

# Blogosphere之電子化教學歷程檔案成效研究--以彰化縣國中小為例

黃俊凱、晁瑞明

E-mail: 9606949@mail.dyu.edu.tw

## 摘要

Blog型態之教學歷程檔案能否被接受以及持續使用，是本研究關注的焦點，因此，本研究結合了科技接受理論(Technology Acceptance Model, TAM)、期望確認理論(Expectation-Confirmation Theory, ECT)以及資訊系統成功模式(IS Success Model)，提出一理論模型，用以預測Blog教學歷程檔案能否成功以及被持續使用。該模型除了包含認知有用、認知易用等TAM核心模式外，除了加入資訊系統成功模式中的資訊品質與系統品質，再加上ECT中的確認、滿意度及持續使用意圖等因素。本研究是透過問卷的方式，請有參加彰化縣九十五學年度教學檔案部落格比賽的教師填寫。總共寄發了260份問卷，有效問卷為195份，回收率為75%。資料分析先以驗證性因素分析來檢視各研究構面的信度與效度，再以結構方程模式來驗證所提假說。研究結果發現，確認受到資訊品質、系統品質、認知有用的影響。滿意度受到確認、認知有用、認知易用的影響，資訊品質及系統品質對滿意度的影響不顯著。持續使用意圖則受到滿意度及認知有用的影響。

關鍵詞：部落格(Blog)；電子化教學歷程檔案；期望確認理論；科技接受模式

## 目錄

中文摘要 . . . . .	iii	英文摘要 . . . . .
iv 誌謝辭 . . . . .	vi	內容目錄 . . . . .
vii 表目錄 . . . . .	ix	圖目錄 . . . . .
xi 第一章 緒論 . . . . .	1	第一節 研究背景 . . . . .
1 第二節 研究動機 . . . . .	2	第三節 研究問題與目的 . . . . .
4 第四節 研究範圍及限制 . . . . .	5	第五節 研究流程 . . . . .
7 第二章 文獻探討 . . . . .	9	第一節 網誌與教學歷程檔案 . . . . .
9 第二節 科技接受模式 . . . . .	14	第三節 資訊品質與系統品質 . . . . .
20 第四節 期望確認理論 . . . . .	26	第三章 研究方法 . . . . .
38 第一節 研究假說與模型推導 . . . . .	38	第二節 變數操作型定義與測量 . . . . .
46 第三節 研究設計 . . . . .	50	第四節 統計與資料分析法 . . . . .
55 第四章 資料分析與結果 . . . . .	58	第一節 前測結果分析 . . . . .
58 第二節 敘述性統計分析 . . . . .	61	第二節 第三節
65 第五章 結論與建議 . . . . .	89	研究模型驗證 . . . . .
研究發現 . . . . .	89	第二節 研究缺失與限制 . . . . .
研究貢獻 . . . . .	93	第四節 未來研究方向與建議 . . . . .
參考文獻 . . . . .	96	附錄A 問卷設計 . . . . .
	113	

## 參考文獻

- 一、中文部份 李敏正(2003)，延伸計劃行為理論以預測WWW持續使用之研究。高雄第一科技大學資訊管理系未出版之碩士論文，高雄市。林克寰(2003)，BLOG 架站實務:使用Movable Type，台北:旗標出版股份有限公司。林清山(1988)，多變項分析統計法，台北:東華書局。邱皓政(2003)，量化研究與統計分析，台北:五南。吳明隆(2000)，SPSS統計應用實務，松崗電腦圖書資料股份有限公司。徐昌義(2002)，我國小學教師在職階段專業檢覈制度之研究，暨南國際大學教育政策與行政研究所未出版之碩士論文，南投縣。許月梅(2005)，幼稚園教師教學專業指標之研究--教學檔案建構取向，台北市立師範學院國民教育研究所未出版之碩士論文，台北市。陳向東、張際平(2003)，博客文化與現代教育技術[線上資料]，來源: <http://www.being.org.cn> [2004, August 21]。陳聖謨(1998)，檔案在師資培育上的應用，教育研究資訊，6(2)，150-156。張德銳(2003)，促進教師專業發展的教學檔案，國教新知，49(4)，60-68。羅綸新(2001)，教學檔案與教師專業成長，教學科技與媒體，57，12-21。二、英文部份 Ajzen, I., & Fishbein, M. (1980). Understanding Attitudes and Predicting SocialBehavior. New Jersey: Prentice-Hall. Anderson, J. C., & Gerbing, D. W. (1984). The effect of sampling error on convergence, improper solutions, and goodness-of-fit indices for maximum likelihood confirmatory factor analysis. Psychometrika, 49, 155-173. Anderson, J.C., & Gering, D.W. (1988). An updated paradigm for scale development incorporating unidimensionality and its assessment. Journal of Marketing Research,

25(May), 186-192. Bagozzi, R.P., & Phillips, L.W. (1982). Representing and testing organizational theories: A holistic construal. *Administrative Science Quarterly*, 27(3), 459-489. Bagozzi, R. P., & Yi, Y. (1988). On the Evaluation of Structural Equation Models. *Journal of the Academy of Marketing Science*, 16(1), 74-94. Bailey, J.E., & Pearson, S.W. (1983). Development of a tool for measuring and analyzing computer user satisfaction. *Management Science*, 29(5), 530-545. Bajaj, A., Nidumolu, S.R. (1998). A feedback model to understand information system usage. *Information & Management*, 33(4), 213-224. Barrett, H. (1997). Electronic teaching portfolios. [Online]. Available: <http://transition.alaska.edu/www/portfolios/site99.html> [2002, Sept, 29] Bentler, P. M., & Bonett D. G. (1980). Significance tests and goodness-of-fit in the analysis of covariance structures. *Psychological Bulletin*, 88(3), 588-606. Bitner M. J. (1990). "Evaluating Service Encounters: The Effects of Physical Surroundings and Employee Responses," *Journal of Marketing*, Vol. 54, 69-82. Bhattacherjee, A. (2001a). Understanding information systems continuance: an expectation-confirmation mode. *MIS Quarterly*, 25(3), 351-370. Bhattacherjee, A. (2001b). An empirical analysis of the antecedents of electronic commerce service continuance. *Decision Support Systems*, 32(2), 201-214. Bird, T. (1990) The Schoolteacher 's portfolio: An essay on possibilities. In the New Handbook of TeacherEvaluation: Assessing Elementary and Secondary School Teachers, Edited by Millman & Darling-Hammond, 241-56. Newbury Park, Ca: Sage. Bollen, K. (1989). Structural Equations with Latent Variables. New York: Wiley. Bushweller, K. (1995). The resilient child. *American School Board Journal*, 182(5), 18-23. Cadotte, E.R., Woodruff, R.B. & Jenkins, R.L. (1987). Expectations and Norms in Models of Consumer Satisfaction. *Journal of Marketing Research*, 24, 305-314. Cardozo, R. (1965). An experimental study of customer effort, expectation, and satisfaction. *Journal of Marketing Research*, 2(8), 244-249. Carmines, E.G., & McIver, P.P. (1981). Analyzing models with unobserved variables: analysis of covariance structures. CA: Beverly Hills. Chae & Kim (2001). Information Quality for Mobile Internet Services. Twenty-Second International Conference on Information Systems. Chiu, H. C., Hsieh, Y. C., & Kao, C. Y. (2005). Website quality and customer 's behavioural intention: An exploratory study of the role of information asymmetry. *Total Quality Management & Business Excellence*, 16(2), 185-197. Churchill, G.A., & Surprenant, C. (1982). An investigation into the determinants of customer satisfaction. *Journal of Marketing Research*, 19, 491-504. Cronin, J. J. & Taylor, S. A. (1992). Measuring service quality: A reexamination and extension. *Journal of Marketing*, 56, 55-68. Davis, F.D. (1989). Perceived usefulness, perceived ease of use, and user acceptance of information technology. *MIS Quarterly*, 13(3), 319-340. Davis, F.D., Bagozzi, R.P., & Warshaw, P.R. (1989). User Acceptance Of Computer Technology: A Comparison Of Two Theoretical Models. *Management Science*, 35(8), 982-1003. Delone, W.H., McLean, E.R. (1992). Information systems success. The quest for the dependent variable. *Information Systems Research*, 3, 60-95. DeLone, W. H. & McLean, E. R. (2003). The DeLone and McLean model of information systems success: A ten-year update. *Journal of Management Information Systems*, 19(4), 9-30. Devaraj, S., Fan, M. & Kohli, R. (2002) Antecedents of B2C channel satisfaction and preference: validating e-commerce metrics. *Information Systems Research*, 13(3), 316-333. Doll, W.J., Torkzadeh, G. (1988). The measurement of end user computing satisfaction. *MIS Quarterly*, 12(2), 259-274. Fishbein, M., & Ajzen, I. (1975). Belief, Attitude, Intentions and Behavior: An Introduction to Theory and Research. MA: Addison-Wesley. Fornell, C., & Larcker, D.F. (1981). Evaluating Structural Equation Models with Unobservables and Measurement Error. *Journal of Marketing Research*, 39-50. Fornell, C., Michael D. J., Eugene W. A., Jaesung C. and Everitt B. (1996). The american customer satisfaction index: nature, purpose, and findings. *Journal of Marketing*, 60, 7-18. Hair, J. F., Anderson, R. E., Tatham, R. L.& Black, W. C. (1992). MultivariateData Analysis with Reading (3rd ed). New York: Macmillan. Hayashi, A., Chen, C., Ryan, T., & Wu, J. (2004). The role of social presence and moderating role of computer self efficacy in predicting the continuance usage of e-learning systems. *Journal of Information Systems Education*, 15(2), 139-154. Hewett, S. M. (2005). Electronic Portfolios: Improving Instructional Practices. *TechTrends*, 48(5), 26-30. Hong, S.J., Thong, J. Y. L., & Tam, K. Y. (2006). Understanding continued information technology usage behavior: A comparison of three models in the context of mobile internet. *Decision Support Systems*, 42, 1819-1834. Howard, J. A., & Jadish N. S. (1969), The theory of buyer behavior. New York: Wiley. Hsu, M.H., Chen, Y.L., & Chiu, C.M. (2003). Examining the WWW continuance: an extended expectation confirmation model. *Communications of the ICISA*. 5(2), 12 – 25. Hu, L., & Bentler, P. M. (1999). Cutoff criteria for fit indexes in covariance structure analysis: Conventional criteria versus new alternatives. *Structural Equation Modelling*, 6, 1-55. Igbaria, M., Guimaraes, T., & Davis G. B. (1995). Testing the determinants of microcomputer usage via a structural equation model. *Journal of Management Information Systems*, 11(4), 87-114. ISO 9241-11, (1998). Ergonomics Requirements for Office with Visual Display Terminals (VDTs)—Part 11: Guidance on Usability. International Organization for Standardization (ISO), Geneva. James, E. G.. & Shery, O. S. (1996). The teacher portfolio:A strategy for professional development and evaluation. Pennsylvania: Technomic. Kaiser, H. F. (1974). An index of factorial simplicity. *Psychometrics*, 39, 31-36. Kang, S. (1998). Information technology acceptance: evolving with the changes in the network environment. Proceedings of the 31st Annual Hawaii International Conference on System Sciences. 413-423. Karahanna, E., & Straub, D.W. (1999). The psychological origins of perceived usefulness and ease of use. *Information & Management*, 35(4), 237-250. Khalifa M., and Liu V. (2002a). Statisfaction with Internet-Based Services. Proceedings of the 35th Hawaii International Conference on System Sciences, 174. Khalifa M., and Liu V. (2002b). Explaining Satisfaction Different Stages of Adoption in the Context of Internet-Based Services. 23th International Conference on Information Systems. King, W.R. & Epstein, B.J. (1983). Assessing information system value. *Decision Sciences*, 4(1), 34-45. Klenowski, V. (2002). Developing Portfolios for Learning and Assessment: Processes and Principles. Oxford: Routledge. Kunsoo S. (1994). End-user's disconfirmed expectations and the success of information systems. *Information Resources Management Journal*, 7(4), 30-40. LaBarbera, P.A., & Mazursky, D. (1983). A longitudinal assessment of consumer satisfaction/dissatisfaction: the dynamic aspect of the cognitive process. *Journal of Marketing Research*, 29, 393 – 404. Latour, S. A. & Peat, N. C. (1979). Conceptual and Methodological Issues in Consumer Satisfaction Research. in Advances in Consumer Research (6Ed). William L. Wikie. Ann Arbor MI: Association for Consumer Research,.431-437. Legris, P.,

Ingham, J., & Collerette, P., (2003). Why do people use information technology? A critical review of the technology acceptance model. *Information & Management*, 40(3), 191-204. Lin, C.S., Wu, S., & Tsai, R.J. (2005). Integrating perceived playfulness into expectation-confirmation model for web portal context. *Information & Management*, 42(5), 683-693. Lin, J. & Lu H. (2000). Towards an understanding of the behavioural intention to use a web site. *International Journal of Information Management*, 20, 197-208. Locke E. A. (1976). The Nature and Causes of Job Satisfaction. in *Handbook of Industrial and Organizational Psychology*, M. D. Dunnette(ed.). New York: Holt. 1297-1349. Loughran, J., Corrigan, D. (1995). Teaching portfolio: A strategy for developing learning and teaching in pre-service teacher education. *Teaching and teacher education*, 11(6), 565-577. Mason. R.O. (1978). Measuring information output: A communication systems approach. *Information & Management*, 1(5), 219-234. Marsh, H.W., & Hocevar, D. (1985). Application of confirmatory factor analysis to the study of self-concept: First- and higher-order factor models and their invariance across groups. *Psychological Bulletin*, 97(3), 562-582. Mathieson, K. (1991). Predicting user intentions: Comparing the technology acceptance model with the theory of planned behavior. *Information Systems Research*, 2(3), 173-191. McKinney, V., Yoon, K., & Zahedi, F.M. (2002). The measurement of Webcustomer satisfaction: an expectation and disconfirmation approach. *Information Systems Research*, 13(3), 296-315. Moersch, C.M., & Fisher, L. M. (1996). Pivotal questions about electronic portfolios. *Leading and Learning with Technology*. Myers, M. D., & Young, L. W. (1997). Hidden agendas, power, and managerial assumptions in information systems development: An ethnographic study. *Information Technology & People*. 10(3), 224-240. Oliver, R. L. (1977). Effects of expectation and disconfirmation on post exposure product evaluations: An alternative interpretation. *Journal of Applied Psychology*, 62(2), 246-250. Oliver, R.L. (1980). A cognitive model for the antecedents and consequences of satisfaction. *Journal of Marketing Research*, 17, 460-469. Oliver, R.L. (1981). Measurement and evaluation of satisfaction process in retail setting. *Journal of Retailing*, 57, 25-48. Oliver, R. L. , & Bearden, W. O. (1985), Disconfirmation processes and consumer evaluations in product usage. *Journal of Business Research*, 13, 495-507. Oliver, R. L. & Wayne S .D. (1988). Response determinants in satisfaction judgements. *Journal of Consumer Research*, 1(14), 495- 507. Olshavsky, R. W. & John A. M. (1972). Consumer expectations, product performance, and perceived product quality. *Journal of Marketing Research*, 9, 19-21. Olson, J. C., & Dover P. A. (1979). Disconfirmation of consumer expectatioin through product trial. *Journal of Applied Psychology*, 64(2), 179-189. Paulson, L.F., Paulson, P.R, Meyer C. (1991). What makes a portfolio a portfolio? *Education Leadership*, 48(5), 60-63. Pavlou, P.A. (2002). What drives electronic commerce? A theory of planned behavior perspective. Best Paper Proceedings of the Academy of Management Conference, Denver, CO, August,.9-14.. Pitt, L.F., Watson, R.T., & Kavan, C.B. (1995). Service quality: A measure of information systems effectiveness. *MIS Quarterly*, 19(2), 173-187. Plouffe, C. R., Hulland, J. S., & Vandenberg, M. (2001). Research report: richness versus parsimony in modeling technology adoption decisions-understanding merchant adoption of a smart card-based payment system. *Information Systems Research*, 12(2), 208-222. Rai, A., Lang, S.S., & Welker, R.B. (2002). Assessing the validity of IS success models: an empirical test and theoretical analysis. *Information Systems Research*, 13(1), 50-69. Roca, J. C., Chiu, C. M., & Martinez, F. J. (2006). Understanding e-learning continuance intention: An extension of the Technology Acceptance Model. *International Journal of Human-Computer Studies*, 64(8), 683-696. Santos J. & Boote, J. (2003), A theoretical exploration and model of consumer expectations, post-purchase affective states and affective behaviour. *Journal of Consumer Behaviour*, 3(2),142. Seddon, P. B. (1997). A respecification and extension of the DeLone and McLean model of IS success. *Information Systems Research*, 8(3), 240-253. Seddon, P. B., & Kiew, M. Y., (1994). A partial test and development of the DeLone and McLean Model of IS success. In *Proceedings of the International Conference on Information Systems* (pp. 99-110), Vancouver, Canada. Seddon, P. B., & Yip, S. K. (1992). An empirical evaluation of user information satisfaction (UIS) measures for use with general ledger accounting software. *Journal of Information Systems*, 6(1), 75-92. Shannon, C. E., & Weaver, W. (1949). *The Mathematical Theory of Communication*.University of Illinois Press, Urbana, IL Shulman, L.S. (1988). A union of insufficiencies: Strategies for teacher assessment in a period of reform. *Educational Leadership*, 46, 36-41 Spreng, R.A., MacKenzie, S.B., & Olshavsky, R.W. (1996). A re-examination of the determinants of consumer satisfaction. *Journal of Marketing*, 60, 15-32. Srinivasan, Ananth, (1985). Alternative Measures of System Effectiveness: Associations and Implications. *MIS Quarterly*, 9(3), 243-253. Swan, J. E. & Trawick I. F. (1981). Disconfirmation of Expectationand Satisfaction with a Retail Service. *Journal of Retailing*, 57, 49-67. Szajna, B., & Scamell, R. (1993). The effects of information system user expectations on their performance and perceptions. *MIS Quarterly*, December, 493-516. Tabachnick, B. G., & Fidell, L. S. (1989). *Using multivariate statistics* (2nd ed.). New York: Harper & Row, Publishers, Inc. Taylor, S., & Todd, P. A. (1995a). Assessing IT usage: the role of prior experience. *MIS Quarterly*, 19(4), 561-570. Taylor, S., & Todd, P. A. (1995b). Understanding information technology usage: a test of competing models. *Information Systems Research*, 6(2), 144-176. Thong, J. Y. L., Hong, S. J. & Tam, K. Y. (2006). The effects of post-adoption beliefs on the expectation-confirmation model for information technology continuance. *International Journal of Human-Computer Studies*, 64, 799-810. Tse, D. K., & Wilton, P. C. (1988). Models of consumer satisfaction formation: An extension. *Journal of Marketing Research* (25), 202-212. Venkatesh, V. (2000). Determinants of perceived ease of use: integrating control, intrinsic motivation, and emotion into the technology acceptance model. *Information Systems Research*, 11(4), 342-365. Wheeler, P. H. (1993). Using portfolios to asses teacher performances. EREAPA Associates, Livermore, CA. Wolf, K. Lichtenstein, G., & Stevenson, C. (1997). Portfolios in Teacher evaluation. Paper presented at the Annual Meeting of the American Educational Research Association. Chicago. Yi, Y. (1990). A critical review of consumer satisfaction. in V. A. Zeithmal (ed.), *Review of Marketing* (4) American Marketing Association, Chicago, 68-123. Zeithaml, V.A. (1988). Consumer perceptions of price, quality, and value: a means-end model and synthesis of evidence. *Journal of Marketing*, 52(3), 2 – 22.