



UNIVERSITI PUTRA MALAYSIA

***DEVELOPMENT AND EVALUATION OF AN ELECTRONIC SIGNING
STORYBOOK FOR ENHANCING READING AMONG DEAF STUDENTS***

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**DEVELOPMENT AND EVALUATION OF AN ELECTRONIC SIGNING
STORYBOOK FOR ENHANCING READING AMONG DEAF STUDENTS**



By

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**Thesis Submitted to the School of Graduate Studies, Universiti Putra
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Science**

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

DEVELOPMENT AND EVALUATION OF AN ELECTRONIC SIGNING STORYBOOK FOR ENHANCING READING AMONG DEAF STUDENTS

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Faculty: Educational Studies

The purpose of this study was to develop and investigate the effect of *CODERead*, an electronic signing storybook based on print titled *Pengembaraan si Kuda Laut* to promote reading skills among deaf students. This quasi-experimental study specifically investigated its impact on vocabulary among deaf respondents. Ten deaf students (M = 11.3 years old) from government-funded deaf school in Kuala Lumpur were involved in this study. Respondents were assigned to two groups; treatment, in which they received *CODERead* reading sessions and control group, who received the conventional dialogic reading sessions. Descriptive statistic and non-parametric; Wilcoxon Sign Rank Test and Mann-Whitney U Test were used to compute the quantitative data. Results indicated that *CODERead* successfully improved deaf students' written word recognition (WWR) and written word meaning (WWM) but not signed word recognition (SWR). By identifying effects of *CODERead* on deaf's vocabulary, it will allow for more

effective technology integration on the deaf literacy and may direct for more future research on the deaf educational technology field.



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

**PEMBANGUNAN DAN PENILAIAN BUKU ELEKTRONIK BAHASA
ISYARAT UNTUK MEMPERBAIKI PEMBACAAN DI KALANGAN
PELAJAR-PELAJAR PEKAK**

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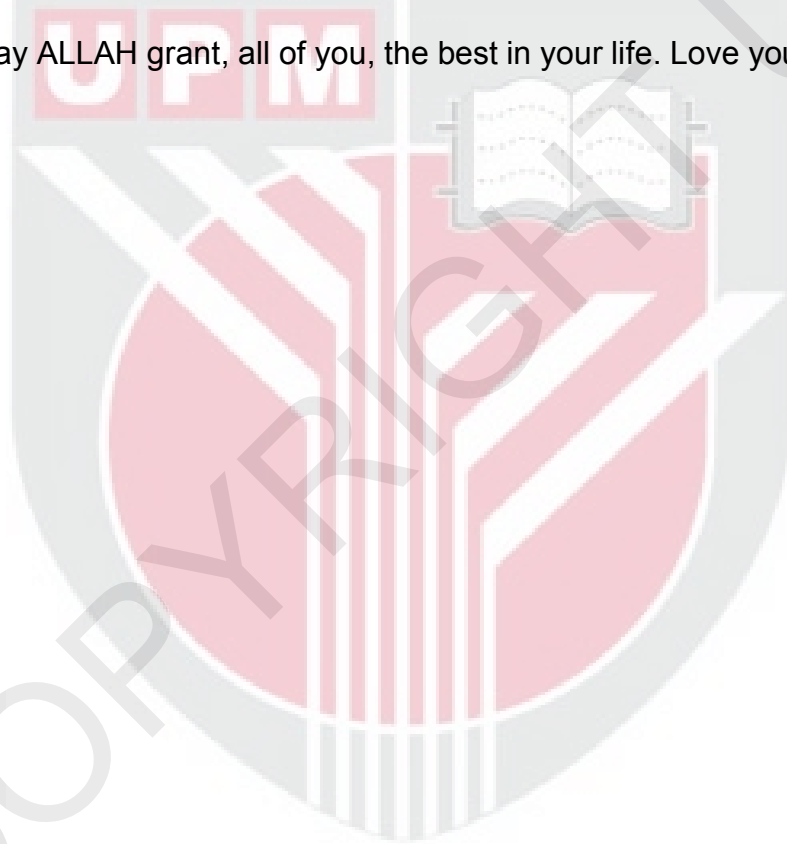
Tujuan kajian ini adalah untuk membangunkan dan mengkaji kesan *CODERead*, buku elektronik bahasa isyarat, berdasarkan buku cetakan Pengembaraan si Kuda Laut, bagi menggalakkan kemahiran membaca di kalangan pelajar-pelajar pekak. Secara khususnya, penyelidikan kuasi-eksperimental ini mengkaji kesannya terhadap perbendaharaan kata di kalangan responden pekak. Sepuluh orang pelajar pekak ($M=11.3$ tahun) dari sebuah sekolah pekak kerajaan di Kuala Lumpur telah terlibat. Responden diagihkan kepada dua kumpulan; kumpulan rawatan, yang menerima olahan *CODERead* dan kumpulan kawalan yang menerima pembacaan *dialogic* secara konvensional. Dapatan kajian dianalisis menggunakan statistik deskriptif dan statistik bukan parametrik; iaitu *Wilcoxon Sign Rank Test* dan *Mann-Whitney U Test*. Dapatan menunjukkan *CODERead* berjaya memperbaiki pengecaman perkataan bertulis dan pemahaman perkataan tetapi tidak bagi pengecaman perkataan dalam bahasa isyarat. Dengan mengenalpasti kesan *CODERead* ke atas

perbendaharaan kata orang pekak, ia akan memberi peluang kepada integrasi teknologi yang lebih berkesan dalam literasi orang pekak dan mungkin menjurus kepada lebih banyak penyelidikan dalam bidang teknologi pendidikan orang pekak.



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I certify that an Examination Committee has met on **13 October 2011** to conduct the final examination of **Nurul Hijja Binti Mazlan** on her **Master of Science in Education** thesis entitled “Development and Evaluation of Electronic Signing Storybook (CODERead) to Promote Reading Skills among Students with Hearing Disabilities” in accordance with Universiti Pertanian Malaysia (Higher Degree Act) 1980 and Universiti Pertanian Malaysia (Higher Degree) Regulations 1981. The Committee recommends that the student be awarded the **Master of Science in Education**.

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DECLARATION

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



NURUL HIJJA BINTI MAZLAN

Date: 13 October 2011

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