THE EFFECTS OF MIND MAPPING STRATEGIES ON THE DEVELOPMENT OF WRITING SKILLS OF SELECTED FORM THREE STUDENTS

\mathbf{BY}

JASVIR KAUR D/O K. AMAR SINGH

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DEDICATION

To my advisor, counsellor and friend, Associate Professor Dr. Shameem Rafik Galea, for being my inspiration and the force behind the determination and relentless perseverance in writing this thesis. I would like to dedicate this study to the students of 3 WIRA 1 (2002) of SMK Pendamaran Jaya for the way in which they accepted the challenge to change their study patterns and their ensuing enthusiasm on the successful outcomes of the effort. To my parents Mr. and Mrs. Amar Singh, my husband, Dr. K.S. Roy, my nieces, Harvin, Melvin and Raveena, my sister, Jasvinder and my brother Ravinder for being there when I needed them the most.

Abstract of thesis presented to the Senate of Universiti Putra Malaysia in fulfilment of the requirement for the degree of Master of Science.

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MARCH 2004

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Education is one of the most powerful mechanisms for developing intellectual prowness. Because the research in brain growth, development and functioning is exemplifying our understanding of the neuro-sciences. In order to nourish students with healthy learning strategies, this research is based on a technique that will prove to enhance students' thinking and writing skills. This study intends to expose students to the approaches and methods of using mind maps and brainstorming strategies in developing their mental capacities. The research design used in this study was a nonrandomised control group; pretest-posttest quasi-experimental design on to groups of hetrogenous form three Malay students selected based on their form two final year examination academic performance on two classes of

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students (25 students in the control group and 25 students in the experimental group). The instruments used were pretest composition questions and posttest composition questions, direct observations and in-depth interviews. The data and results collected were analysed using the SPSS for percentage, mean, standard deviation, t-tests and repeated- measures analysis of variance. The finding showed that there was no significant difference in the mean scores in the pretest between the two groups of subjects administered in the first semester of 2002 after the teaching of composition in the normal method. However, there was a significant difference in the mean scores in the experimental group as compared to the control group in the posttest admistered in the second semester of 2002 after the treatment. The findings also showed that the subjects in the experimental group responded more positively to the technique of mindmapping and brainstorming. This study concluded that the teaching method, mindmapping and brainstorming strategies during the prewriting stage had a positive and consistent effect on this group of from three students' composition writing skills immediately after treatment as compared to the control group with the normal classroom teaching method.

Abstrak tesis yang dikemukakan kepada Senat Universiti Putra Malaysia untuk memenuhi keperluan ijazah Master Sains.

KEBERKESANAN STRATEGI PETA MINDA KE ATAS PERKEMBANGAN KEMAHIRAN PENULISAN BAHASA INGGERIS DI KALANGAN PELAJAR MALAYSIA

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Pendidikan adalah salah satu mekanisme yang berkesan untuk meningkatkan perkembangan intelektual. Daripada kajian perkembangan minda, perkembangan dan fungsi minda mewujudkan pemahaman sains neuro. Untuk mengujudkan strategi pembelajaran yang berkesan di kalangan pelajar, kajian ini memberi penekanan kepada teknik yang terbukti akan mempertingkatkan perkembangan tahap kemahiran berfikir dan menulis di kalangan mereka. Kajian ini bertujuan untuk mendedahkan pelajar kepada kaedah dan pendekatan dengan mengunakan peta mind dan sumbang saran untuk perkembangan mental mereka. Rekabentuk kajian yang digunakan untuk kajian ini adalah rekabentuk kumpulan kawalan tidak rawak, praujian-pascaujian eksperimen-kuasi ke atas kumpulan pelajar Melayu

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tingkatan 3 yang 'hetrogenous' dan dipilih mengikut keputusan akademik tahun akhir tingkatan dua mereka. Mereka terdiri daripada pelajar dari dua kelas tingkatan tiga yang berlainan (25 pelajar dari kumpulan kawalan dan 25 pelajar dari kumpulan eksperimen). Alat ukur yang digunakan untuk mengumpul data adalah soalan karangan praujian dan pascaujian, pemerhatian secara langsung dan temuduga terperinci. Data dan keputusan yang dikumpul dianalisiskan dengan mengunakan SPSS untuk mendapat peratus, min, sisihan piawai dan ujian-t dan ujian 'repeated measures analysis of variance'. Keputusan menunjukkan bahawa tiada perbezaan yang signifikan bagi kedua-dua kumpulan pelajar dalam keputusan praujian di semester 1 (2002). Namun, keputusan menunjukkan bahawa bahawa ada perbezaan yang signifikan bagi kumpulan eksperimen berbanding dengan kumpulan kawalan dalam ujian pasca yang diberi di semester 2 (2002) selepas olahan. Keputusan juga menunjukkan bahawa respon subjek dari kumpulan kawalan dalam penulisan karangan mengunakan teknik peta minda dan sumbang saran lebih positif. Kesimpulan daripada kajian ini, cara pengajaran mengunakan kaedah peta minda dan sumbang saran semasa merangka penulisan, memberi kesan positif dan konsisten kepada kemahiran menulis karangan bagi kumpulan pelajar tingkatan tiga selepas olahan di semester 2 (2002) berbanding dengan pelajar daripada kumpulan kawalan yang terlibat dalam cara pengajaran yang normal.

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I certify that an Examination Committee met on July 2003 to conduct the final examination of Jasvir Kaur d/o K. Amar Singh on her Master of Science thesis entitled "The Effectiveness of Mindmapping Strategies in the Development of Writing Skills of a Selected Malaysian Form Three Students" in accordance with Universiti Pertanian Malaysia (Higher Degree) Act 1980 and Universiti Pertanian Malaysia (Higher Degree) Regulation 1981. The Committee recommends that the candidate be awarded the relevant degree. Members of the Examination Committee are as follows:

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DECLARATION

I hereby declare that the thesis is based on my original work except for quotations and citations which have been duly acknowledged. I declare that this thesis has not been previously or concurrently submitted for any other degree at UPM or other institutions.

JASVIR KAUR D/O K.AMAR SINGH

Date : 27 June 2004

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