UNIVERSITI PUTRA MALAYSIA

FACTORS INFLUENCING INTEGRATION OF WEB-BASED INSTRUCTION BY SECONDARY SCHOOL ENGLISH LANGUAGE TEACHERS

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By

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February 2012

Chairman: Jayakaran Mukundan, PhD

Faculty: Educational Studies

The current study investigated the factors that influence the adoption and integration of Web-Based Instruction (WBI) by secondary school teachers in Malaysia. Also, this investigated the relationship between the five attributes of the Diffusion of Innovations Model , National Educational Technology Standards for Teachers (NETS•T), teachers' demographic variables and WBI adoption and integration by TESL (Malaysian) secondary school teachers as well as their stages of concern with regard to WBI application.

Data were collected from 450 secondary school English language teachers in Malacca, Malaysia. A questionnaire comprising of five separate sections (demographic variables, attributes of diffusion of innovation based on Roger's model, National Educational Technology Standards for Teachers, different types of technology adopters, stages of concern) was selected as the

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instrument of the quantative phase of the study and a semi structured interview was chosen as the instrument for the qualitative phase of the research to help find out about the tentative barriers which may have caused hinderance in technology application from teachers and to identify how their stages of concern are related to their perceived characteristics of technology application and integration. Analysis of data showed that the attributes of diffusion of innovation correlated with WBI integration (r=0.525). Also, descriptive statistics indicated the most frequent attribute of diffusion of innovation was “Relative Advantage” (Mean=3.59) while the least frequent attribute was shown to be “Trialibility” (Mean= 3.11). Similarly, t-test showed no significant relationship between demographic variables and WBI application except for gender (t=2.319, sig=0.22).

A positive correlation was reported between NETS*T and WBI integration (r=0.516). Finally, it was shown that the barriers for WBI application among Malaysian secondary school teachers included Time, teacher's role, students’ readiness, distraction, language proficiency Access to computer facilities. English language secondary school teachers in Malacca have the highest degree of concern in stage 0 which is awareness; so, they fall in “Non-users” category. In conclusion, this study suggests the need for more professional development programs and training sessions for the English language teachers to be well-informed on their awareness in technology integration in their classes.

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Abstrak tesis yang dikemukakan kepada Senat Universiti Putra Malaysia sebagai memenuhi keperluan untuk ijazah Doktor Falsafah

FACTOR YANG MEMPENGARUHI PENGINTEGARASIAN PEMBELAJARAN BERASASKAN WEB OLEHGURU BAHASA INGGERIS SEKOLAH MENENGAH

Oleh

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Februari 2012

Pengerusi: Jayakaran Mukundan, PhD

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Penyelidikan ini mengkaji faktor-faktor yang mempengaruhi adaptasi dan integrasi Pengajaran Berasaskan Web (WBI) oleh para guru sekolah menengah di Malaysia. Selain itu, kajian ini juga cuba mencari hubungan antara lima atribut daripada Difusi Model Inovasi (hubungan dengan keuntungan, keserasian, kekompleksan, kebolehan menguji, dan kebolehan memerhati), Piawai Nasional Teknologi Pendidikan untuk guru (Nets • T), pembolehubah demografi para guru dan adaptasi dan integrasi WBI dengan TESL (Malaysia) ,guru sekolah menengah serta tahap yang menjadi perhatian mereka berkaitan dengan aplikasi WBI.

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Data dikumpulkan dari 450 guru bahasa Inggeris di sekolah menengah dari Melaka, Malaysia. Satu soal selidik yang terdiri daripada lima bahagian berasingan (pembolehubah demografi, atribut difusi inovasi berdasarkan model Roger, Piawai Nasional Teknologi Pendidikan untuk guru, pelbagai jenis pengadaptasian teknologi, tahap pemerhatian) dipilih sebagai instrumen dari fasa kuantitatif kajian dan wawancara separa berstruktur dipilih sebagai instrumen untuk fasa kajian kualitatif untuk membantu mengetahui kemungkinan rintangan yang menyebabkan halangan dalam aplikasi teknologi dari guru dan mengenalpasti bagaimana tahap berkenaan berhubung dengan ciri-ciri yang mereka fahami tentang aplikasi dan integrasi teknologi. Analisis regresif berganda digunakan untuk mengetahui hubungan antara persepsi oleh model atribut difusi inovasi, Piawai Nasional Teknologi Pendidikan untuk guru, tahap dan Arahan Berasaskan Web oleh guru- guru bahasa Inggeris sekolah menengah di Melaka.

Tambahan pula, t-test dan ANOVA digunakan untuk mengetahui perbezaan antara pembolehubah kajian. Analisis regresif berganda menunjukkan bahawa sifat difusi inovasi berkorelasi dengan integrasi WBI (r = 0,525). Selain itu, hasil analisis regresi berganda piawai membuktikan bahawa ada hubungan yang signifikan antara kekompleksan dan kebolehan memerhati dan integrasi WBI (sig = 0,002 & 0,000 masing-masing).Namun, tidak ada hubungan yang signifikan ditemui antara atribut lain iaitu di antara model difusi inovasi dan integrasi WBI. Selain itu, statistik deskriptif menunjukkan bahawa sifat yang sering didifusi inovasi adalah "Keunggulan

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Relatif" (Min = 3,59), manakala yang paling sedikit adalah atribut yang sering terbukti "Trialibility" (Min = 3.11). Pada masa yang sama, t-test menunjukkan ada hubungan yang signifikan antara pembolehubah demografi dan aplikasi WBI kecuali untuk jenis jantina (t = 2,319, sig = 0,22).

Regresi berganada dilaporkan berkorelasi positif antara T * Nets dan integrasi WBI (r = 0.516). Keputusan kajian menunjukkan bahawa guru Bahasa Inggeris sekkolah menengah di Melaka mempunyai kebimbangan tinggi di hamper semua tahap dengan konsekuensi dan maklumatt peringkat masing-masing adalah yang tertinggi (mean = 17,61 & 17,13) Akhirnya,. terbukti bahawa halangan untuk aplikasi WBI antara guru sekolah menengah di Malaysia termasuk masa, peranan guru, kesediaan pelajar, gangguan, kemahiran bahasa bagi membolehkan pelajar mengakses kemudahan komputer.

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To My Beloved Parents:

To whom I owe my everything,

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I would like to acknowledge the many people who have touched my life & walked with me through my journey of learning & teaching. Learning is an expression of hope, a belief in a better, more just future. Teaching is also an honor for which I am the most grateful. It is very difficult to find words that adequately express my gratitude to them.

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I certify that a Thesis Examination Committee has met on 23/02/2012 to conduct the final examination of Sima Sayadian on her PhD thesis entitled "Factors Influencing Integration Of Web-Based Instruction By Secondary School English Language Teachers In Malacca" in accordance with the Universities and University Colleges Act 1971 and the Constitution of the University Putra Malaysia [P.U.(A)106] 15 MARCH 1998. The Committee recommends that the student be awarded the Doctor of Philosophy Members of the Thesis Examination Committee were as follows:

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DECLARATION

I declare 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 University Putra Malaysia or at any other institution.

SIMA SAYADIAN

Date: 23 February 2012

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