EFFECTS OF INFUSING SOCRATIC QUESTIONS IN MIND MAPS® ON THE DEVELOPMENT OF ESL STUDENTS’ WRITING SKILLS

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By

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

2013
To my supervisor and advisor

Dr. Shameem Rafik Galea

&

My mother

Madam Amar Kaur
Abstract of thesis presented to the Senate of University Putra Malaysia in fulfilment of the requirement for the degree of Doctor of Philosophy.

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July 2013

Chairman: Assoc. Professor Shameem Rafik Galea, PhD

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In the early 80’s the process writing approach replaced the previous product approach. Current research in Malaysia acknowledges the fact that the teaching of writing has evolved over the years but the Malaysian English as a Second Language (ESL) classroom has yet to completely adopt the process approach as the product approach is still the preferred approach. One of the reasons for this delay in the shift from product to process may be due to the fact that the education system emphasises heavily on examinations (Chandrasegaran, 1991; Kaur, J, 2004; Chow, 2007; Kaur, T. & Rajalingam, 2012). Teaching writing using the process approach must be made functional in the Malaysian ESL writing classroom because writing involves the process of clarifying ideas and making thoughts visible. There is thus a need to further include the teaching of thinking skills within the writing curriculum because the writing process requires the knowledge on an extensive range of linguistic and cognitive strategies (Emig; 1983; Rugguiero, 1995; Ritchhart, 2002; Chow; 2007; Lucini, 2010) which invokes higher cognitive functions of the mind.
Thinking and planning for writing tools can fulfil in many folds the requirements of the education system, teachers’ need to produce results and learners’ independence and authentic voice. Thinking tools like Mind maps® introduced by Tony Buzan in 1971 and Socratic Questioning techniques can be built into the process writing instruction at the pre-writing and revising stages through brainstorming and conferencing sessions by both the teacher and students. There is an increasing number of research which applies Mind maps® in the planning and pre-writing stage in the teaching of writing skills. However, at present there is no research in Malaysia on the application of Mind Maps® and Socratic questions as a writing tool in scaffolding the development of ESL students’ writing skills. This study therefore aims to investigate the effects of infusing Socratic questions in Mind maps® (Socratic Maps©) as a pre-writing tool in scaffolding the development of ESL students’ writing skills.

This study which involves 4 groups of 200 upper secondary students from 2 different schools was conducted to determine the effects of Socratic Maps© in scaffolding the process writing approach in developing ESL students’ writing skills. The experimental classes comprised of 50 students from each school. The teachers from the experimental groups had initially attended a 5 day course on the application of Socratic Maps© in the teaching of writing. These teachers were further given personal training and hands-on practices on the application of Socratic Maps© and Socratic questions within the process writing framework.

Writing lessons were then taught based on the process writing framework where the teachers in the experimental groups were provided with lesson plans and Socratic Map© templates. The intervention period was for 1 semester, approximately 98 days
of face-to-face interaction. Writing lessons were carried out every day for 2 hours where students were taught writing skills based on the process writing framework. Socratic Mapping templates and Socratic questions were used as pre-writing tools in scaffolding the writing activities during brainstorming and conferencing sessions. The scaffolding processes were developmental and carried out in stages in order to provide students with enough practice to master the skills of mind mapping and in applying Socratic questions during brainstorming and conferencing sessions in groups and with peers.

The scoring of the essays was done using the Six-Trait Analytic Writing Rubric which consisted of ideas, organization, word choice, sentence fluency and conventions. The Six-Trait Analytic Writing Rubric is similar to the rubrics used by the Malaysian Examination Syndicate to assess English essay questions for public examinations. The scores were analysed using Paired Samples t-test and MANOVA. The results show that there is a significant improvement in the essays of the students in post-test 1 and post-test 2 compared to those in pre-test. There is also improvement in the length of the essays and an increase in students’ vocabulary. Both the experimental and control groups from both the schools showed an improvement over the semester. However, the experimental group showed a higher and consistent improvement in terms of quality, students’ independence and motivation which is highly likely to be attributed to Socratic Maps© and Socratic questions in scaffolding the writing processes within the process writing approach. The results of the delayed post-tests means adjusted by pre-tests using MANOVA showed that there was a significant difference between the two groups, favouring the treatment groups from both the schools.
Abstrak tesis yand dikemukakan kepada Senat Universiti Putra Malaysia sebagai memenuhi keperluan untuk ijazah Doktor Falsafah.

KESAN PENERAPAN SOALAN SOCRATIK DALAM PETA MINDA® TERHADAP PEMBANGUNAN KEMahirAN Menulis PELAJAR ESL

oleh

JASVIR KAUR K. AMAR SINGH

Julai 2013

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Karangan telah diperiksa dengan menggunakan Arahan Analisis Penulisan 6 Sifat yang merangkumi idea, susunan, pilihan perkataan, kefasihan ayat dan konvensyen penulisan. Arahan Analisis Penulisan 6 Sifat adalah sama dengan arahan pemeriksaan Lembaga Peperiksaan Malaysia untuk menilai jawapan soalan karangan dalam peperiksaan umum. Skor-skor para pelajar telah dianalisa menggunakan T-Test sampel berpasangan dan MANOVA. Keputusan menunjukkan kemajuan yang ketara dalam karangan para pelajar selepas ujian 1 dan ujian 2 berbanding dengan sebelum ujian saringan. Karangan yang dihasilkan juga lebih panjang dan perbendaharaan kata para pelajar juga semakin meningkat. Kedua-dua kumpulan eksperimental dan kawalan dari kedua-dua sekolah menunjukkan kemajuan sepanjang semester yang dikaji. Akan tetapi, kumpulan eksperimental menunjukkan kemajuan yang lebih tinggi dan konsisten dari segi kualiti, kebebasan pelajar dan
motivasi. Ini boleh dikaitkan dengan Peta Sokratik© dan soalan Sokratik untuk menyokong proses-proses menulis dalam pendekatan penulisan berasaskan proses. Keputusan ujian selepas kajian yang dilengahkan dengan purata yang diselaraskan oleh ujian saringan menggunakan MANOVA menunjukkan ada perbezaan yang ketara di antara dua kumpulan tersebut, yang memihak kepada kumpulan eksperimental/kajian dari kedua-dua sekolah.
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I certify that an Examination Committee met on 30 July 2013 to conduct the final examination of Jasvir Kaur K. Amar Singh on her Doctor of Philosophy thesis entitled ‘Effects Of Infusing Socratic Questions In Mind Maps® On The Development Of ESL Students' Writing Skills’ in accordance with the Universities and University College 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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DECLARATION

I declare that this thesis is my original work except from quotations and citations which have been duly acknowledged. I also declare that it has not previously, and is not concurrently, submitted for any other degree at University Putra Malaysia or any other institution.

JASVIR KAUR K. AMAR SINGH

Date: 30 July 2013
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