

UNIVERSITI TEKNOLOGI MARA

**FACILITATING HIGHER ORDER
THINKING SKILLS (HOTS) IN ESL
READING THROUGH COMPUTER
MEDIATED LEARNING TUTORIAL**

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Thesis submitted in fulfillment
of the requirements for the degree of
Doctor of Philosophy

Academy of Language Studies

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I certify that a panel of examiners has met on 14 October 2016 to conduct the final examination of Noraini Binti Ahmad Basri on her Doctor of Philosophy thesis entitled “Facilitating Higher Order Thinking Skills (HOTs) in ESL Reading through Computer Mediated Learning Tutorial” in accordance with Universiti Teknologi MARA Act 1976 (Akta 173). The Panel of Examiners recommends that the student be awarded the relevant degree. The panel of Examiners was as follows:

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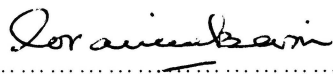
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I declare that the work in this thesis was carried out in accordance with the regulations of Universiti Teknologi MARA. It is original and is the results of my own work, unless otherwise indicated or acknowledged as referenced work. This thesis has not been submitted to any other academic institution or non-academic institution for any degree or qualification.

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ABSTRACT

Developing learners' critical reading skills at tertiary level is crucial because learners need the knowledge and skills to be able to read academic materials constructively throughout their university courses. However, L2 learners have difficulties in developing higher order thinking skills (HOTS) such as analyzing, synthesizing and evaluating, all of which are important for critical reading. Among the problems identified in this study are learners' lack of performance in advance reading and critical thinking, learners' motivation in acquiring the skills and the lack of useful learning supports which can facilitate knowledge acquisition and skills attainment of HOTS. There is an urgent need to seek effective tools that can be used to teach these skills in the classroom. For this purpose, technology has been found to assist learners' vocabulary growth, improve learners' reading comprehension and motivation, and increase their reading performance. This study applies a mixed-method (quantitative and qualitative approaches) at examining the use of a customized computer-mediated learning tutorial (CMLT) in the teaching of higher order thinking skills in ESL reading classrooms. One hundred and eighty-five (185) undergraduate learners who pursued their degree at Universiti Teknologi MARA, Malaysia participated in this study. The experimental group learners were given lessons and activities on Reading and Critical Thinking course through the use of a CMLT. Meanwhile, the control group learners were only exposed to standard textbooks as their reference for the course. The research intervention (CMLT) was developed based on the Instructional System Design model and Gagne Nine Events of Instruction. A pretest, posttest and the final examination were administered to find out learners' performance in their Reading and Critical Thinking course. Surveys and interviews were also conducted to solicit information regarding learners' perceived usefulness of the CMLT and their motivation in learning the course after they had been exposed to the intervention. In addition, statistical analyses were performed to determine learners' performance before and after using the CMLT. Results of the findings showed that technology did assist learners in their reading and critical thinking course. The experimental group learners outperformed their counterparts both in their posttest and final examination performances. Moreover, the experimental group learners' motivation showed improvements after they were exposed to the treatment. It is hoped that his study would help educators to use technology as an alternative teaching tool in developing L2 learners' reading and critical thinking skills. There is also a need for language educators to work closely with instructional system designers in coming up with interactive multimedia templates that can be shared. Coming up with common templates will allow new contents to be added easily, modified and improved over time.

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