## The study of Web-based annotation design on L2 reading comprehension and vocabulary learning

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## **ABSTRACT**

The study aims to investigate the effect of web-based annotation design on reading comprehension and vocabulary learning. The researcher's intention is to determine whether CAI annotation guidance (the design with inference-making activity) helps learners in comprehending an article and acquiring vocabulary, and whether CAI annotation type (L1 and L2 input) influences learners' performance of reading comprehension and vocabulary learning. The participants were forty second-year undergraduate students of the English Language Department at Da-Yeh University. All participants were randomly assigned to five groups to ensure equal reading proficiency among groups. The first group was the control group and was offered paper-based annotation during the reading process. Group 2 and Group 3 were offered web-based annotation with English-only definition. Group 4 and group 5 were offered web-based annotation with English-Chinese definition. In addition, Group 2 and Group 4 did inference-making activity in which they were required to choose from two possible choices one correct definition to a new word. The main findings are: (1) Students' performance of reading comprehension and vocabulary acquisition was better while doing inference-making activity with L1+L2 definition. (2) When offered with L2 definition, inference-making activity increased mental burden to the students. (3) If students did not do inference-making activity,L1+L2 definition made participants more confused towards the meaning of a certain word. (4) Most students had positive attitudes towards CAI annotation on comprehending an article or acquiring vocabulary. Based on the findings, some pedagogical implications and design of web-based annotation further discussed in Chapter V.Suggestions for further study are also proposed.

Keywords: web-based annotation, reading comprehension, vocabulary learning

Table of Contents

封面內頁 簽名頁 授權書

iv ABSTRACT

vii TABLE OF CONTENTS

xi LIST OF TABLES

INTRODUCTION 1.1 Background and Motivation of the Study

3 1.3 Significance of the Study

5 1.5 Organization of the Thesis

6 1.7 Research questions

iii 中文摘要

v ACKNOWLEDGEMENT

viii LIST OF FIGURES

xii Chapter I.

1 1.2 Purpose of the Study

4 1.4 Definition of Terms

5 1.6 Limitation of the Study

6 Chapter II. LITERATURE REVIEW

2.1 Rearding Theory and Strategies

9 2.1.1 Reading Theory

9 2.1.2 Reading Strategies and Inference-making

12 2.2 The Relationship between Reading and Vocabulary

Knowledge14 2.3 Annotation Design on Reading Comperhension and Vocabulary Learning16 2.3.1 Traditional Reading Aids

16 2.3.2 Web-based Glosses Annotation

19 2.3.2.1 Introduction of

Web-based Glosses and Annotation

19 2.3.2.2 Incidental and Intentional Vocabulary Learning

2.3.2.3 Monolingual and Bilingual Word Definitions 23 2.4 Summary

21 2.3.2.4 Single and Multiple Annotation Design 24 Chapter III. METHODOLOGY 3.1

Design of the Study

3.3.2.1 Reading Test

26 3.2 Participants

32 3.3 Experimental Materials

33 3.3.1 Reading Materials

38 3.3.2.2 Vocabulary Test

34 3.3.1.1 Text

34 3.3.1.2 Dictionary

37 3.3.2 Instruments

38 3.3.2.3 Questionnaire

39 3.4 Procedure

40 3.5 Data Analysis

42

37

20

3.6 Pilot Study

43 Chapter IV. RESUKTS AND DISCUSSION 4.1

Analysis of Students' Performances with Different Annotation Guidance46 4.1.1 Reading Comprehension Performance

Annotation Guidance and Annotation Type

50 4.2.1 Reading Comprehension Performance

51 4.2.2 Vocabulary Acquisition

54 4.3 Analysis of Students' Attitudes

57 4.3.1 Effects of CAI Annotation in Comprehension an Article

57 4.3.2 Effects of CAI

Annotation in Acquiring Vocabulary

COMPREHENSION POSTTEST

60 4.3.3 Effects of English&Chinese Vocabulary Definition

62 4.3.4 Effects of CALL in Self-learning

65 Chapter V. CONCLUSION 5.1 Summary of

the Main Finfings

68 5.2 Pedagogical Implications

71 5.3 Suggestions for Further Research

73 REFERENCE

84 APPENDIX C READING

74 APPENDIX A THE READING TEXT

81

APPENDIX B ENGLISH DEFINITIONS OF VOCABULARY

89 APPENDIX D VOCABULARY POSTTEST

92 APPENDIX E QUESTIONNAIRE

98

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