# THE EFFECT OF TELL ME MORE (TMM) USABILITY ON STUDENTS' SEGMENTAL AND SUPRASEGMENTAL PRONUNCIATION

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I hereby declare that I have checked this thesis, and, in my opinion, this thesis is adequate in terms of scope and quality for the award of the degree of Master of Science.

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

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## ABSTRAK

Penggunaan bahasa Inggeris sebagai bahasa rasmi telah diiktiraf di lebih 50 buah negara. Kelas pembelajaran bahasa Inggeris telah dibanjiri dengan bahan-bahan pengajaran dan pembelajaran untuk menyokong kemahiran seperti membaca, menulis, bertutur dan mendengar dalam bahasa Inggeris, dan satu aspek bahasa yang kekal membingungkan untuk pelajar Bahasa Inggeris ialah sebutan. Pengajaran sebutan telah meningkat secara drastik dari ketika ia mula diperkenalkan. Penggunaan perisian pembelajaran bahasa untuk mengajar sebutan masih belum mendapat populariti di Malaysia. Oleh itu, untuk mengenal pasti tanggapan sekitar penggunaan perisian pembelajaran bahasa, Tell me More (TMM) sebagai perisian pembelajaran sebutan, kajian ini bertujuan untuk menilai kesan penggunaan modul pengucapan TMM pada sebutan segmental dan sebutan suprasegmental serta kebolehgunaannya sebagai perisian pembelajaran sebutan di sebuah universiti teknikal di Malaysia. Sebelum penggunaan dan kegunaan pengucapan TMM diterokai, kajian awal dijalankan untuk mengenalpasti kebimbangan umum menggunakan perisian untuk mempelajari sebutan. Berdasarkan kajian awal, 56% daripada 110 pelajar mendakwa telah menggunakan sokongan teknologi untuk belajar sebutan tetapi tidak selesa untuk diperbetulkan pada kesilapan sebutan. Tambahan lagi, kaedah campuran digunakan untuk mengetahui bagaimana pelajar melihat kebolehgunaan TMM untuk mempelajari sebutan. Sebagai perisian pembelajaran sebutan, kajian kuantitatif mendapati bahawa 187 pelajar berpendapat bahawa TMM mempunyai kebolehgunaan yang baik dari segi keberkesanan, kecekapan dan kepuasan pengguna untuk digunakan sebagai perisian pembelajaran sebutan. Walau bagaimanapun, wawancara kualitatif menunjukkan perbezaan sikap dan kepercayaan yang dialami oleh pelajar semasa cuba modul sebutan dalam TMM. Kajian ini merupakan sebahagian daripada penyelidikan mengenai penggunaan perisian dalam pengajaran bilik darjah. Dengan mendokumenkan penggunaan modul sebutan TMM dan kebolehgunaannya sebagai perisian pembelajaran sebutan, penyelidikan ini akan menyumbang kepada penyelidikan masa depan dalam bidang yang sama.

## ABSTRACT

The use of English as the common official language is recognized in over 50 countries. While the classrooms are constantly flooded with materials of teaching and learning to support elements like reading, writing, speaking and listening in English, one aspect has remained perplexing for the learners of English; pronunciation. The teaching of pronunciation had drastically improved from when it was first introduced. Amidst the increased use of technology to learn pronunciation in Malaysia, the use of language learning software to learn pronunciation has yet to gain popularity. A preliminary study was conducted to identify the general concerns surrounding the use of TMM to learn pronunciation. The preliminary study found that 56% of the students were not comfortable to be corrected on pronunciation errors through a language learning software. In order to further examine student's inhibition on receiving pronunciation correction from TMM, this study investigates students' apprehensions on usability through the use of a language learning software like Tell Me More (TMM) on students segmental and suprasegmental pronunciation. First, a questionnaire was distributed to find out how students perceived the usability of the built-in pronunciation modules in TMM to learn segmental and suprasegmental pronunciation. Then, in the second part of the study, an interview was conducted to investigate the user experience of students on TMM. The findings from the questionnaire attested that 187 students found the built-in pronunciation modules in TMM attributed to positively in improving the students segmental and suprasegmental pronunciation. However the findings from the interview demonstrated varying user experiences while using TMM. By documenting the effect of TMM built-in pronunciation modules and its user experience, this research hopes to highlight how well a language learning software like Tell Me More achieves pronunciation goals with engineering undergraduates in Malaysia and how students feel while interacting with digital products like TMM.

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| | |
|---|---|
| ASR | Automated Speech Recognition |
| CAI | Computer Assisted Instruction |
| CALL | Computer Assisted Language Learning |
| CAPT | Computer Assisted Pronunciation Training |
| SLA | Second Language Acquisition |
| TMM | Tell Me More |
| L1 | First Language |
| L2 | Second Language |
| RP | Received Pronunciation |
| EF | Education First |
| AR | Augmented Reality |
| UI | User Interface |
| SME | Standard Malaysian English |
| MalE | Malaysian English |
| NNS | Non-native speakers |
| MPLS | Multimedia Pronunciation Learning Management System |
| MALL | Mobile Assisted Language Learning (MALL) |
| ESL | English as a Second Language |
| EFL | English as a Foreign Language |
| LFC | Lingua Franca Core |
| AI | Artificial intelligence |
| HMM | Hidden Markov Model |
| SDK | Software Development Kit |
| HCI | Human-Computer Interaction |
| ISO | International Organization for Standards |

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