

論文摘要

為能落實教育公平競爭原則，縮短城鄉教育資源落差，教育部於二〇〇二年暑假期間辦理了名為「魔速英語夏令營」的偏遠學校遠距教學活動，這是我國首次運用衛星從事現場直播教學，並搭配數位學習平台功能，讓各地的偏遠學生都能透過教室的投影幕上課，這樣的教學模式，除了讓各地學生能夠同步接觸到一致的教學內容外，學生也可以和教師同步做視訊即時互動與溝通；「魔速英語夏令營」教學實驗案結束後受到各界好評與關注，總計全國有超過 1,500 位偏遠地區學生因而受惠。本研究即是以運用「衛星互動電視」提供「遠距同步視訊教學」目的為探討起始，輔以「魔速英語夏令營」個案，試圖了解目前直播衛星電視應用於遠距教學的發展方式，再透過檢視影音互動教學的效益，來審視運用新科技來平衡城鄉教育資源落差的可能性；而為求研究結果周延與客觀，本研究除了廣泛蒐集閱讀相關文獻、專論、中外期刊及書籍之外，並採用「參與觀察」、「文獻分析」、「個案研究」以及「次級資料引用與整理」等研究方法進行探究，進而取得在理論與實務上的具體建議。

本研究取得之結論為：(一) 持續運用「衛星互動電視」可以逐漸改善城鄉教育資源落差：利用直播衛星將節目覆蓋至最廣的區域，在技術層面上可以使得偏遠地區取得教育普及的公平性。(二) 施行「遠距同步視訊教學」對偏遠地區的教學資源確有改善，學生可以接觸到與都會學校同步的最新教材內容，縮短與城鄉之間的教育差距。(三) 遠距教學透過多媒體輔助教學的方式可以受到師生的接受，透過真人現場實況的指導以及同步影音教學平台的機制，可以提高學習的效果。(四)、衛星搭配網路架構下的互動教學方式成本低、效益大，而且是極為簡約可行的互動教學方式。而本研究針對平衡「城鄉教育資源差距」之具體建議為：(一) 整合教育資源，製播「遠距同步視訊教學」課程，並針對特定的課程，擴大實驗範疇。(二) 強化「遠距同步視訊教學共通平台」之具體優勢，落實於教育單位或是學習環境之中，並規範進程，達到均衡教育資源的目標。

關鍵詞：互動電視、直播衛星、教育資源落差、遠距教學、數位學習

Abstract

Interactive Satellite Television as a Solution to Redeem the Educational Resources Disparity between Urban and Rural Areas— A Case Study by a Simultaneous Distance Learning Project "Magic English Camp"

This thesis was based on simultaneous distance learning made possible through “Interactive Satellite TV” and the “Magic English Camp” case-study to investigate development of the convergence of satellite television and distance learning. By evaluating this case-study of interactive virtual video pedagogy, the project intended to identify and understand how new technologies can “equilibrate” the digital divide between urban and rural areas. As an employee of ERA Digital Media Corporation, the author was able to take part in the preparation of The Magic English Camp event program and closely follow its evolution and outcome. In order to pursue comprehensive and objective results, this project required extensive research and work on journals, periodicals, publications etc. Furthermore, this project conducted "Participant Observation", "Literature Analysis" and "Secondary Research" methodology along with "Case Study Analysis" for both theoretical and practical concrete suggestions.

To sum up, the results of this thesis indicate the following: 1. continuously to use the “Interactive Satellite TV” can step-by-step to improve the educational resource disparity in urban and rural area. 2. Simultaneous Distance learning leveled the playing field for children in rural areas who were now able to benefit both from advanced educational material and the teaching of native English-speakers. 3. The effect of multi-media pedagogy is significant. Real-time instruction and simultaneous visual and audio pedagogy captured attention, motivated learning and increased learning efficiency. 4. It is easier to build the “Interactive Satellite TV system” that could be used repeatedly. With high speed mass data transmission as a characteristic and priority, satellite and internet made it possible to establish a “Simultaneous Distance learning Platform” thus making it more facile to access instruction for students without geographic limitations. Moreover, there are two suggestions for this research: 1. Combine the most of educational resources and to produce the synchronous video-information courses for the people. 2. To build up the distance learning platform for everyone students in the whole environment, and standardize the process to reach the goal of educational resources of equilibrium.

Keyword(s): Educational resources, e-Learning, Interactive TV, Satellite.