• 計畫中文名稱	以臺語為第二外國語學習之數位說、聽部份網際網路線上教學系統之設計與開發---以臺語為第二外國語學習之數位說、聽部份網際網路線上教學系統之設計與開發		
• 計畫英文名稱	Design and Development of a Web-Based Online Digital Speaking and Listening Tutoring System on Taiwanese as the Second Language		
• 系統編號	PB9701-0032	• 研究性質	技術發展
• 計畫編號	NSC96-2524-S038-001	• 研究方式	學術補助
• 主管機關	行政院國家科學委員會	• 研究期間	9612 ～ 9711
• 執行機構	臺北醫學大學醫學資訊研究所		
• 年度	96 年	• 研究經費	3060 千元
• 研究領域	資訊科學--軟體		
• 研究人員	蔣以仁,邱泓文,楊允言,徐建業		
• 中文關鍵字	第二外國語學習; 數位學習; 網際網路; 電腦輔助學習; 語音辨音; 教學系統		
• 英文關鍵字	Second Language Learning, eLearning, World Wide Web, CALL, Speech Recognition, Tutoring System		
• 中文摘要	以臺語為第二外國語學習之數位說、聽部份網際網路線上教學系統之設計與開發， 計分為四個子計畫，分別為： 臺語發音與日常會話說、聽部份網際網路線上數位多媒體教材開發 臺語發音及辨音校正網際網路線上輔助教學系統開發 臺語說、聽力網際網路線上測驗診斷系統開發 臺語網際網路線上發音與聽力學習評量與分析 隨著亞洲經濟日益強大，學習華語文逐漸成為一股熱潮，華語學習熱潮近年來襲捲 全球；外國人學華語面臨到的最大困難是便是五音不全，四聲不準，怪腔怪調。「說」 與「聽」則是語言學習的第一步，也是最重要的一步。 本計畫將以提供外籍人士的臺語之第二外國語網際網路線上數位語言學習系統，依 據語言數位 SLA 學習流程的定義，按第二外國語言學習同中求異的特性，編撰適當教 材，透過語料庫，訂定正確語音資料庫，利用語音辨識原理，提供說、聽的辨音，協 助外籍人士進行臺語的『聽』、『說』學習訓練，可讓外籍人士容易自我訓練並學習正 確臺語的會話，並理解臺語的交談；透過測驗，診斷自己發音與聽力的問題，藉由辨 音程序，標示錯誤位置，可自我調整；經由學習評量，發掘問題，對症下藥。		
• 英文摘要	This project 「Design and Development of a Web-Based Online Speech and Listening Tutoring System on Taiwanese as the Second Language」 consists of four subprojects: 1. Development of the Web-Based Taiwanese multimedia instructional materials for pronunciations and conversions. 2. Development of a Web-based acoustic recognition system for Taiwanese Speech and Listening. 3. Development of a Web-based Taiwanese speech and listening diagnostic system. 4. Assessments of the Web-based Speech and Listening for Taiwanese language. enthusiastic As the growth of economical power in Asia, the		

learning of Chinese becomes around the world. For the learners in Chinese as a second language, the most difficult they faced to is pronunciation with a weird accent and harsh tone. Speaking and Listening is the first and most important for the second language learners. This project focuses on providing a web-based Taiwanese as a second language tutoring system. Based on SLA architecture following the concept to find out the same and distinguish the differences between Taiwanese and the learners』 naïve language, we will investigate on developing multimedia instructional materials properly. The important characteristics of this tutoring system are to provide a course for Taiwanese conversions and comprehend the communications for Taiwanese as the second language learners. In order to build a Web-Based online speech and listening tutoring system on Taiwanese as the second language, it needs us to design and integrate an acoustic database from a complete linguistic database. Based on the principle of speech recognitions, the web site will allow learners to practice repeatedly by differentiating the learner』s voice and standard tone of voice and eliminating it, so it is able for learners to fluently pronounce Taiwanese characters and sentences. According to recognition procedures and quiz evaluations the system can properly diagnose the problem on Taiwanese speech and listening, the learner is able to achieve a good studying effect.