

UNIVERSITI PUTRA MALAYSIA

EFFECTS OF MULTIMEDIA ANNOTATIONS ON READING COMPREHENSION AND INCIDENTAL VOCABULARY ACQUISITION OF MALAYSIAN TERTIARY ESL STUDENTS

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FPP 2014 15



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By

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Thesis Submitted to the School of Graduate Studies, Universiti Putra Malaysia, in Fulfilment of the Requirements for the Degree of Doctor of Philosophy

February 2014

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DEDICATIONS



This dissertation is especially dedicated to my beloved husband, Tay Yew Guan; my three beautiful sons, Theng Hong, Theng Min and Theng Zhe; my late dad, Mr. Tan Thian Hua and my dearest mum, Mdm Lee Geok Hoon Abstract of thesis presented to the Senate of Universiti Putra Malaysia in fulfilment of the requirement for the degree of Doctor of Philosophy

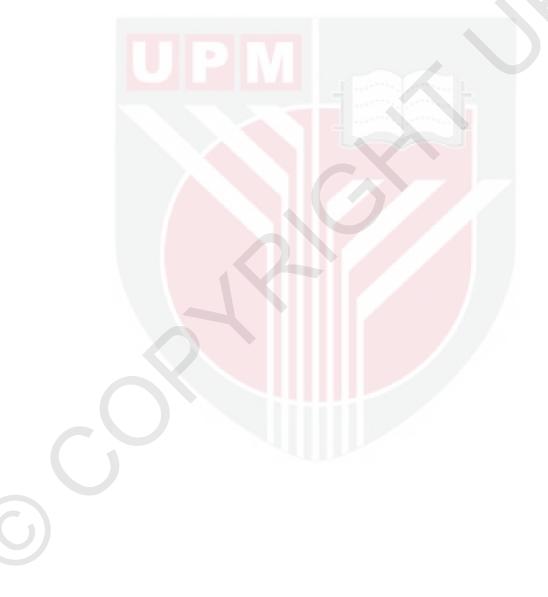
EFFECTS OF MULTIMEDIA ANNOTATIONS ON READING COMPREHENSION AND INCIDENTAL VOCABULARY ACQUISITION OF MALAYSIAN TERTIARY ESL STUDENTS



This study investigated the effects of different types of multimedia annotations on reading comprehension and incidental vocabulary acquisition among learners of English as a second language whose English language proficiency is of intermediate level. The subjects were one hundred and twenty eight second and third semester college students enrolled in a teacher-training institute. The subjects were directed to read an electronic reading text in English containing thirty annotated words. Each participant read the text under one of the following conditions: No annotation (Control group), Audio annotation (A group), Audio-Text annotation (AT group), Audio-Picture annotation (AP group) and Audio-Picture-Text annotation (APT group).

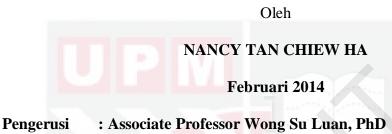
The instrument used for data collection was a set of reading comprehension test and a set of vocabulary test. The reading comprehension test comprised thirty multiplechoice questions and ten open-ended subjective comprehension questions. The vocabulary test measured the research participants' ability to recall the meanings of all the target words and to use them in writing (vocabulary production). Two posttests were conducted to compare the research participants' achievement. The first posttest was carried out immediately after the participants had finished reading the comprehension text assigned to them. The second posttest was administered three weeks later to measure reading comprehension and word retention.

The results showed that there was no statistical difference in the reading comprehension, vocabulary recall, and vocabulary production scores between the control group and the multimedia annotation groups across all test points (pretest, immediate posttest, delayed posttest). As for the multimedia-annotation groups, it was found that all multimedia annotations, except audio only format, did increase reading comprehension, vocabulary recall, and vocabulary production scores of the participants. The findings also indicated that among the multimedia annotation configurations, the more annotation format and annotation mode utilized corresponded to higher reading comprehension, vocabulary recall, and vocabulary production scores in immediate and delayed posttests. It was therefore established that all multimedia annotations presented except for audio only format, did indeed have a significant effect in improving reading comprehension and incidental vocabulary acquisition of the research participants.



Abstrak tesis yang dikemukakan kepada Senat Universiti Putra Malaysia sebagai memenuhi keperluan untuk ijazah Doktor Falsafah

KESAN ANOTASI MULTIMEDIA TERHADAP PENCAPAIAN KEFAHAMAN MEMBACA DAN PENGUASAAN KOSA KATA DALAM KALANGAN PELAJAR BAHASA INGGERIS SEBAGAI BAHASA KEDUA DI PERINGKAT TERTIARI MALAYSIA



Pengerusi: Associate Professor Wong Su Luan, PhDFakulti: Pengajian Pendidikan

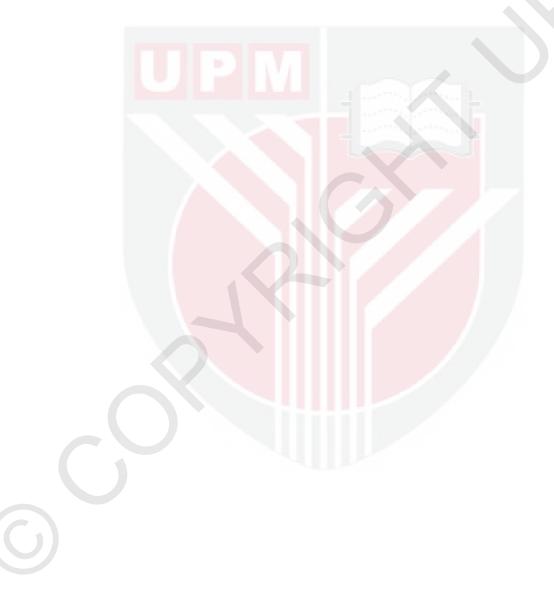
Kajian ini mengkaji kesan jenis anotasi multimedia terhadap permahaman membaca dan pemerolehan kosa kata dalam kalangan pelajar berkecekapan Bahasa Inggeris peringkat sederhana yang mengikut program Bahasa Inggeris sebagai Bahasa Kedua. Subjek kajian terdiri daripada 128 pelajar di sebuah Institut Pengajian Guru yang berada dalam semester kedua dan semester ketiga. Subjek kajian diminta untuk membaca teks elektronik Bahasa Inggeris yang mengandungi tiga puluh perkataan beranotasi. Setiap subjek kajian membaca teks di bawah salah satu daripada syaratsyarat berikut: Tiada Anotasi (kumpulan kawalan), Anotasi Audio (kumpulan A), Anotasi Audio-Teks (kumpulan AT), Anotasi Audio-Gambar (kumpulan AP) dan Anotasi Audio-Gambar-Teks (kumpulan APT).

Instrumen kajian yang digunakan untuk mengumpul data terdiri daripada satu set ujian kefahaman dan satu set ujian kosa kata. Ujian kefahaman meliputi tiga puluh soalan beraneka pilihan dan sepuluh soalan kefahaman subjektif. Ujian perbendaharaan kata menguji subjek kajian samada mereka boleh mengingat semula semua makna perkataan sasaran, dan samada mereka boleh menggunakan perkataan sasaran itu dalam penulisan. Dua ujian pasca dijalankan untuk membandingkan pencapaian subjek kajian. Ujian pasca pertama dijalankan sejurus subjek kajian habis membaca teks yang diberi. Ujian pasca yang kedua diberi tiga minggu kemudian untuk mengukur pengekalan perkataan.

Hasil kajian menunjukkan bahawa tidak terdapat perbezaan statistik secara signifikan dalam skor kefahaman membaca, mengingat semula kosa kata, dan penggunaan kosa kata untuk ujian pra dan ujian pasca. Bagi kumpulan anotasi multimedia, didapati



bahawa terdapat peningkatan skor bagi kefahaman membaca, mengingat semula kosa kata, dan penggunaan kosa kata para peserta semua kumpulan kecuali kumpulan yang diberi anotasi audio. Hasil kajian juga menunjukkan bahawa konfigurasi anotasi multimedia berbagai format dan mod membawa kepada kefahaman membaca yang lebih tinggi serta meningkatkan daya mengingat semula kosa kata, dan penggunaan kosa kata dalam kedua-dua ujian pasca. Oleh itu, ia telah dibuktikan bahawa semua anotasi multimedia kecuali format audio, memang mendatangkan kesan positif dalam meningkatkan kefahaman membaca dan pemerolehan kosa kata di antara subjek kajian.



ACKNOWLEDGEMENTS

I wish to express my utmost appreciation to my supervisory committee for their unwavering support and encouragement throughout my graduate study at Universiti Putra Malaysia. I would like to especially thank my former thesis chair Dr. Fauziah Hassan (who has since retired) for her understanding and insightful feedback. Her unfailing confidence in me has bolstered me up in times of uncertainties and tears.

Furthermore, I wish to express my gratitude to my present supervisor Associate Professor Dr. Wong Su Luan for offering me immense support, encouragement and guidance on every aspect of my dissertation work. Her help and professional advice has contributed greatly to the completion of this dissertation. My heartfelt appreciation also goes to my two supervisory committee members, Professor Dr. Kamariah Bt Abu Bakar and Dr. Habsah Bt Hussin for their invaluable suggestions.

I am also particularly grateful my two test assistants who had put in a lot of time and effort in assisting me vet and score the reading test, and in helping me conduct the pretest and posttests. I am greatly indebted to En Ghazali bin Hj Mustapha, an English language lecturer at Institut Pendidikan Guru Raja Melewar for his help in arranging for the test venues and the research participants. Without his help, this dissertation would not have materialized.

I am eternally grateful to my husband and three sons. Their love, support and understanding have made the grueling years throughout my study bearable and helped me surmount challenges that would surely have overwhelmed me if I had faced them alone. I love them with all of my heart.

Lastly, this dissertation is especially dedicated to my late father who believed in me, and to my mum, brothers and sisters for encouraging me throughout a sometimes thorny path. I may never walk this path again, but having walked through it, my life has been enriched and transformed. I certify that a Thesis Examination Committee has met on 28 February 2014 to conduct the final examination of Nancy Tan Chiew Ha on her thesis entitled "Effects of Multimedia Annotations on Reading Comprehension and Incidental Vocabulary Acquisition of Malaysian Tertiary ESL Students" in accordance with the Universities and University Colleges Act 1971 and the Constitution of the Universiti Putra Malaysia [P.U. (A) 106] 15 March 1998. The Committee recommends that the student be awarded the Doctor of Philosophy.

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