

THE EFFECT OF ACTIVE READING
SOFTWARE ON SAUDI EFL LEARNERS'
READING COMPREHENSION SKILLS

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DOCTOR OF PHILOSOPHY

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ABSTRAK

Kajian ini dijalankan untuk mengkaji kesan arahan teknologi bersepadu (*technology-integrated instruction*) ke atas kemahiran pemahaman bacaan di kalangan para pelajar sarjanamuda Bahasa Inggeris sebagai Bahasa Kedua (EFL) di Universiti Majmaah, Arab Saudi. Kajian eksperimen ini menggunakan teknologi perisian membaca aktif (*Active Reading Software*) (ARS) sebagai alat untuk mengkaji keberkesanannya terhadap pemahaman bacaan secara literal, tafsiran, kritikal dan kreatif. Kajian ini juga cuba menerokai pengaruh arahan ARS ke atas sikap pelajar terhadap mempelajari kemahiran pemahaman bacaan. Pemboleh ubah kajian dianalisis and diterangkan berdasarkan kerangka teori yang merangkumi teori *Schema*, Rumelhalt (1980) dan *Cognitive Theory of Multimedia Learning* (CTML) oleh Meyer (2005). Kajian ini menggunakan pendekatan kaedah campuran penjelasan berurutan mengikuti reka bentuk kajian quasi-eksperimen pra- dan pasca-ujian untuk mengumpul data kualitatif dan kuantitatif. Peserta kajian merupakan 60 orang pelajar lelaki pengajian Bahasa Inggeris sebagai Bahasa Asing di Universiti Majmaah, Arab Saudi. Pembahagian secara rawak telah dibuat untuk membahagi peserta kepada dua kumpulan iaitu kumpulan eksperimen dan kumpulan kawalan. Data kuantitatif dikumpul melalui pencapaian ujian bacaan dan soalan survey, manakala data kualitatif dikumpul melalui pendekatan temu bual separa berstruktur. Analisa data kuantitatif dijalankan menggunakan SPSS versi 22, manakala data kualitatif dianalisa menggunakan prosedur analisis bertema. Dapatan kajian menunjukkan terdapat perbezaan yang signifikan dari segi pencapaian membaca di antara kedua-dua kumpulan kajian. Purata skor dalam kalangan kumpulan eksperimen lebih tinggi berbanding kumpulan kawalan. Rumusan yang dibuat daripada dapatan kajian ialah penggunaan ARS sebagai alat pembelajaran dapat memberikan impak positif terhadap pencapaian bacaan para pelajar. Dapatan kajian juga menunjukkan kesan positif penggunaan intervensi ARS terhadap sikap pelajar. Walau bagaimanapun, dapatan kajian menunjukkan pendedahan ARS yang lebih lama tidak memberi kesan yang signifikan ke atas pemahaman bacaan dan sikap pelajar. Oleh yang demikian, dapat disimpulkan bahawa hasil kajian ini menunjukkan penggunaan ARS sebagai alat bantu mengajar dapat meningkatkan prestasi pemahaman bacaan.

ABSTRACT

The present study investigated the effects of technology-integrated instruction on reading comprehension skills of the undergraduate EFL learners at Majmaah University, Saudi Arabia. The experimental study utilized Active Reading Software (ARS) as a technological tool to examine its efficacy on reading comprehension at literal, interpretative, critical, and creative levels. The study also attempted to explore the influence of ARS instruction on learners' attitudes towards learning reading comprehension. The variables of the study were analyzed and described based on a theoretical framework that included Schema theory, Rumelhart (1980) and Meyer's (2005) Cognitive Theory of Multimedia Learning (CTML). This study employed a sequential explanatory mixed-method approach following a quasi-experimental pretest posttest design for collecting the quantitative and qualitative data of the research. The study utilized 60 male participants studying English as a foreign language at Majmaah University, Saudi Arabia. Randomization procedure was used to cluster two intact groups into experimental and control groups. Quantitative data were obtained via reading achievement tests and questionnaire surveys while qualitative data were procured through semi-structured interviews. Analysis of quantitative data made use of statistical package SPSS 22, whereas qualitative data of the study were evaluated using thematic data analysis procedure. Findings of the study pointed out a significant difference in the mean scores of the experimental groups involved in the study in terms of reading achievement. The mean score of the experimental groups on reading post-test was higher than that of the control group. The conclusion was drawn from the findings that using ARS as a learning tool had significant impacts on learners' reading achievement. The findings of this study demonstrated that ARS is an effective learning tool for enhancing reading comprehension skills since the ARS instruction focused on aspects that could improve learners' comprehension skills. These aspects included using authentic learning materials, activation of prior or background knowledge, positive learning attitudes, interactive learning activities, individualized and stress-free learning environment. The results of the current study also showed that the participants in the experimental group performed better than the control group because they received the learning input in a conducive environment, which helped them improve their reading proficiency. In the ARS instruction, the learning materials were presented using dual-channel (auditory and visual). Thus, the nature of learning materials used in ARS reading sections and the mode of presentation have encouraged learners to involve actively in the learning process to construct meaningful information based on their prior knowledge. Furthermore, the findings also revealed positive attitudes of learners towards ARS in terms of perceived ease of use, perceived usefulness, user-friendly interface design and retention, all of which are factors that could contribute to technology acceptance and integration in the learning process. Therefore, the current study based on the findings suggests that the use of ARS as a learning tool can be effective in improving learners' reading comprehension skills and learners' attitudes towards the adoption and integration of technology-based learning in language classes.

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