like my teachers' commenting on my English blog entries.					
9	I am more careful with my writing samples when using English blogs.					
10	I like to leave messages on my classmates' English blogs.					
11	I always examine sentences carefully before posting entries on my English blog.					
12	I like to post many entries, photos, or clips on my English blog.					
13	I like to hand in assignments through blogs instead of paper.					
14	I like to practise writing on English blogs more than in class.					
15	I think English blog writing enhances my organising abilities					
16	I do not worry about making mistakes when I write on my English blog.					
17	I like my classmates commenting on my English blog.					
18	I think I am more confident when writing on blogs than on paper.					
19	When using English blogs, I look up difficult words more actively.					
20	I enjoy communicating with my classmates through English blogs.					
21	Responding to comments on my English blog improves my English writing abilities.					
22	I think I write more contents on my English blog than my paper-pencil writing.					
23	Reading entries on my classmates' English blogs improves my English writing abilities.					
24	When writing on my English blog, I use different forms of English words (e.g. Tense: eat, ate, eaten).					
25	It is convenient and fast to update my English blog.					

**This is the end of the questionnaires. Please confirm you have answered every question. Thank you for the cooperation and assistance.**

## Appendix C. Observational Checklist

### Observation Checklist

Date:

Time:

	No.	Observational Items	Tick if the item is		Note
			Ture	False	
<b>INSTRUCTOR'S INSTRUCTION</b>	1	Did the teacher provide the model articles for the students?			
	2	Did the teacher analyse and explain the model articles to the students?			
	3	Did the teacher guide the students how to write?			
	4	Did the teacher brainstorm and compose an exemplified essay with the students?			
	5	Did the teacher make the students have a group discussion regarding the writing tasks?			
	6	Did the teacher allow the students to write their own essay individually?			
	7	Did the teacher mark the students' samples?			
	8	Did the teacher discuss the complete writing samples with the students in class?			
	9	Did the teacher allow the students to complete a final writing sample after discussing with both the instructor and peers?			

	No.	Observation Checking Items	Tick if the item is		Note
			true	false	
<b>LEARNERS' LEARNING</b>	1	Did the students receive the model articles before class?			
	2	Did the students participate in the class actively?			
	3	Did the students provide their ideas, comments, or questions in class?			
	4	Did the students brainstorm and compose an exemplified essay with the teacher?			
	5	Did the students have a group discussion regarding the writing tasks?			
	6	Did the students have sufficient time to write their own essay individually?			
	7	Did the students revise their writing samples based on the instructor feedback?			
	8	Did the students provide their feedback for their peers' writing samples?			
	9	Did the students finish a complete writing samples based on the feedback from both the instructor and peers?			



## Appendix D. Interview Questions

### D.1. Mandarin Chinese Version

#### 第一部份: 過程/文體寫作教學法

1. 老師的講解是否幫助你了解寫作題目? 為什麼?
2. 老師所提供的範文是否幫助你了解寫作題目? 為什麼?
3. 你認為老師批改時所給的意見是否能提升你的英文寫作能力? 為什麼?
4. 你認為同學所給的意見是否能提升你的英文寫作能力? 為什麼?
5. 你認為此次的英文寫作教學有什麼優點?
6. 你認為此次的英文寫作教學有什麼缺點?
7. 關於此次寫作教學, 你是否還有其他以上題目未提及的意見或想法?

#### 第二部份: 寫作策略

1. 你是否會利用各種方法記住寫作技巧、單字或文法概念? 為什麼?
2. 你是否盡可能使用不同的英文寫技巧、單字或文法? 為什麼?
3. 你是否會用各種方式提升自己的英文寫作能力 (如: 閱讀小說、雜誌或報紙等)? 為什麼?
4. 英文寫作遇到不會寫的時候, 你通常會怎麼做 (如: 查字典、找其他字替代、或任何其他方法)? 為什麼?
5. 日常生活中, 何種情況下你會用英文書寫? 為什麼?
6. 你是否會訂定目標、規劃時程或尋找伙伴來提升自己的英文寫作能力? 為什麼?
7. 你是否會對英文寫作感到焦慮? 為什麼? 若會, 你會如何減輕焦慮感?
8. 當你的英文寫作表現良好時, 你是否會犒賞自己? 為什麼?
9. 你是否會和同學練習英文寫作? 你們通常如何做?

#### 第三部份: 部落格寫作

1. 你認為使用部落格是否能提升你的英文寫作能力? 為什麼?
2. 你認為透過部落格閱讀同學的文章是否能提升你的英文寫作能力? 為什麼?
3. 你比較喜歡紙筆寫作或部落格寫作? 為什麼?
4. 你認為此次的部落格英文寫作教學最大的收穫是什麼?
5. 你認為透過部落格學習英文寫作有什麼優點?
6. 你認為透過部落格學習英文寫作有什麼缺點?
7. 關於部落格英文寫作教學, 你是否還有其他以上題目未提及的意見或想法?

## D.2. English Version

### Part I: Process/Genre Approach

1. Does the teacher's instruction help you understand the writing topics? Why?
2. Does the teacher's provision of the model articles help you understand the writing topics? Why?
3. Do you think the teacher's comments on your writing samples improve your English writing abilities? Why?
4. Do you think the classmates' comments on your writing samples improve your English writing abilities? Why?
5. What are the advantages you find in this English writing programme?
6. What are the disadvantages you find in this English writing programme?
7. Regarding the English writing programme, do you have any ideas or opinions that I have not asked?

### Part II: Writing Strategies

1. Do you use any ways to remember writing skills, vocabulary, or grammar? Why?
2. Do you try your best to use different English writing skills, vocabulary, or grammar? Why?
3. Do you use any ways to improve your English writing abilities (e.g. reading novels, magazines, or newspaper etc.)? Why?
4. What do you usually do if you have difficulties in English writing (e.g. looking up dictionaries, finding out substitute words, or using other ways)? Why?
5. In what circumstances, do you write in English in your daily life? Why?
6. Do you set up goals, plan your schedules, or have partners to improve your English writing abilities? Why?
7. Do you feel anxious about English writing? Why? If yes, what do you do to relieve your sense of anxiety?
8. Do you reward yourself if you perform well on English writing? Why?
9. Do you practise English writing with your classmates? What do you usually do?

### Part III: Blog Writing

1. Do you think the use of blogs improves your English writing abilities? Why?
2. Do you think reading your classmates' essays on blogs improves your English writing abilities? Why?
3. Do you prefer writing on paper or blogs? Why?
4. What have you learned the most from this English blog writing programme? Why?
5. What are the advantages of learning English writing through blogs?
6. What are the disadvantages of learning English writing through blogs?
7. Regarding the English blog writing programme, do you have any ideas or opinions that I have not asked?

## Appendix E. Snapshot of the Tutor Blog (example)

OCT 14  
TUE 2014

🔒 Global Warming (week 2)

[model article - para 2](#)

### Global Warming: A Disaster Waiting to Happen

In reality, green house gases **are blamed for** global warming, which many scientists believe could **result in** ice floes melting, sea levels rising and similar **disastrous consequences visualized** in 2012. Factory, car, and airplane **exhausts** are three examples of serious **greenhouse gas missions**, but there are many more. Since we do not have **alternative** energy sources or technologies capable of providing the power we need for our daily lives, we are dependent on the use of **carbon fossil fuels** that make the world's environmental situation worse.

source: 張一慈、陳彩虹 (2013)。全民英檢一路通 (中級) 寫作能力測驗。台灣，台北: 文鶴出版有限公司。

#### Discussion:

- 1) Please summarise the paragraph.
- 2) According to the author, what are the causes and effects of the global warming?
- 3) Why people can't stop producing greenhouse gases?

#### Homework:

- 1) Please write a **second paragraph with your introduction** and post it on your blog by [23:59:59 2014/10/20](#).
- 2) Please **read 3~5 posts and leave your comments with your Student No.** on your classmates blogs by [23:59:59 2014/10/24](#).

#### IMPORTANT NOTE:

*Many of you haven't set up your own blog and haven't submitted your writing on the blog. Please finish it as early as possible. I appreciate your kind cooperation.*

## Appendix F. Snapshot of the Learner Blog (example)



Oct 27 Mon 2014 Global Warming (week 3)

---

分享:      

Global Warming is a very serious problem now. The earth faces many crises which result from man-made activities. If we don't do our best to protect the earth and solve the problems, we will bring ruin and wipe out the entire population. On the other hand, if we try our best to protect the earth, we will have a better earth to live in.

Global Warming is a problem of too much carbon dioxide in the atmosphere. There are some reasons which cause too much carbon dioxide, such as factory exhausts, deforestation and overpopulation. Factory exhausts make the greenhouse gas and cause green-house effect. Deforestation results in more and more carbon dioxide. These problems cause climate change which means sea levels will rise. Furthermore, if we don't take action to improve, animals like polar bears and we mankind will not have place to live.

Following are some ways that I think we mankind can reduce the damages to prevent the global warming become worse. First, our government should be stricter to ban the heavy industries and let them know that how serious the air pollution is. Second, to reduce the deforestation, we can use the internet to do our assignments. It's time to take action. There is plenty we can do.

Appendix G. The Front Cover of the Textbook



## Appendix H. Paper Handouts Employed in the Control Group

### H.1. Global Warming

#### **Global Warming: A Disaster Waiting to Happen**

Though not a great movie, 2012 was popular around the world because it tapped into people's fears about a worsening natural environment, largely caused by man's industrial development. In the film, solar storms lead to a great flood, and the only way of escape is to get on board an ark in remote Tibet.

In reality, green house gases are blamed for global warming, which many scientists believe could result in ice floes melting, sea levels rising and similar disastrous consequences visualized in 2012. Factory, car, and airplane exhausts are three examples of serious greenhouse gas emissions, but there are many more. Since we do not have alternative energy sources or technologies capable of providing the power we need for our daily lives, we are dependent on the use of carbon fossil fuels that make the world's environmental situation worse.

A "carbon footprint" refers to the total amount of greenhouse gases produced to support a lifestyle. "Green" campaigners say it is vital to lead a low-carbon lifestyle and prevent climate change, examples of ways in which individuals can reduce their carbon footprints include taking fewer airplane flights, ensuring your home is correctly insulated and recycling products. If you are serious about wanting to lead a green or low-carbon footprint lifestyle, get a carbon calculator to determine precisely what your carbon foot print is. You can then work on ideas to reduce your impact on the planet, such as saving water and turning off air conditioners.

It is thought that by reducing our carbon footprints we can save the world from further harm. Actually, if there is a catastrophic event caused by global warming, humans may well be wiped off the face of the Earth, but the planet will likely continue to exist much as it has for billions of years.

取自張一慈、陳彩虹(2013)。全民英檢一路通(中級)寫作能力測驗。台灣，台北：文鶴出版有限公司。



## H.2. Low Birth Rate

### Low Birth Rates

There has been a dramatic increase in the world's population over the past 100 years, with the number of people rising from about 1.6 billion in 1900 to the current estimate of about 6.8 billion. Not all countries are experiencing record low birth rate. Women in Japan, Taiwan and Spain, for example, have among the lowest fertility rates in the world. The reasons for this are complicated, but can be outlined as follows.

Firstly, women are working more and marrying later. This is a general trend in the developed world. Since women are not as fertile after 30 and pregnancies have an additional risk of complications, fewer children are being born. Secondly, some women choose not to have children because they think their job prospects are not good after having children. This is because in many male dominated countries, employees tend not to hire women with young child as they believe these women will not be able to spend as much time on their work as men and single women. Further reasons given by people as obstacles to having children include financial worries, the problem of juggling work and a family, and a lack of childcare support.

Couples who choose not to have children sometimes rationalize their decision by saying: "There's enough children in the world already" and "the planet can't support more people." However, as outlined in the previous paragraph, usually more than this contributes to the decision.

取自張一慈、陳彩虹(2013)。全民英檢一路通(中級)寫作能力測驗。台灣，台北：文鶴出版有限公司。



## Appendix I. Research Participation Consent Form

### I.1. Mandarin Chinese Version



Shaped by the past, creating the future

#### 研究參與同意書

同學您好:

我是英國德倫大學教育學院(School of Education, University of Durham, UK)博士班學生-張偉鈺。很開心有機會邀請您參與我的博士論文研究(題目: *部落格運用於過程/文體寫作教學之成效及其與大學生寫作策略關係之研究*)。此論文由 Dr. Alan Walker-Glaves 指導, 其研究目的在於瞭解過程/文體寫作教學法運用在電腦輔助語言教學上是否提升大學生的英文寫作能力, 及瞭解學生在英文寫作策略上是否有何轉變。該論文已通過德倫大學教育學院的研究允許, 始得進行。

此論文的研究工具包括: 英文寫作文章、問卷、觀察及訪談。研究的參與為自願性, 您有權利在任何研究時間點內退出參與此研究且不受任何懲罰。本論文的研究時間將為期約 6~8 週 (依照課程進度加以增減研究時間)。在研究過程中, 您需要繳交數篇英文文章及填寫問卷, 而我也會在課堂上觀察學生的上課狀況。研究的參與則為無償報酬。

所有搜集而成的資料將高度機密保存於安全處所內。未經您的同意, 絕不會將您的資料提供給本論文研究生與論文指導教授以外的第三人。研究結果也將發表於本人的博士論文中及學術期刊或研討會上, 但您的身份會以匿名方式呈現於任何形式的報告中。

**研究的參與對您絕無任何傷害或潛在風險。**

倘若您對本研究有任何疑問或您也想瞭解研究結果, 請您隨時與我聯絡。非常感謝您的協助、配合與參與。

請於下方勾選一選項:

- 我已充份瞭解上述內容且「同意」參與此研究。  
 我已充份瞭解上述內容但「不同意」參與此研究。

簽名: \_\_\_\_\_  
日期: 2014 年 月 日

研究生: 張偉鈺  
手機: 0988-xxxxxx  
Email: weixxx.xxxxx@durham.ac.uk

Leazes Road  
Durham City, DH1 1TA  
Telephone +44 (0)191 334 2000 Fax +44 (0)191 334 8311  
[www.durham.ac.uk](http://www.durham.ac.uk)  
Durham University is the trading name of the University of Durham

## I.2. English Version



Shaped by the past, creating the future

### Research Participation Consent Form

Dear Participants:

My name is Chang, Wei-Yu, a PhD student, who is supervised by Dr. Alan Walker-Gleaves's at the School of Education, University of Durham, UK. I am pleased to invite you to participate in my research project entitled: *A Study on the Effects of Blogs in EFL Process/Genre-Based Writing Classrooms and Its Relationship with College Students' Writing Strategies*. The purposes of the study are to find out whether the provision of the process/genre approach in computer-assisted language education helps EFL students' writing performance and whether there are any changes in terms of their writing strategies. The research has been approved by the Departmental Research Ethics and Data Protection Committee.

The research instruments in this study include the written essays, questionnaires, observations, and interviews. Participation in the study is completely voluntary, and you have the rights to withdraw from the participation at any time without permission, consequence or penalty. The research will be about 6-8 weeks according to the class progress. During the process of the study, you will need to write several essays and fill out three questionnaires, and you will be observed in class. You will receive no compensation for participating in the study.

All the collected data will be kept confidential and will not be revealed to others without your permission except for me and my supervisor. The research results will be reported in my PhD thesis, journal articles or academic conferences, but your identity will be kept anonymous in any forms at any places.

**THERE IS NEITHER KNOWN HARM NOR POTENTIAL RISK ARISING FROM PARTICIPATING IN THIS STUDY.**

If you have any questions or problems regarding the study or want to know the results of the research, please feel free to contact me. Thank you very much for your consideration, cooperation as well as participation. Your kind help is highly appreciated.

**Please tick one of the options below:**

- I fully understand the aforementioned statements and **AGREE** to participate in the study.
- I fully understand the aforementioned statements but **DISAGREE** to participate in the study.

**Signature:** \_\_\_\_\_

**Date:**     /     / 2014

PhD Student: Chang, Wei-Yu

Mobile: 0988-xxxxxx

Email: weixx.xxxxx@durham.ac.uk

Leazes Road  
Durham City, DH1 1TA  
Telephone +44 (0)191 334 2000 Fax +44 (0)191 334 8311  
[www.durham.ac.uk](http://www.durham.ac.uk)  
Durham University is the trading name of the University of Durham



## Appendix K. Interview Consent Form

### K.1. Mandarin Chinese Version



Shaped by the past, creating the future

#### 訪談同意書

同學您好:

我是英國德倫大學教育學院(School of Education, University of Durham, UK)博士班學生-張偉鈺。很開心有機會邀請您參與我的博士論文研究(題目: *部落格運用於過程/文體寫作教學之成效及其與大學生寫作策略關係之研究*)。此論文由 Dr. Alan Walker-Glaves 指導, 其研究目的在於瞭解過程/文體寫作教學法運用在電腦輔助語言教學上是否提升大學生的英文寫作能力, 及瞭解學生在英文寫作策略上是否有何轉變。該論文已通過德倫大學教育學院的研究允許, 始得進行。

現在您將由我進行訪談。訪談時所有內容將被錄音、抄寫、翻譯及報告在本人的博士論文中及學術期刊或研討會上, 但您的身份會以匿名的方式呈現於任何形式的報告中。訪談的參與為自願性, 您有權利在任何的訪談時間點內退出訪談而不受到任何懲罰。訪談時間預計為半小時(依照進度加以增減訪談時間)。訪談的參與則為無償報酬。

所有搜集而成的資料將高度機密保存於安全處所內。未經您的同意, 絕不會將您的資料提供給本論文研究生與論文指導教授以外的第三人。

**訪談的參與對您絕無任何傷害或潛在風險。**

倘若您對本研究有任何的疑問或您也想瞭解研究結果, 請您隨時與我聯絡。非常感謝您的協助、配合與參與。

請於下方勾選一選項:

- 我已充份瞭解上述內容且「同意」參與訪談。
- 我已充份瞭解上述內容但「不同意」參與訪談。

簽名: \_\_\_\_\_

日期: 2014 年 月 日

研究生: 張偉鈺

手機: 0988-xxxxxx

Email: weixxx.xxxxx@durham.ac.uk

Leazes Road  
Durham City, DH1 1TA  
Telephone +44 (0)191 334 2000 Fax +44 (0)191 334 8311  
[www.durham.ac.uk](http://www.durham.ac.uk)  
Durham University is the trading name of the University of Durham

## K.2. English Version



Shaped by the past, creating the future

### Interview Consent Form

Dear Participants:

My name is Chang, Weiyu, a PhD student, who is supervised by Dr. Alan Walker-Gleaves's at the School of Education, University of Durham, UK. I am pleased to invite you to participate in my research project entitled: *A Study on the Effects of Blogs in EFL Process/Genre-Based Writing Classrooms and Its Relationship with College Students' Writing Strategies*. The purposes of the study are to find out whether the provision of the process/genre approach in computer-assisted language education helps EFL students' writing performance and whether there are any changes in terms of their writing strategies. The research has been approved by the Departmental Research Ethics and Data Protection Committee.

Now you are going to be interviewed by me. All the information you give in the interview process will be audio recorded, transcribed, interpreted, and reported in my PhD thesis, journal articles or academic conferences, but your identity will be kept anonymous in any forms at any places. The interview is completely voluntary, and you have the rights to withdraw from the participation at any time without permission, consequence or penalty. The interview will take about half an hour according to the interview progress. You will receive no compensation for participating in the interview.

All the collected data will be kept confidential and will not be revealed to others without your permission except for me and my supervisor.

**THERE IS NEITHER KNOWN HARM NOR POTENTIAL RISK ARISING FROM PARTICIPATING IN THE INTERVIEW.**

If you have any questions or problems regarding the study or want to know the results of the research, please feel free to contact me. Thank you very much for your consideration, cooperation as well as participation. Your kind help is highly appreciated.

**Please tick one of the options below:**

- I fully understand the aforementioned statements and **AGREE** to participate in the interview.
- I fully understand the aforementioned statements but **DISAGREE** to participate in the interview.

**Signature:** \_\_\_\_\_

**Date:**     /     / 2014

PhD Student: Chang, Wei-Yu

Mobile: 0988-xxxxxx

Email: weixx.xxxxx@durham.ac.uk

Leazes Road  
Durham City, DH1 1TA  
Telephone +44 (0)191 334 2000 Fax +44 (0)191 334 8311  
[www.durham.ac.uk](http://www.durham.ac.uk)  
Durham University is the trading name of the University of Durham



## Appendix L. Ethical Approval Letter



Shaped by the past, creating the future

*30 September 2014*

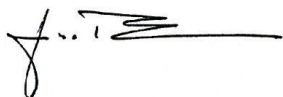
*Wei-Yu Chang  
PGR Student  
School of Education*

*wei-yu.chang@durham.ac.uk*

Dear Wei-Yu,

I am pleased to inform you that your application for ethical approval in respect of 'A study on the effects of blogs in EFL process/genre-based writing classrooms and its relationship with college students' writing strategies' has been approved by the School of Education Ethics Committee.

May we take this opportunity to wish you good luck with your research.



Dr. J. Beckmann  
Chair of School of Education Ethics Committee

Leazes Road  
Durham, DH1 1TA  
Telephone +44 (0)191 334 2000 Fax +44 (0)191 334 8311  
[www.durham.ac.uk/education](http://www.durham.ac.uk/education)

## Appendix M. Interview Transcripts

### PART I. QUESTIONS FOR THE PGA

#### 1. 老師的講解是否幫助你了解寫作題目? 為什麼?

Does the teacher's instruction help you understand the writing topics? Why?

Interview subject #1: 我覺得有一點點，有幫助。因為大部份第一次看到題目的時候都不知道可以寫什麼東西，但有了範本之後大致上會有個方向。(你覺得範本對你是有幫助的, 是嗎?) 嗯。

I think it is a little bit. It is helpful. Because I don't know what to write when I read the writing topics for the first time. But, I had a preliminary direction after reading the model articles. (You think the model articles are helpful to you, right?) Yes.

Interview subject #2: 我覺得有時候沒有，因為老師講的東西有時沒有符合我想寫的，或有時聽不懂。(不懂的地方是指?) 老師的講解和我想的方向不一樣導致我不懂。

I think sometimes it was not helpful because the instructor's instruction sometimes doesn't fit in with what I want to write, or sometimes I don't understand what he talks about. (What don't you understand?) The instructor's instruction did not fit in with my thoughts, which makes me confused.

Interview subject #3: 有。(為什麼?) 比較有方向可以寫，也可以參考範文的內容。

Yes. (Why?) I have more directions about the writing, and I can refer to the contents in the model articles as well.

Interview subject #4: 會。有時看不懂文章，老師講解後就會瞭解內容。(那寫作題目呢?) 會，會更瞭解文章架構，更有寫作方向。如果沒有範文的話，對於比較困難的題目，可能就亂寫。

Yes. Sometimes I don't understand the articles, but I can understand them after the instructor's explanations. (How about the writing topics?) Yes. I can understand more about the structures of the articles, and I have clearer writing directions. If I don't have model articles, I may write without basis for more difficult writing topics.

Interview subject #5: 是。會有一個大概的方向，可以從那些方向想一些細節。

Yes. I can have a general direction, and then I can think of details by going through the direction.

Interview subject #6: 有幫助，多少有幫助。(你為何認為有幫助?) 有時看完題目不知道如何寫大綱，如果老師有講解的話，我們會比較有想法。

Yes, it is more or less helpful. (Why do you think it is helpful?) Sometimes I don't know how to start outlines after reading the

writing topics, but I have more ideas after the teacher's explanations.

Interview subject #7: 可以。(為什麼?) 可以知道如何下筆。

Yes. (Why?) I can understand how to start writing samples.

Interview subject #8: 很有幫助。老師 po 的文章和講解都很清楚，也會舉例，可以知道文章結構，也能找到文章重點。

Very helpful. The model articles and the instructor's instruction are quite clear. The instructor also provides some examples, so we can understand the structures and the key points of the model articles.

Interview subject #9: 有。比較不會離題，也比較好發揮。會比較知道如何使用片語或文法。

Yes. My writing samples would not digress from the writing topics, and it is easier to write. I can understand how to use phrases or grammar.

Interview subject #10: 會。(為什麼?) 因為老師會給我們方向，也會帶我們看範文，我們會比較知道如何下筆。

Yes. (Why?) The instructor provides us with writing directions, and guides us to read the model articles. We can understand how to start writing.

Interview subject #11: 可以。因為老師的講解很清楚，而且有範文，可以知道怎麼寫。

Yes. The instructor's explanations are very clear, and we have the model articles. We can understand how to write.

Interview subject #12: 可以。老師通常都會提供例子、單字，例如低出生率有那些可能因素，這可以幫助我更找到寫文章的方向。

Yes. The instructor usually provides examples and vocabulary. For example, he provides the possible reasons for the low birth rate, which helps me find out the writing directions.

Interview subject #13: 可以。因為老師上課會提出例子，這樣可以幫助我知道如何寫文章，而且老師講解後，我也比較容易下筆。

Yes. The instructor provides examples in class, which helps me understand how to write the essays. Moreover, it is easier for me to start writing after the instructor's explanations.

Interview subject #14: 會，有幫助。因為老師解釋之後我們比較知道如何寫，也比較有方向。

Yes, it is helpful. We can understand how to write, and have writing directions after the instructor's explanations.



2. 老師所提供的範文是否幫助你了解寫作題目? 為什麼?

Does the teacher's provision of the model articles help you understand the writing topics? Why?

Interview subject #1: 我覺得可以瞭解一點點。因為每個人看文章的觀點都不太一樣。(所以你覺得無法瞭解很多, 只有一點點而已, 是嗎?) 嗯。  
I think I can understand them a little bit because everyone has different points of view when reading articles. (You don't think you can understand a great deal, but just a little bit. Right?) Yes.

Interview subject #2: 有幫助。因為可以知道如何開頭、陳述文章。  
Yes. It is helpful because I can understand how to start and pave the way for my writing samples.

Interview subject #3: 這題和第一題一樣啊。  
The question is the same with Q1.

Interview subject #4: 不會。我覺得我們上課文章的題目太困難了。(看了範文後還是很難嗎?) 對, 我都想直接抄範文了。上課時能瞭解, 但自己要寫時就很難發揮。(什麼因素讓你難發揮呢?) 題目太困難了。  
No. I think the writing topics we use in class are too difficult. (After reading the model articles, are they still difficult?) Yes. I even want to copy the model articles. I can understand them in class, but it is too difficult to write by myself. (What makes them difficult?) The writing topics are too difficult.

Interview subject #5: 可以。讀完範文後可以知道作者的寫作方式或方向。自己就會有寫作方向, 就不會離題, 而且也可以參考範文的內容。  
Yes. I can understand how the writers write or the writing directions after reading the model articles. I can have writing directions, and I will not digress from the writing topics. Also, I can refer to the contents in the model articles.

Interview subject #6: 可以。可以參考範文。但有時讀完範文會發現, 自己的想法和範文的內容差不多。(所以會被範文限制?) 對。  
Yes. I can refer to the model articles. However, sometimes I find my ideas are similar to the ones used in the model articles after reading them. (Are you confined to the model articles?) Yes.

Interview subject #7: 可以。但有時會想抄範文的內容。(為什麼?) 有時不知道怎麼寫就會參考範文, 看了範文就會想抄上面的內。  
Yes. However, sometimes I want to copy the contents in the model articles. (Why?) When I don't know how to write, I refer to the model articles. After reading them, I want to copy them.

Interview subject #8: 很有幫助。我們課程的題目還蠻困難的，像是少子化或全球暖化的議題，如果沒事先查資料的話，對我們其實還蠻難的，但老師提供文章，我們能夠找到寫作方向。

Very helpful. The writing topics are quite difficult to us, such as the low birth rate and global warming. It would be very difficult to start if we don't search for the information in advance. However, because of the instructor's provision of the model articles, we are able to have the writing directions.

Interview subject #9: 會。比較容易下筆，而且我們也可以直接參考範文的內容和架構。

Yes. It is easier to start, and we can refer to the contents and structures in the model articles directly.

Interview subject #10: 可以。因為我們從沒寫過這類題目，但老師講解後，我們會比較知道怎麼寫以及讀者需要的資訊。

Yes. We never wrote about these kinds of writing topics before. However, we are more able to understand how to write, and what readers need after the instructor's explanations.

Interview subject #11: 可以。範文的內容和題目通常是一致的，只是自己寫作時要特別注意，不要偏離主題。

Yes. The contents of the model articles usually conform to the writing topics. However, we need to pay more attention to our writing samples to avoid digressing from the writing topics when we are writing.

Interview subject #12: 可以。因為我們這次寫的題目關於全球暖化和少子化議題，所以讀完範文之後，我們可以知道讀者需要的資訊是那些，然後提出具體的例子和說明。

Yes. Our writing topics are about global warming and low birth rate. After reading the model articles, we can understand what information readers need, and then we can provide specific examples and explanations.

Interview subject #13: 可以。因為範文可以讓我知道寫作的方向。

Yes. The model articles help me understand the writing directions.

Interview subject #14: 和第一題一樣，會比較有方向，也比較容易下筆。

The answer is the same with Q1. We have the writing directions, and we can start writing more easily.

3. 你認為老師批改時所給的意見是否能提升你的英文寫作能力? 為什麼?

Do you think the teacher's comments on your writing samples improve your English writing abilities? Why?

Interview subject #1: 大部份都改文法上的錯誤，我覺得有一點幫助。(你覺得老師多著墨於文法上的錯誤，所以對你寫作的文法多少有幫助，是嗎?) 對。

Most corrections are about the grammatical mistakes, so I think it is a bit helpful. (You think the instructor focuses on the grammatical mistakes, and it is helpful to your grammatical abilities in writing, right?) Yes.

Interview subject #2: 可以。我自己的文法沒有很好，老師批改後，就會知道那裡寫錯，老師的意見也會幫助我知道如何修改文章。

Yes. My grammatical abilities are not good, so I can understand what mistakes I have made after the instructor's marking. The instructor's comments also help me understand how to modify my writing samples.

Interview subject #3: 會。可以知道犯了什麼錯。

Yes. I can understand what mistakes I've made.

Interview subject #4: 會。可以提升文法能力，對於有些沒想到的單字也有幫助。

Yes. It improves my grammatical abilities. It also helps me use some vocabulary that I haven't thought about.

Interview subject #5: 基本上是可以。在文法或單字的用法上有幫助。(為什麼你認為這樣些你的寫作有幫助?) 以後寫作如果遇到類似狀況，就不會用錯文法或單字了。

Basically yes. They are helpful to the usages of grammar and vocabulary. (Why do you think they are helpful to your writings?) If I have similar situations in my future writing, I will not use grammar or vocabulary incorrectly.

Interview subject #6: 多少可以吧。(為什麼?) 寫錯就要改，老師改了就記住，不要犯一樣的錯誤。

It is more or less helpful. (Why?) I have to modify my mistakes. I remember the teacher's corrections, and not to make the same mistakes.

Interview subject #7: 可以，文法的部份。(為什麼?) 可能是中籍老師吧，外籍老師我都看不懂他們在改什麼。

Yes, grammar. (Why?) It may be because of the Taiwanese teacher. I don't understand the foreign teachers' comments.

Interview subject #8: 非常有幫助。我們很喜歡老師給我們很多意見，這樣對我們寫作很有幫助，而且也提升我們的文法和文章組織能力。

Very helpful. We are glad that the instructor provides us with a great number of comments, which are really helpful to improve our writing abilities. Also our grammatical abilities and essay organising abilities can be improved as well.

Interview subject #9: 可以。因為老師給的建議都是我常犯的錯誤，我們多寫、多看，一定會有所幫助。

Yes. The instructor's comments point out the mistakes that I often make. It must be helpful if we write more samples and read more articles.

Interview subject #10: 可以。(為什麼?) 因為老師很認真看我寫的文章，然後找出錯誤，我的文法能力也提升了。

Yes. (Why?) The instructor marks my writing samples cautiously, and find out the mistakes. My grammatical abilities are enhanced as well.

Interview subject #11: 可以。老師的批改很清楚，而且也會用例子的方式提供建議的修改。

Yes. The instructor's markings are quite clear, and he also provides suggested examples for us to modify our writing samples.

Interview subject #12: 可以。會知道自己犯錯的地方，下次就會比較注意，錯誤率也會降低。

Yes. I can understand my mistakes, and I will pay more attention to them in my future writing samples. The frequency of mistakes will also decrease.

Interview subject #13: 我覺得還好，有時老師批改的內容和自己想表達的意思不同。

Not really. Sometimes the instructor's markings are different from my ideas that I want to express.

Interview subject #14: 可以。老師會指出文法錯誤，我下次在這部份就會比較小心謹慎，不再犯一樣的錯。

Yes. The instructor indicates the grammatical mistakes. I will be more cautious and avoid making the same mistakes in my future writing samples.

4. 你認為同學所給的意見是否能提升你的英文寫作能力? 為什麼?

Do you think the classmates' comments on your writing samples improve your English writing abilities? Why?

Interview subject #1: 可以。(為什麼?) 因為很多頭腦想的總比一個頭腦多。

Yes. (Why?) Two heads are better than one.

Interview subject #2: 我覺得還好。沒能提升很多，因為他們自己可能也不知道要怎麼寫。

Not really. It doesn't help a great deal because they may not know how to write, either.

Interview subject #3: 會列入參考，如果我也認同，就會採用同學的意見。

I will refer to my classmates' opinions. If I agree with them, I will use their comments.

Interview subject #4: 可以。(為什麼?) 透過和同學討論，程度較好的同學可以提供協助。(那方面的協助?) 不知道如何寫時，同學就會給意見，也會給一些方向。

Yes. (Why?) Some more proficient classmates are able to provide helps through the discussions. (What kind of helps?) They provide their opinions and directions when we don't know how to write.

Interview subject #5: 可以。因為有時候同學提出的觀點是我沒有想到的，可以參考他們的想法。

Yes. Sometimes the classmates' ideas are what I haven't thought about. I can refer to their ideas.

Interview subject #6: 可以。有時和同學的想法不同，可以互相交流，增加寫作能力。

Yes. Sometimes my ideas are different from my classmates'. We can exchange our ideas, which enhances our writing abilities.

Interview subject #7: 寫的時候我很少和同學討論，都自己上網查，只有寫完才會請同學看。(那你請同學看完他們會給你意見嗎?) 很少。除非是組別作業，需要整組討論。

I rarely discuss with my classmates when I am writing. I usually search for online information. I ask my classmates to read my essays after I finish them. (Do they provide any comments for you after reading?) Rarely. Unless it is a group assignment, we have to discuss it together.

Interview subject #8: 這就要視情況而定。大部份的同學都只是鼓勵，我覺得對我的寫作實質幫助不大。

It depends. Most classmates offer compliments which don't really improve my writing abilities.

Interview subject #9: 不可以。因為同學的回饋都是“非常好”，沒有具體的評判，也沒有任何文法或寫作方面的建議。

No. My classmates' feedback is "very good" at all times. They neither provide specific criticisms, nor provide any grammatical or writing suggestions for me.

Interview subject #10: 可以。因為可以學到其他人的優點。

Yes. I can learn from others' strengths.

Interview subject #11: 不一定，因為有些同學會用自己的觀點提供建議，但這些建議不一定正確，所以不一定能提升寫作能力。

Not necessarily. Some classmates provide suggestions based on their own viewpoints. The suggestions may not be correct, so they don't really improve my writing abilities.

Interview subject #12: 我覺得不太可以，同學比較少提出具體建議，不會針對某個部份加以批判。

I don't think so. My classmates rarely provide specific suggestions. They don't criticise on certain parts.

Interview subject #13: 可以。和同學討論的過程中可以知道如何修改自己的寫作。

Yes. I can understand how to modify my writing samples when I discuss with my classmates.

Interview subject #14: 同學的建議也有幫助，但也是針對文法或單字的使用。(那內容呢? 是否有幫助?) 內容就還好。

The classmates' feedback is also helpful, and they also direct to the usages of grammar and vocabulary. (How about the contents? Are they helpful?) Not really.

5. 你認為此次的英文寫作教學有什麼優點?

What are the advantages you find in this English writing programme?

Interview subject #1: 很輕鬆。可以更快速學習。

It is easy. We learn faster.

Interview subject #2: 覺得上課教的“寫作風格”還蠻有幫助的。(為什麼?) 因為有些內容是我之前沒有想過的。(還有其他的嗎?) 沒有。

I think the contents of "writing style" are quite helpful. (Why?) I've never thought about it before. (Anything else?) No.

Interview subject #3: 比較容易下筆，寫作也比較有方向。

It is easier to start writing, and I have more directions for writing.

- Interview subject #4: 提升我的文法能力。  
It improves my grammatical abilities.
- Interview subject #5: 增加和老師的互動機會，寫作技巧上也有幫助。  
It increases the interactions with the instructor, and it is helpful to my writing skills as well.
- Interview subject #6: 增加我們的寫作機會，幫助我們愈寫愈好。  
It increases our writing opportunities, and helps us write better.
- Interview subject #7: 多認識一些單字。老師課堂上的引導可以幫助我們找到寫作方向，幫助我們瞭解寫作前沒想到的部份。  
I learn more vocabulary. The teacher's guidance helps us find out writing directions, and helps us understand what we haven't thought about before we write.
- Interview subject #8: 老師會清楚的點出我們犯的錯誤或提供寫作建議，這樣可以讓我們更能從中學習自己所欠缺的部份，而且透過部落格的方式有一個很大的好處是我們有充份的時間去理解老師所提供的意見，但如果在課堂上發問則會擔心是否會佔用太多時間、是否趕不及下一節上課、是否還有其他同學等著發問，而且透過部落格我們也不會遺漏老師的意見，但課堂上老師說明之後，回去我們可能就忘了。  
The instructor points out our mistakes clearly or provides writing suggestions for us, which help us understand what we lack. Moreover, we have sufficient time to understand the instructor's opinions on blogs. If we ask questions in class, we need to worry about whether we take up too much time, whether we are late for the next class, or whether there is anyone waiting to ask questions. Also, it is impossible to miss the instructor's comments on blogs, but we would forget what he said after class.
- Interview subject #9: 不需要列印，節省紙張。WORD 可以協助檢查我們的拼字、文法錯誤。也可以線上查字典。  
We don't need to print out assignments, which saves papers. Word processor helps us examine spellings and grammatical mistakes. We can also use online dictionary.
- Interview subject #10: 可以增進我們的文法能力，而且和老師同學間也比較有互動。寫作前的講解也能幫助我們找到寫作方向。  
It improves our grammatical abilities, and we have more interactions with the teacher as well as the classmates. The instructor's explanations before writing also help us find out writing directions.

Interview subject #11: 我們必須閱讀同學的文章，所以可以學習其他同學的優點。  
We have to read others' writing samples, so we can learn from others' strengths.

Interview subject #12: 寫作前先讀範文可以幫助我們更有寫作的方向，也比較容易下筆。  
Reading model articles before writing helps us find out writing directions, and it is easier to start writing as well.

Interview subject #13: 以前寫作不太有和同學或老師討論的機會，但這次教學多了很多這樣的機會，覺得自己進步很多。  
We had scarce opportunities to discuss with the classmates or instructors in previous writing classes, but we have a great number of discussions in this programme. I think my writing abilities have been developed a great deal.

Interview subject #14: 我覺得我的寫作能力有進步，因為我原本的英文寫作並沒有很好，但這次的教學讓我們可以不斷重覆的寫、不斷重覆的修改，我覺得我的寫作能力有明顯的提升。  
I think I have made progress with my writing abilities. My writing abilities were not good, but I think my writing abilities are improving greatly because I have to write and modify my writing samples repeatedly in this programme.

6. 你認為此次的英文寫作教學有什麼缺點？

What are the disadvantages you find in this English writing programme?

Interview subject #1: 每個星期都寫一樣的題目。  
Writing about the same topics every week.

Interview subject #2: 沒有。  
No.

Interview subject #3: 一直寫重複的內容，可以換其他不同的主題。  
Writing about the same contents repeatedly. Different topics can be used.

Interview subject #4: 要一直重寫文章。  
Need to revise writing samples repeatedly.

Interview subject #5: 寫作題目一直重覆。  
Writing about the same topics repeatedly.



Interview subject #6: 一直重覆一樣的題目，感覺寫的內容都一樣。  
Writing about the same topics repeatedly. I think I am writing the same contents all the time.

Interview subject #7: 沒有。  
No.

Interview subject #8: 對我而言沒有缺點。我覺得我有明顯的進步，而且也很喜歡這樣的方式。  
I don't think there is any disadvantage. I find myself making much progress, and I like the way we have in class.

Interview subject #9: 有時痞客邦上的留言會不見。  
Sometimes the messages on the *Pixnet* disappear.

Interview subject #10: 我覺得沒有。  
I don't think there is any one.

Interview subject #11: 這次的寫作方式和往常不一樣，還蠻新鮮的，沒什麼缺點。  
This writing class is quite different from the previous ones. It is quite new. There is not disadvantage.

Interview subject #12: 看完範文後，我們的想法會被侷限，比較沒有自己的想法。  
After reading the model articles, our ideas are confined to them, and we lack our own ideas.

Interview subject #13: 大致上沒有。  
Generally speaking, no.

Interview subject #14: 對我而言，沒有。  
I don't think so.

7. 關於此次寫作教學，你是否還有其他以上題目未提及的意見或想法？

Regarding the English writing programme, do you have any ideas or opinions that I have not asked?

Interview subject #1: 我覺得你講解文章要快一點。  
I think you should speed up your instruction.

Interview subject #2: 沒有。  
No.

Interview subject #3: 沒有。  
No.

Interview subject #4: 不要太難的題目。  
Avoid using difficult writing topics.

Interview subject #5: 沒有。  
No.

Interview subject #6: 沒有。  
No.

Interview subject #7: 沒有。  
No.

Interview subject #8: 沒有。我覺得一切都很好。  
No. I think everything is good.

Interview subject #9: 沒有。  
No.

Interview subject #10: 沒有。  
No.

Interview subject #11: 沒有。  
No.

Interview subject #12: 沒有。  
No.

Interview subject #13: 沒有。  
No.

Interview subject #14: 沒有。  
No.

## PART II. QUESTIONS FOR WRITING STRATEGIES

### 1. 你是否會利用各種方法記住寫作技巧、單字或文法概念? 為什麼?

Do you use any ways to remember writing skills, vocabulary, or grammar? Why?

Interview subject #1: 我會記在我的筆記本裡。(任何寫作技巧、單字嗎?) 比較特別的。(為什麼?) 可以寫出更完美的文章。

I take notes on my notebook. (Any writing skills? Any vocabulary?) Something special. (Why?) I can write better essays.

Interview subject #2: 會記寫作技巧, 可能會寫的比較多、比較通順。也會背單字, 然後使用不同的單字寫文章, 避免單字的重複。(所以你會用這些方法來幫助你寫文章?) 對。(那你都如何記住它們?) 背起來。

I usually take writing skills, so I may write more contents and write more smoothly. I also recite and memorise vocabulary, and I write with different words to avoid word repetitions. (You use these ways to help you write essays, right?) Yes. (How do you remember them?) Recite by heart.

Interview subject #3: 會, 會做筆記, 也許以後會用到。(為什麼你會把它們記在筆記本?) 不想背。

Yes, I take notes because I may use them in the future. (Why do you jot down on the notebook?) I don't want to recite and memorise them.

Interview subject #4: 會, 記住的話, 考試時就會寫更快、更順、更好, 說不定分數高一些我就不會被當了。(你都怎麼記?) 記在腦裡。(你不會記筆記嗎?) 不會, 我不寫筆記。

Yes. If I remember them, I can write faster, more smoothly, and better during exams. If I could get higher scores, I would not fail the course. (How do you remember them?) Keep in mind. (Don't you take notes?) No. I don't take notes.

Interview subject #5: 老師批改後的評語或建議我都會把它們記住。(那你都怎麼記?) 硬記, 印在腦海裡。(你會記在筆記上嗎?) 不會, 都記在腦海裡。

I usually remember the teachers' comments and suggestions after their marking. (How do you remember them?) Force myself to remember them. Keep in mind. (Do you take notes?) No. I bear them in mind.

Interview subject #6: 會。(你都怎麼記?) 記在頭腦。(你為何想記住?) 總不可以一直犯一樣的錯誤或總是用一些簡單的單字或句子寫作。

Yes. (How do you remember them?) Keep in mind. (Why do you want to remember them?) I can't make the same mistakes, or write with simple vocabulary or sentences all the time.

- Interview subject #7: 會，會記在大腦裡。(你為何想把它們記住?) 以後寫作可能會用得到。  
Yes, I keep them in mind. (Why do you want to remember them?) I may use them in my future writing samples.
- Interview subject #8: 會。會將一些沒用過的寫法、單字或文法記在筆記本上，也許將來有天我會用得到。  
Yes. I take notes about some writing usages, vocabulary, or grammar that I never use before. I may use them someday.
- Interview subject #9: 不會。遇到不會寫的就查，除非是一些比較基本、常用的文法，像是 not only...but also，一些比較特別的就不會記。(為什麼?) 因為特別的我也用不到，平常都寫簡單的文章。  
No. If I don't know how to write, I search for it. I take notes for some basic and commonly used grammar, such as not only...but also. I don't take notes for some special usages. (Why?) I don't use special ones. I usually write simple essays.
- Interview subject #10: 我會覆習不熟悉的文法概念。(你通常怎麼做?) 多看句子。  
I review grammar that I don't understand well. (How do you usually do?) Read sentences.
- Interview subject #11: 單字吧，如果沒有單字，句子也寫不出來。(那你们都怎麼記單字?) 背起來。  
Vocabulary. We can't make any sentences without vocabulary. (How do you remember vocabulary?) Recite and rote memorise.
- Interview subject #12: 會記單字和文法。(你通常怎麼記住?) 我會抄在筆記上也會背起來。(為什麼你想記住它們?) 因為寫作可能會用到，如果把它們記起來將來就用得到了。  
I take vocabulary and grammar. (How do you remember them?) I take notes and also recite by heart. (Why do you want to remember them?) I may use them in my future writing samples. If I remember them, I can use them someday.
- Interview subject #13: 會背一些片語、單字或文章。(為何你會這麼做?) 寫文章或考試時可以用得到，也比較不會犯錯。  
I memorise and recite some phrases, vocabulary, or articles. (Why do you do so?) I can use them when I am writing or doing tests. I would make fewer mistakes.
- Interview subject #14: 我會記文法，因為我覺得我的文法能力比較弱，所以我會將文法記下來。(那你通常怎麼記?) 大部份都記在大腦裡。(為什麼你想把它們記下來?) 因為以後可能會用到。  
I usually take grammar. My grammar is relatively weak, so I usually remember them. (What do you usually do to remember

it?) Keep in mind. (Why do you want to keep them in mind?)  
Perhaps I may use them someday.

2. 你是否盡可能使用不同的英文寫技巧、單字或文法? 為什麼?

Do you try your best to use different English writing skills, vocabulary, or grammar?  
Why?

Interview subject #1: 會盡量用不同單字。(那技巧或文法呢?) 比較少。(為什麼?) 如果用不同的單字讀者讀文章時比較不乏味。技巧或文法則是有時記不了那麼多，有寫作時間限制的話。

I try to use different vocabulary. (How about writing skills or grammar?) Relatively rare. (Why?) Readers would not get bored when reading if I use different vocabulary. Regarding writing skills or grammar, I can't remember so much of them if I have limited amount of time for writing.

Interview subject #2: 我都用一樣的。(為什麼?) 就習慣這個方式。(可是你剛說你會背不同的文法、單字來幫助你寫文章?) 就背那些，用一樣的。(所以你會將你背的用在寫作上囉?) 盡量，如果有想到的話就會用在文章上。

I usually write with the same way. (Why?) I am used to it. (But you just said that you recite and memorise different grammar and vocabulary to help you write.) I use what I recite and memorise. (You use what you recite and memorise on your writing samples, right?) Try my best to do it. If I remember them, I will use them on my writing samples.

Interview subject #3: 會。如果記得，就會用。

Yes. If I remember them, I will use them.

Interview subject #4: 偶爾，如果我記得的話。

Occasionally, if I remember to do it.

Interview subject #5: 會，會避免使用一樣的單字。(為何你要這麼做?) 增加讀者的閱讀興趣，避免讓讀者一直看到一樣的單字。

Yes, I avoid using the same vocabulary. (Why do you want to do so?) To increase readers' reading interests, and to prevent them from reading repetitive words.

Interview subject #6: 會。(為什麼?) 想寫不一樣的文章，不想和高中時所寫的作文一樣，想提升自己的寫作能力。

Yes. (Why?) I want to write different kinds of essays. I don't want to write essays which are the same with the ones I did at high school. I want to improve my writing abilities.

Interview subject #7: 會。因為寫一樣的東西分數比較低。

Yes. The scores will be lower if I write the same things.

Interview subject #8: 會，這樣我才會更進步。如果不常用某個文法或寫作技巧，就很容易忘記。

Yes, it helps me make progress. If I use certain grammar or writing skills rarely, I will forget them soon.

Interview subject #9: 會。如果太多一樣的單字或文法，我就會改一下。(為什麼?) 這樣的文章比較好，讀者不會一直看重覆的內容。

Yes. I will modify it if I use too much similar vocabulary or grammar, which is the same. (Why?) The writing samples of this kind are better. Readers will not read the same contents all the time.

Interview subject #10: 會使用不同的單字，避免使用重覆的單字，讓文章不會那麼單調。(還有其他的嗎?) 沒有。

I use different vocabulary to avoid word repetitions, which keeps the writing samples from monotony. (Anything else?) No.

Interview subject #11: 我上了大學才主修英文，所以也不知道什麼英文寫作技巧，寫作時就根據自己原有的知識寫，如果上課有學到寫作技巧，就會把它們記起來。

I major in English after entering the university, so I don't know what English writing skills are. I usually write what I've already known. If I learn writing skills in class, I will remember them.

Interview subject #12: 會。例如我背了一個新單字，當我寫文章時，我就會把它用在文章裡。

Yes. For example, if I memorise new vocabulary, I will use it in my writing samples when I am writing.

Interview subject #13: 不會用很多技巧或文法，但會使用不同的單字。(為什麼?) 我怕用不同的文法會出錯。

I don't use a lot of different skills or grammar, but I use different vocabulary. (Why?) I am afraid to make mistakes if I use different grammar.

Interview subject #14: 技巧比較不會，但會用不同的文法和單字。(為什麼?) 總要學新的東西吧。

Not for writing skills, but I use different grammar and vocabulary. (Why?) We have to learn new things.

3. 你是否會用各種方式提升自己的英文寫作能力 (如: 閱讀小說、雜誌或報紙等)? 為什麼?

Do you use any ways to improve your English writing abilities (e.g. reading novels, magazines, or newspaper etc.)? Why?

Interview subject #1: 會，會看英文小說。(還有其他的嗎?) 沒有。雜誌很少，只有看英文小說。

Yes, I read English novels. (Anything else?) No. I read English magazines rarely. I just read English novels.

Interview subject #2: 比較少，比較少閱讀，因為沒有很喜歡看書。(你不會用任何方式提升你的寫作能力?) 除非考試，考試會看書，平常就不太會了。

Relatively rare. I read scarcely because I don't like reading. (Don't you try any ways to improve your writing abilities?) Except for preparing for exams, I study rarely.

Interview subject #3: 看電影。(你覺得看電影如何提升你的寫作能力?) 會注意他們的對話，也會有字幕，這些都有幫助。

Watch movies (How does movie watching improve your writing abilities?) I pay attention to their conversations, and there are subtitles. They are all helpful.

Interview subject #4: 不會，因為我還要打工，還有補修其他課程的學分。

No, I have a part-time job, and I have to make up some credits.

Interview subject #5: 基本上不太會，除非老師要求我們讀文章或課文才會。(為什麼不會看?) 因為自己英文能力沒那麼好，看英文文章的速度也很慢。

Basically not, unless teachers require us to read. (Why not?) My English competence is not so good, and English reading speed is also very slow.

Interview subject #6: 沒有。(為什麼不會這麼做?) 沒有這樣的習慣，不會特地做什麼去提升寫作能力。

No. (Why not?) I am not used to it. I don't do anything in particular to improve my writing abilities.

Interview subject #7: 會看小說。(為何會看小說提升寫作能力?) 看小說可以提升文法能力和字彙量，也許未來寫作作用得到。

I read novels. (Why do you read novels to improve your writing abilities?) Reading novels increases my grammatical abilities and the amount of vocabulary. I may use them in my future writing samples.

Interview subject #8: 會多看其他人的文章。(例如什麼?) 會在網路上看其他人的英文文章或專欄，就看一些短短的英文文章。

I read others' writing samples. (Any example?) I read others' English writing samples or columns on the Internet. I read some short English writing samples.

Interview subject #9: 會，我會看英文電影和聽英文歌。(這樣做對寫作有幫助嗎?) 會。我可以知道他們如何使用英文，像是介系詞、單字等等。

Yes, I watch English movies and listen to English songs. (Are they helpful to your writing?) Yes. I can understand how they use English, such as preposition, vocabulary and the like.

Interview subject #10: 我會閱讀英文小說，幫助自己寫的文章更流暢。(還有其他的嗎?) 沒有，我只會看英文小說。

I read English novels, which helps me write more smoothly. (Anything else?) No. I just read English novels.

Interview subject #11: 我通常都是看電影。(你認為看電影可以提升你的寫作能力嗎?) 可以增進我的思考能力，幫助我更有想法。

I usually watch movies. (Do you think watching movies improves your writing abilities?) It improves my critical thinking abilities. It makes me more thoughtful.

Interview subject #12: 會看雜誌，雜誌裡有很多的片語或慣用語，我覺得對我的寫作很有幫助。

I read magazines. There are a large number of phrases and idioms in magazines. I think they are helpful to my writing a great deal.

Interview subject #13: 看雜誌。(為什麼?) 我自己蠻喜歡英文的，所以想背起來。

Read magazines. (Why?) I like English quite much, so I want to recite and memorise it.

Interview subject #14: 我比較喜歡看電影，針對自己比較有興趣的，多聽多看久了之後就會進步。

I prefer watching movies. I make progress by listening to and watching what I am interested in.



4. 英文寫作遇到不會寫的時候，你通常會怎麼做 (如: 查字典、找其他字替代、或任何其他方法)? 為什麼?

What do you usually do if you have difficulties in English writing (e.g. looking up dictionaries, finding out substitute words, or using other ways)? Why?

Interview subject #1: 查字典或翻以前上課的書。(還有其他的嗎?) 問老師或同學，更快速。

Looking up in a dictionary or referring to the previous textbooks. (Anything else?) Asking instructors or classmates. It is faster.

Interview subject #2: 如果單字的話，會想看看有沒有其他的同義字，或用比較容易的方式寫。文法的話，有時可能跳過，就不寫這個，或用其他比較簡單的句子寫。

For vocabulary, I try to find out synonyms, or write with easier ways. For grammar, I sometimes skip it and not to write it, or I write with other simpler sentences.

Interview subject #3: 問同學，如果有人可以問，就會用問的，比較快。如果只有一個人，就會自己查單字。(那文法呢?) 寫作通常都是在課堂上，所以就問同學。(所以課堂外你不會自己用英文書寫?) 頂多就寫記，但也不需要很精準的文法，就用自己的方式寫就好。

Ask my classmates. If I have someone to ask, I usually ask them. It is faster. If I am alone, I usually look up words in a dictionary. (How about grammar?) I usually write essays in class, so I just ask my classmates. (Don't you write in English other than in class?) Just for my diary, but it does not need very precise grammar. I can write it with my own way.

Interview subject #4: 查字典或上網查，有時會用翻譯軟體，參考該如何下筆，或找其他字代替。(你會問同學或老師嗎?) 會，會找任何可能的方式來解決問題。

Look up words in a dictionary or search for online information. Sometimes I use translation software to help me start writing samples, or find out substitute words. (Do you ask your classmates or teachers?) Yes. I use any possible solutions to solve my problems.

Interview subject #5: 上網查。(查什麼?) 查一些文法和單字的用法。問同學或老師，或用其他的句子或單字寫。

Search for online information. (What do you search for?) I search for some grammatical or vocabulary usages. I also ask my classmates or teachers, or I use other sentences or vocabulary to write.

**Interview subject #6:** 單字不會就查字典。如果是整篇文章，在寫完畢繳交前，我會請老師先幫我看過。(為何你會這麼做?) 因為我不希望我所繳交的作文在任課老師批改完後整篇都是紅色的。

For vocabulary, I look up words in a dictionary. For essays, I ask a teacher to examine it for me before submission. (Why do you do so?) I don't want to see my writing samples marked with many rubric corrections after I get them from the instructor.

**Interview subject #7:** 單字不會就查字典，文法不會就查文法書。(如果段落或文章不知道怎麼寫呢?) 上網找資料，找題目可以寫的內容有那些。

Look up words in a dictionary for vocabulary and consult grammar books for grammatical problems. (What if you don't know how to write paragraphs or essays?) Search for online information. Find out what can be included in writing samples.

**Interview subject #8:** 單字不會的話，就查字典。至於文法、文章結構或方向不清楚的話，我會直接問老師或和同學一起討論。

For vocabulary, I look up words in a dictionary. As for grammar, structures, or writing directions, I ask instructors directly, or discuss with my classmates.

**Interview subject #9:** 題目不會寫就看範文，單字不會就查單字，文法不會就用最簡單的句子表達。(你為何會採取這些方式?) 因為要交作業。

For writing topics, I refer to model articles. For vocabulary, I look up in a dictionary. For grammar, I express with the simplest sentences. (Why do you use these ways?) To submit assignments.

**Interview subject #10:** 我會問老師或同學。(為什麼?) 老師會直接給方向，自己想很難達到要求。也會問寫作能力較好的同學，畢竟年紀相仿，比較容易溝通。

I ask instructors or classmates. (Why?) Instructors provide directions directly. It is difficult to achieve the requirements by myself. I also ask my classmates who are proficient in writing. We are about the same age, so it is easier to communicate.

**Interview subject #11:** 我會找其他同義字。如果文章不會寫的話我會尋問英文能力較好的同學或上網找資料。

I use some other synonyms. If I don't know how to write essays, I ask my classmates whose English abilities are better than mine, or I search for online information.

**Interview subject #12:** 單字的部份我會先想看看是否有其他單字可以替代，想不到的話就會查字典。文章的話就會上網查資料，讓自己更有寫作的想法。

For vocabulary, I think about other words to substitute. If I can't make it, I will look up words in a dictionary. For essays, I search

for online information to make me more thoughtful to my writing samples.

**Interview subject #13:** 我會上網查或問同學。(為什麼?) 網路上的資訊很多可以供查詢, 但查完還會再問同學是否正確, 因為網路資訊可能是錯的。

I search for online information or ask classmates. (Why?) There is a great deal of online information, but I also confirm the accuracy of the information by asking my classmates because some information may be incorrect.

**Interview subject #14:** 我會先查字典, 如果手邊沒有字典的話, 我會用其他字替代。(那文章或文法不會寫呢?) 文法的話, 會用自己原本知道的方式寫, 至於文章, 我會參考網路上的範文。

I look up words in a dictionary in the first place. If I don't have a dictionary at hand, I use different words to substitute. (How about essays or grammar?) For grammar, I use what I've already known. For essays, I refer to online articles.

#### 5. 日常生活中, 何種情況下你會用英文書寫? 為什麼?

In what circumstances, do you write in English in your daily life? Why?

**Interview subject #1:** 懶的寫中文的時候, 因為英文的筆劃比較少。

When I am lazy to write Chinese characters because English involves fewer numbers of strokes.

**Interview subject #2:** 應該沒有, 可能和朋友聊天時偶爾講一、二個單字或句子。(只有說的部份嗎?) 說和打字的都會。

Not really. I just use one or two words or sentences to talk with my friends. (Just for speaking?) Both speaking and typing.

**Interview subject #3:** 課堂上或寫日記時。(你為何會用英文寫日記?) 中文筆劃太多了, 用英文寫比較快。

In class or for diary. (Why do you write the diary in English?) There are too many numbers of strokes in Chinese characters. Writing in English is faster.

**Interview subject #4:** 不會, 只有偶爾, 日常生活中很少用到英文。

No, just once in a while. I seldom use English in my daily life.

**Interview subject #5:** 除了作業以外, 比較少。(如果和同學聊天等等呢?) 只有片段的, 不會全部都用英文。(那你為何要用英文寫?) 比較快, 有時就直接想到英文。

Relatively rare, except for assignments. (How about talking with your classmates?) I just use English partly, but not use it all the

time. (Why do you want to write in English?) It is faster, and sometimes English occurs to me directly.

Interview subject #6: 日記，有時會用英文寫日記。其他時候就不會了。(你為何想用英文寫日記?) 有時比較特別的句子或單字會用英文寫。(為何其他時候你不會用英文寫?) 覺得還是寫中文比較順。  
For diary, sometimes I write the diary in English. I don't write in English at other times. (Why do you want to write the diary in English?) I write some special sentences or vocabulary in English. (Why don't you write in English at other times?) I think writing in Chinese is more comfortable.

Interview subject #7: 寫一些 MEMO 時才會用到英文。  
I only write in English when writing memos.

Interview subject #8: 大部份都是作業，日常生活中很少，只有一些單字或一、二個句子會用英文寫，不會寫一整篇文章。  
Most of them are assignments. I rarely do it in my daily life. I only write some vocabulary or one or two English sentences. I don't write a complete essay.

Interview subject #9: 寫作業的時候，日常生活不會用英文書寫。  
Just for assignments. I don't write in English in my daily life.

Interview subject #10: 只有上英文課的時候或臉書留言有時會用些簡單的英文。  
In English class only, or sometimes I leave messages with simple English on Facebook.

Interview subject #11: 通常都是在網路上用簡單的英文寫，例如臉書或日記。  
I usually write with simple English online, such as Facebook or diary.

Interview subject #12: 記筆記時，有些比較冗長的文字會用英文寫，這樣比較快，或寫一些備忘錄(memo)也會用英文書寫。  
When taking notes, I write in English for some lengthy words because it is faster. I also write memos in English.

Interview subject #13: 如果需要大量寫中文時，可能會使用一些英文，筆劃比較少。(你何時會這麼做?) 像是寫 memo 時。(還有其他時候會寫英文嗎?) 很少，有時打 LINE 也會用英文。(那你是打句子還是單字呢?) 通常都是打單字。  
If I have to write a great number of Chinese characters, I may use some English because it has fewer numbers of strokes. (When do you do this?) Writing memos. (What else?) Rarely. Sometimes I type in English on LINE App. (Do you use whole sentences or vocabulary?) Usually vocabulary.

Interview subject #14: 基本上不太用英文書寫，除非短短的字句。(為什麼?) 比較節省時間。

Basically, I don't write in English, except for some vocabulary or short sentences. (Why?) It saves time.

6. 你是否會訂定目標、規劃時程或尋找伙伴來提升自己的英文寫作能力? 為什麼?  
Do you set up goals, plan your schedules, or have partners to improve your English writing abilities? Why?

Interview subject #1: 不會。(為什麼?) 沒有那個習慣。

No. (Why?) I am not used to doing it.

Interview subject #2: 有想過要訓練，但懶惰。之前有補習英檢，就比較常寫和給老師批改。沒有補習後，就沒有了。

I thought about practising it before, but I am lazy. I went to an after-school programme for the GEPT test, and I wrote more frequently than before and had my writing samples marked by the instructor. After finishing the programme, I no longer do it.

Interview subject #3: 不會，比較想提升口說能力。(為什麼?) 比較想和外國人對話，而不是書寫。口說比較重要，寫報告才會用得到寫作。

No, I would like to improve my speaking abilities more. (Why?) I would like to talk with foreigners, but not write to them. Speaking is more important. Writing is for written report only.

Interview subject #4: 不會，因為懶惰。(你不在乎你的英文寫作嗎?) 會在乎，會練習，但練習很少。(那你都如何練習?) 寫一篇文章，再請老師批改。(是作業嗎?) 不是。

No, I am lazy. (Don't you care about your English writing?) No, I care about it. I practise it, but I rarely do it. (How do you practise it?) I write an essay and ask a teacher to mark it. (Is it an assignment?) No.

Interview subject #5: 不會，除了作文課。(為何不這麼做?) 個性懶惰、不積極。

No, except for in writing class. (Why not?) I am lazy and passive.

Interview subject #6: 有計劃這麼做。(那你計劃如何執行?) 用英文寫日記或盡量用英文寫一些東西。(你為何想這麼做?) 提升自己的寫作能力。

I have planned to do so. (How do you plan to do it?) Write the diary in English or try to write in English as much as possible. (Why do you want to do so?) Improve my writing abilities.

Interview subject #7: 沒有嘗試過。(怎麼沒想過要嘗試?) 我需要考多益，但多益不需要考寫作，所以我都著重在聽力和閱讀居多。

I haven't tried it. (Why haven't you thought about it?) I need to take a TOEIC test, but writing is not included in the test. I focus on the listening and reading practice mostly.

Interview subject #8: 如果有到一位願意和我一起練習寫作的同學，我們就會約每週固定一個時間練習寫作。(你會訂定一個時程或目標嗎?) 如果需要開始認真準備，例如：準備考試，就會訂定一個目標和時程。

If there is a person who is willing to practise English writing with me, we can set up a fixed time to practise it every week. (Do you set up a timetable or a goal?) If I need to prepare something serious, I will set up a timetable or a goal, such as preparing for exams.

Interview subject #9: 不會。(為什麼?) 感覺沒有人會想一起成為寫作伙伴，只有在上課才會練習。

No. (Why?) It seems that nobody wants to be a writing partner. We only practise writing in class.

Interview subject #10: 我會一直練習，希望自己可以寫出一篇不錯的文章。(你會怎麼練習?) 例如今天背了十個單字，我就會用這十個單字造十個句子。

I keep practising. I hope I can produce a good writing sample. (How do you practise it?) If I recite and memorise ten vocabulary, and then I will make ten sentences with these ten words.

Interview subject #11: 不會。因為我比較不喜歡寫作，所以我不太練習寫作。

No. I relatively dislike writing, so I practise it rarely.

Interview subject #12: 我會訂定目標。(那你通常會如何訂定你的目標?) 例如一個星期會要求自己寫兩篇文章。(為什麼你要這樣要求你自己?) 訓練自己的寫作速度及幫助自己理解文章架構。

I set up objectives. (How do you usually do it?) For example, I ask myself to write two pieces of English essays. (Why do you want to do so?) To train my writing speed and to get familiar with writing structures.

Interview subject #13: 會規定自己一個時間唸英文，像是假日可能安排一個小時讀英文，培養自己的語感。(為什麼你想規劃時間唸英文?) 因為將來工作可能會用到英文。

I regulate myself to study English in a certain time. For example, I study English for an hour on holidays to nurture my English instinctive understanding. (Why do you do so?) I may use English

in my future career.

Interview subject #14: 有時間的話我會考慮，因為現階段比較忙碌。

I will think about it if I have time because I am quite busy at the moment.

7. 你是否會對英文寫作感到焦慮? 為什麼? 若會，你會如何減輕焦慮感?

Do you feel anxious about English writing? Why? If yes, what do you do to relieve your sense of anxiety?

Interview subject #1: 不會。(為什麼?) 我不懂為什麼要感到焦慮。會期待老師對自己的文章評價為何。(那你不會害怕評價是負面的嗎?) 不會, 總要不斷的學習。

No. (Why?) I don't understand why I need to feel anxious. I look forward to teacher's comments on my essays. (Aren't you afraid you would get negative feedback?) No, we have to learn continuously.

Interview subject #2: 不會。(為什麼?) 焦慮應該就寫不出文章。

No. (Why?) If I feel anxious, I can't produce anything.

Interview subject #3: 不會，沒有壓力。

No, I don't feel stressed.

Interview subject #4: 偶爾。(為什麼?) 寫不出來時，會很煩。(那你都如何減輕焦慮感?) 先放著，想到時再寫。(如果 deadline 已經快到了，怎麼辦?) 就用翻譯軟體。

Occasionally. (Why?) I feel annoyed if I can't produce anything. (How do you relieve the sense of anxiety?) Just leave it there, and do it when I want to do it. (If deadline is coming, what will you do?) Use translation software.

Interview subject #5: 我怕寫的作業被老師退回，或不知道怎麼寫時也會焦慮。(你都如何減輕焦慮感?) 先休息一下再寫或上網查。

I am afraid that my writing samples would be rejected, or I also feel anxious when I don't know how to write. (How do you relieve the sense of anxiety?) Take a break first, or search for online information.

Interview subject #6: 不太會。(為什麼不會焦慮?) 沒什麼需要焦慮的。

No really. (Why not?) Nothing worthwhile to worry about.

Interview subject #7: 會，不知道下一句該怎麼寫時。有時中文的想法不知道怎麼轉換成英文寫作，或造成中文式的英文寫作。(你都如何減輕焦慮感?) 只能找資料或改天再寫。

Yes, when I don't know how to write the next sentence.

Sometimes I don't know how to convert Chinese ideas into English writing, or I write in Chinglish. (How do you relieve the sense of anxiety?) Search for Information or do it some other day.

Interview subject #8: 不會，只會覺得很煩，很想趕快完成但又想把它寫好。(你為何不會感到焦慮?) 可能時間充裕吧，在家寫沒有時間的壓力，可以自己安排，不像在學校可能短短一個小時就需要完成一篇作文。

No, I just feel annoyed. I want to finish it as soon as possible, but I also want to produce a good essay. (Why don't you feel anxious?) It may be because I have sufficient time. I don't have time pressure when writing at home. I can arrange it myself. Different from writing at school, I may need to finish an essay within an hour.

Interview subject #9: 還好，不太會感到焦慮。(為什麼?) 想寫什麼就寫什麼，沒什麼好焦慮的。

Not really, I don't feel anxious. (Why?) Just write what I want to write. Nothing worthwhile to worry about.

Interview subject #10: 有一些。(為什麼?) 因為我的寫作能力比較弱，我怕會我的文章會有很多錯誤。(那你都如何減輕焦慮感?) 不會特別做什麼。

A little bit. (Why?) Because my writing abilities are relatively weak, I am afraid that there are a lot of mistakes in my writing samples. (How do you relieve the sense of anxiety?) I do nothing.

Interview subject #11: 會。因為我上大學才接觸英文寫作，以前沒有接觸過，所以會焦慮。(那你都如何減輕焦慮感?) 不會特別做什麼。

Yes. I start to write in English after entering the university, and I never did it before, so I feel anxious. (How do you relieve the sense of anxiety?) I do nothing.

Interview subject #12: 會。(為什麼?) 文章一開始不知道如何下筆會比較容易焦慮。(那你都如何減輕焦慮感?) 我會依照題目需求查相關資料，幫助自己更有架構能力。

Yes. (Why?) I feel anxious when I don't know how to start a writing sample. (How do you relieve the sense of anxiety?) I search for related information according to the topic to help me have constructive abilities.



Interview subject #13: 不會。(為什麼?) 沒什麼好焦慮的。  
No. (Why?) Nothing worthwhile to worry about.

Interview subject #14: 不太會。但有時真的寫不出來的話，會有一點焦慮。(那你焦慮時會怎麼做?) 我會聽音樂減輕壓力。  
Not really. I feel a bit anxious when I really don't know how to write. (What do you do when you feel anxious?) I listen to music to relieve myself.

8. 當你的英文寫作表現良好時，你是否會犒賞自己? 為什麼?

Do you reward yourself if you perform well on English writing? Why?

Interview subject #1: 不會。(為什麼?) 這就是份作業，沒什麼值得犒賞的。  
No. (Why?) It is just an assignment. Nothing worthwhile to reward.

Interview subject #2: 不會，只有很開心而已。  
No, I just feel happy.

Interview subject #3: 不會。不太重視寫作，所以也不會犒賞自己。  
No. I don't place importance on writing, so I don't reward myself.

Interview subject #4: 不會。(為什麼?) 說不定這次很好，下次就很差。  
No. (Why?) It is good this time, but it may be bad next time.

Interview subject #5: 不會。因為不太會寫的好，所以也沒什麼機會犒賞自己。  
No. I don't have an opportunity to reward myself because I don't perform well on writing.

Interview subject #6: 不會，就只有很高興，不會特別犒賞自己。  
No, I just feel happy. I don't reward myself.

Interview subject #7: 不會，會很開心而已。  
No, I just feel happy.

Interview subject #8: 不會，沒什麼值得犒賞的。  
No, nothing worthwhile reward.

Interview subject #9: 會。(為什麼?) 這樣我才更會有寫作的動力。(你都如何犒賞自己?) 買東西給自己吃。  
Yes. (Why?) I will have more motivations to write. (How do you reward yourself?) Buy some food for myself.

Interview subject #10: 不會，沒什麼好犒賞的。  
No, nothing worthwhile to reward.

Interview subject #11: 還沒有寫的很好的時候。  
I've never had a good one so far.

Interview subject #12: 會吧。(為什麼你想犒賞自己?) 鼓勵自己。  
Maybe yes. (Why do you want to reward yourself?) Encourage myself.

Interview subject #13: 可能會買個食物犒賞自己。  
Perhaps I will buy some food to reward myself.

Interview subject #14: 基本上不會。(為什麼?) 表現好是我們應該的。  
Basically not. (Why?) Having good performances is what we have to do.

9. 你是否會和同學練習英文寫作? 你們通常如何做?

Do you practise English writing with your classmates? What do you usually do?

Interview subject #1: 在課堂上會。(那都如何進行?) 閱讀彼此的文章，提供建議。  
In class. (How do you do it?) We read essays and provide feedback to each other.

Interview subject #2: 只有準備考試的時候。(那你們通常如何做?) 討論一下格式或如何寫比較好。(你們會互相批改嗎?) 寫完時會請同學看一下是有需要修改的地方。  
Just preparing for exams. (What do you usually do?) Discussing the format or how to write. (Do you mark essays with each other?) After finishing writing samples, I ask my classmates to examine whether anything needs to be modified.

Interview subject #3: 上課時會討論該如何寫，老師上課的內容為何及文章的要求有那些。  
We discuss how to write, what instructors talk about, and what writing requirements are in class.

Interview subject #4: 只有作業，平常沒有。(那你們都怎麼做?) 討論題目要怎麼寫，文章要怎麼修改。  
For assignments only. I never do it in my daily life. (How do you do it?) We discuss how to write, and how to modify essays.

Interview subject #5: 只有上課時。(你們通常怎麼做?) 就看彼此的文章給意見。  
Just in class. (How do you usually do it?) Read essays and provide feedback to each other.

- Interview subject #6: 只有上課或在家需要討論時才會。(你們通常怎麼做?) 討論該怎麼寫文章或看彼此的文章。  
Just in class or when it is necessary after class. (How do you usually do it?) Discuss how to write essays or read essays for each other.
- Interview subject #7: 可能就參考彼此的文章，或老師批改後不知道該如何修改時，會和同學互相討論找靈感、想法。  
We refer to writing samples each other. When we don't know how to modify our essays after the instructor's marking, we also discuss with each other to inspire ourselves.
- Interview subject #8: 不會。除非有特定目標，才會一起練習。如果沒有目標，就不會特定練習。  
No. Unless we have a specific goal, we practise together. If there isn't, we don't practise it.
- Interview subject #9: 只會將寫好的文章請同學看是否有任何錯誤或需修改的地方。  
I just have my classmates read my complete writing samples to confirm whether there is any mistake or anything needs to be modified.
- Interview subject #10: 不會，通常都是自己練習。  
No, I usually practise it myself.
- Interview subject #11: 不太會，我現在才開始接觸英文寫作，所以還沒有機會找同學練習。  
Not really. I just start to write in English, so I don't have an opportunity to practise it with my classmates.
- Interview subject #12: 不常。(為什麼?) 因為自己的想法可能和同學的不一樣，這樣可能造成衝突，所以我都自己寫居多。  
Not often. (Why?) My ideas may be different from others', and it may cause some conflicts. I usually practise it myself.
- Interview subject #13: 會。(你們通常怎麼做?) 會把自己寫好的文章彼此互相看，檢查是否有錯誤。  
Yes. (How do you usually do it?) We read the writing samples for each other to confirm whether there is any mistake.
- Interview subject #14: 基本上只有寫作課才會。(那通常怎麼做?) 我們會討論主題句該怎麼寫，然後提出建議給彼此。  
Basically, we do it in writing class only. (How do you usually do it?) We discuss how to write topic sentences, and provide suggestions to each other.

### PART III. QUESTIONS FOR BLOG WRITING

1. 你認為使用部落格是否能提升你的英文寫作能力? 為什麼?

Do you think the use of blogs improves your English writing abilities? Why?

Interview subject #8: 會。(為什麼?) 因為老師會在我們的部落格針對我們寫的文章給予回饋，所以我們能進步很快。

Yes. (Why?) Because the instructor provides feedback for us based on our writing samples on our blogs, we can make progress fast.

Interview subject #9: 不能。任何題目都可以改成紙筆寫作，所以部落格寫作和紙筆寫作沒什麼差別。

No. Any topics can be done through paper-pencil writing, so there is not difference between blog writing and paper-pencil writing.

Interview subject #10: 可以。其實部落格寫作和紙筆寫作對我們的寫作能力都有幫助。而透過部落格我們可以閱讀同學寫的文章，彼此學習。

Yes. In fact, both blog writing and paper-pencil writing are helpful to develop our writing abilities. However, we can read others' writing samples, and learn from each other on blogs.

Interview subject #11: 可以。部落格寫作比較輕鬆，雖然文法、單字還是需要注意，但在部落格寫作我比較沒壓力。

Yes. Blog writing is easier. Although we still need to pay attention to grammar and vocabulary, I feel less stress when writing on blogs.

Interview subject #12: 可以。(為什麼?) 寫完的文章 PO 在部落格上會有其他人看，他們可能會留言給意見，可以提升寫作能力。

Yes. (Why?) The writing samples posted on blogs are for others to read. They may leave their comments, which can improve our writing abilities.

Interview subject #13: 可以。(為什麼?) 因為在部落格上我可以看同學 PO 在部落格的寫作，我覺得這可以提升我的寫作能力。

Yes. (Why?) I can read my classmates' writing samples on blogs, and I think it improves my writing abilities.

Interview subject #14: 我覺得可以，因為可以參考別人的文章，而且我們將自己的文章 PO 在網路上，也可以讓其他人評比我們寫的文章。

I think it is helpful because we can refer to others' writing samples. Others can also comment on our writing samples after we post them on blogs.

2. 你認為透過部落格閱讀同學的文章是否能提升你的英文寫作能力? 為什麼?  
Do you think reading your classmates' essays on blogs improves your English writing abilities? Why?

Interview subject #8: 會。因為我會看見我和別人不一樣的想法，而這想法可能是我從來沒想過。

Yes. I can understand my ideas are different from others', which I may have never thought about.

Interview subject #9: 可以。因為可以參考其他同學的寫作，也可以學到其他單字。

Yes. I can refer to others' writing samples and learn some vocabulary.

Interview subject #10: 可以。(為什麼?) 多看文章就會知道怎麼寫。

Yes. (Why?) Reading more articles makes us understand how to write.

Interview subject #11: 多少可以提升，因為同學寫的文章和我的一定不一樣，所以可以參考其他同學的觀點。

It is more or less helpful. The classmates' writing samples must be different from mine, so I can refer to others' perspectives from their writing samples.

Interview subject #12: 可以，可以學習同學如何寫文章。

Yes, I can learn how others write their essays.

Interview subject #13: 可以。(你通常從同學文章學到什麼?) 學到一些我沒看過的新知識，例如同學在文章所提出的一些例子是我沒看過的，我就可以學到其他知識。

Yes. (What do you usually learn from others' writing samples?) I can learn something I don't know. For example, my classmates may talk about an example that I don't know, and then I can learn new knowledge.

Interview subject #14: 可以。因為每個人的寫作風格不一樣，我們可以從別人身上學習他們的優點。

Yes. Everyone has different writing styles, so we can learn strengths from others.

3. 你比較喜歡紙筆寫作或部落格寫作? 為什麼?

Do you prefer writing on paper or blogs? Why?

**Interview subject #8:** 我認為都可以。只要老師批改文章後會給我們回饋，對我們都有幫助，只是用部落格可以在家寫，會比較沒時間上的壓力，但紙筆方式有時需要在上課時間內完成，壓力會比較大。(你認為這二者之間有何差異?) 我覺得紙筆寫作比較容易檢查，而且我們可以直接在紙上作筆記，提醒我們那個地方需要修改、補充等等。

Either way. It is helpful to us as long as instructors provide us with feedback. However, I feel less pressure when writing on blogs at home because I have more time to write. As for paper-pencil writing, we sometimes have to finish our writing samples within class time, which makes us feel stress. (How do you find the differences between them?) I think paper-pencil writing is easier to examine, and we can take notes on paper directly to remind us to modify or supplement.

**Interview subject #9:** 部落格。可以直接打在電腦上面，不需要用手寫，而且作業也不需要列印。部落格寫作比較方便，現在網路的使用非常普遍，作業也可以透過手機繳交。

Blogs. I can type on a computer directly. I don't need to write by hand. Also, I don't need to print out assignments. Blog writing is more convenient because the Internet is very common nowadays, and I even submit my assignments through using a smartphone.

**Interview subject #10:** 紙筆寫作。因為我電腦打字比較慢，手寫應該會比較快。

Paper-pencil writing. My typing is slow, so writing by hand may be faster.

**Interview subject #11:** 部落格寫作。因為我覺得比較輕鬆沒壓力。

Blog writing. I think it is easier, and I feel less stress.

**Interview subject #12:** 部落格寫作。因為部落格很清楚的排列我們寫的文章，也可以隨時回去看之前寫的文章，但紙筆的文章，通常都一張一張，會比較亂。

Blog writing. Our writing samples are arranged on blogs clearly, and we can read our previous writing samples anytime. However, there are many sheets of paper when writing on paper, which is a bit messy.

**Interview subject #13:** 紙筆寫作。(為什麼?) 比較習慣紙筆的方式。

Paper-pencil writing. (Why?) I am used to it.

Interview subject #14: 基本上二種我都可以接受，不管那一種方式都有它的優缺點。

Basically, both are fine to me. No matter what kind of instruction it is, it has advantages and disadvantages.

4. 你認為此次的部落格英文寫作教學最大的收穫是什麼？

What have you learned the most from this English blog writing programme?

Interview subject #8: 我覺得老師很認真看我們的作文，上大學後就很少遇到這麼認真的老師，需要我們自己發問。

I think the instructor is hard-working. After studying at the university, I rarely meet such a hard-working teacher. We have to ask questions voluntarily.

Interview subject #9: 寫到其他不同類型的文章，像是少子化、全球暖化，這些文章也比較困難。和平常寫作的題目很不一樣。

We write about some different types of essays, such as low birth rate or global warming. These kinds of writings are more difficult, and they are quite different from what we usually write.

Interview subject #10: 比較多機會練習英文，可以讀其他人的文章，也可以留言給同學，彼此學習。

We have more opportunities to practise English, read others' writing samples, and leave messages to others. We can learn from each other.

Interview subject #11: 部落格寫作和紙筆寫作蠻不一樣的，而我也比較喜歡部落格寫作，所以未來可能會開始在部落格上寫作，這對我是一個很大的改變。

Blog writing is quite different from paper-pencil writing, and I prefer blog writing. I may start to write something on blogs in the future, which is a great change to me.

Interview subject #12: 我覺得我的文章組織能力比較進步。

I think my organisation ability is better than before.

Interview subject #13: 擁有一個自己的英文部落格可以和其他人分享自己的寫作。

I have my own English blog, and I can share my writing samples with others.

Interview subject #14: 回家可以覆習。如果是一般上課方式，上完課黑板就會擦掉。

I can review at home. All the teaching contents are erased after class if it is in a traditional writing class.

5. 你認為透過部落格學習英文寫作有什麼優點?

What are the advantages of learning English writing through blogs?

Interview subject #8: 我覺得文章的寫作格式幫助比較大，其他就還好。

I think it is more helpful to writing formats. As for other parts, I don't think it helps a great deal.

Interview subject #9: 大家都可以看到，不限定班上同學，其他人對我們的文章如果有興趣也以回覆，非常方便。

Everyone can read our writing samples, and readers are not confined to our classmates only. If someone is interested in our writing samples, they can leave their messages, too. It is very convenient.

Interview subject #10: 我覺得部落格寫作和紙筆寫作沒什麼太大的差別。

I don't think there is a great difference between blog writing and paper-pencil writing.

Interview subject #11: 可以方便閱讀其他同學的文章，學習別人的寫作方式，參考別人的觀點想法。

It is convenient to read others' writing samples, learn from others' writing samples, and refer to others' perspectives.

Interview subject #12: 我覺得我的寫作能力一直進步中。(在什麼方面?) 例如我們寫作有時需要上網查資料，在這過程中，也可以吸收其他自己不知道的知識，也許將來寫作也派得上用場。

I think my writing abilities are getting better. (In what aspects?) For example, we need to search for some online information when we are writing. We can learn something we don't know in the process, which may be useful to our future writing.

Interview subject #13: 在網路上可以一次看很多文章，可以吸收比較多的知識。

I can read a great number of articles on the Internet, and I can learn much more knowledge.

Interview subject #14: 回家可以覆習，可以閱讀別人的文章，學習別人的優點等。

I can review at home. I can refer to others' writing samples. I can learn from others' strengths.

6. 你認為透過部落格學習英文寫作有什麼缺點?

What are the disadvantages of learning English writing through blogs?

Interview subject #8: 我覺得都很好，沒什麼缺點。

I think it is quite good. There is not disadvantage.



Interview subject #9: 一定要有電腦和網路才可以進行，如果突然忘記寫作業，也不能用紙筆方式取代。而且萬一停電，也沒辦法使用部落格  
A computer and the Internet must be accessed first. If I forget to write assignments, I can't do it with a handwriting essay. If there is a power outage, I can't use blogs, either.

Interview subject #10: 我覺得部落格寫作和紙筆寫作沒什麼太大的差別。  
I don't think there is a great difference between blog writing and paper-pencil writing.

Interview subject #11: 我覺得沒有。  
I don't think there is any one.

Interview subject #12: PO 在部落格上的文章會被大家看到，比較沒隱私。  
Everyone can read our entries on blogs. It causes lower degree of privacy.

Interview subject #13: 傷眼睛，看太久眼睛會累。  
It is harmful to our eyes. I feel tired after using a computer for a long time.

Interview subject #14: 比較麻煩，需要先準備電腦、網路。  
It is inconvenient because we have to have access to a computer and the Internet in advance.

7. 關於部落格英文寫作教學，你是否還有其他以上題目未提及的意見或想法?  
Regarding the English blog writing programme, do you have any ideas or opinions that I have not asked?

Interview subject #8: 沒有。  
No.

Interview subject #9: 沒有。  
No.

Interview subject #10: 沒有。  
No.

Interview subject #11: 沒有。  
No.

Interview subject #12: 沒有。  
No.

Interview subject #13: 也許老師可以要求我們背一些文章，我覺得這可以有效的提升寫作能力。

Perhaps instructors can ask us to recite and memorise some articles. I think it can improve our writing abilities effectively.

Interview subject #14: 沒有。

No.