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結合行動、感應及語音科技之圖書館導引系統及其成效分析

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摘要

由於科技的進步，藉由無線網路及無線射頻辨識技術，建立不同於傳統圖書館的使用環境，成為提升圖書館形象的服務之一。本研究針對國小學童較無地理位置概念的特性，藉由行動及感應技術，製作了能夠幫助學童在圖書館內快速尋書的系統環境。並針對低年級更需要聲音的協助，提供了不必依賴螢幕的語音導引功能。

本研究參考過去學者之研究架構，設計出針對某國小圖書館滿意度架構的4項指標，並指出指標中以「引導設備因素」影響整體滿意度最高。為了解系統語音對學童使用滿意度的影響，我們亦進行了相關因素的研究分析，結果顯示，每一項語音因素，均對系統的使用滿意度產生正相關的影響。另外，找到書的人次比例亦因本系統的協助有提高的現象。

關鍵詞：情境感知、無線射頻辨識系統、無所不在、圖書館應用、語音導引

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A Library Guide System Combining Mobile, Sensing, and Voice Technologies and Its Effect Analysis

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Abstract

Due to the progress of the science and technologies, using wireless networks and the technology important for promoting library image. Therefore, based on mobile and sensing technologies, this research presented a library guide system to help elementary schoolchildren to seek books fast in libraries. Aimed at the demand of sound for lower grade schoolchildren, the system also provided the function of voice guide by which the system can be used easily with less screen-needed.

Based on the past research architecture, we presented four merit points to measure satisfactory degree for the schoolchildren. The experimental result showed that among the four points, the guide equipment is the most effective reason. In order to understand the influence factors of the system voice satisfaction, the relative research and analysis were done. The result showed that each voice function positively influence the usage satisfaction of the guide system. Additionally, by the assistance of the system, the rate of elementary schoolchildren to find books had been increased.

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