數位學習科技期刊 第 3 卷第 2 期 2011 年 4 月,頁 81-98

素養取向科技使用量表之發展

曾建勳 * 洪碧霞 ** 林宜樺 ***

摘要

素養是國小學生適應未來生活的關鍵,科技支持學習則是數位紀元中創新而重要的學習取向。素養取向科技使用量表著重科技在真實情境運用功能的覺察與認同,本研究透過量表發展,評估國小學生以科技支持學習的態度與意向,作為教師發展科技支持學習方案的具體參考。研究中以計畫行為理論與科技接受模式為基礎,發展網路化國小學生科技使用量表,包含科技使用態度、科技控制知覺、科技主觀規範與科技使用意向等四個層面,共26題。在610位國小高年級學生的有效樣本中,全量表 α 係數為0.94,分層面 α 係數分別為0.83、0.85、0.79及0.84。各層面之間的相關介於0.68至0.76。量表得分與學生在校電腦成績的相關略高於與自然或數學成績的相關,男生平均得分也比女生略高。整體而言,量表呈現合理的內部一致性和構念效度。

關鍵詞:性別差異、科技支持學習、科技接受模式、計畫行為理論、素養

^{*} 高雄市竹圍國小教師, E-mail: tjs1219@mail2000.com.tw

^{**} 國立臺南大學測驗統計研究所教授,E-mail: hungps@mail.nutn.edu.tw

^{***} 國立臺南大學測驗統計研究所博士生, E-mail: ihua.lin@msa.hinet.net 投稿日期:2009.11.13;修正日期:2010.01.05;接受日期:2010.01.06

International Journal on Digital Learning Technology Volume 3, Number 2, April 2011, pp. 81-98

The Development of a Literacy-based Technology Application Scale

Chien-Hsun Tseng* Pi-Hsia Hung** I-Hua Lin***

Abstract

Development of student's learning literacy is a very crucial goal for elementary education. Learning with technology is an innovative and important learning approach for students to develop their competences in a digital era. Student's technology application attitude and intention may affect their technology literacy development. The curriculum design for learning with technology should also take the related factors into considerations. This study developed a technology application scale (TAS) for elementary students based on the theory of planned behavior and technology acceptance model. There were 610 fifth and sixth-graders sampled from twenty-six schools included as the norm. In this study we explore the differences between grades and gender of TAS. There is no significant difference between the 5th and 6th graders on TAS. The male students perform a little bit better than the female students. The correlation pattern reasonably supports the theory of planned behavior. The results suggest TAS is a reliable and valid instrument to provide basic information about students' affective aspect of technology application.

Keywords: gender difference, learning with technology, technology acceptance model, planned behavior, literacy

Manuscript received: 2009.11.13; Revised: 2010.01.05; Accepted: 2010.01.06

-

^{*} Teacher, Jhu Wei Elementary School, Kaohsiung City. E-mail: tjs1219@mail2000.com.tw

^{**} Professor, Graduate Institute of Measurement and Statistics, National University of Tainan. E-mail: hungps@mail.nutn.edu.tw

^{***} Doctorate Student, Graduate Institute of Measurement and Statistics, National University of Tainan. E-mail: ihua.lin@msa.hinet.net