

The Research Based on Ontology to Explore E-Learning Blog Journey Portfolio

孫皖傑、晁瑞明

E-mail: 9607626@mail.dyu.edu.tw

ABSTRACT

With e-learning development, the concept has spread and help with the current information technology, so that the e-learning has become future learning patterns of a new trend. In recent years the most popular Blog, has also started a number of applications in the study as situation the Portfolio, therefore teachers must record on students learning process for students learning to do Assessment of the situation. As Blog in the storage students with learning portfolios, and the search for teachers want the student's portfolios, Students wanted to find the relevant files for self-study, the lack of a good functional and resulting teachers in Blog do commentary on the amount of convenient not enough, and the student is not easy for self-learning. XML is Blog RSS subscription mechanism which has the main file format, Ontology can be a field of knowledge and clearly defined to classification, The purpose of this study was based to the concept of ontology on which was established e-learning Journey Portfolio search system, Blog to each student's learning Portfolio to RSS subscription mechanism, XML files removed important information storage. Search through the system, users can customize the Domain Ontology Tree. establish the type of connection, so that teachers and students can easily search for the correct files. Through this e-learning Portfolio search system , This study will provide the most economical time to assist teachers to browse and completed the assessment of student learning needs; and help students self-management learning Portfolio and browser learning Portfolio to others students for self-study, feedback, improve knowledge management and add e-learning results.

Keywords : Portfolio ; Blog ; Ontology ; KM

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REFERENCES

一、中文部份 方興東(2003)，“博客”資訊時代的麥哲倫，電腦與網路，第十七期。朱毓君(2001)，“以本體論強化網路FAQ系統之解答整合能力”，台灣科技大學電子工程系未出版之碩士論文。卓宜青(2001)，網路化學習歷程檔案系統及同儕評量，台灣新竹國立交通大學未出版之碩士學位論文。劉京偉譯(2000)，勤業管理顧問公司著，「知識管理的第一本書」，台北:商周出版社。陳煜儒、楊東麟(2002)，Using Data Mining to Construct a Flexible WebSearch System，逢甲大學資訊工程研究所未出版之碩士論文。陳建勳譯(2005)，Dan Gillmor 原著，《草根媒體-部落格傳奇》(We the Media)，臺北:美商歐格萊禮股份有限公司台灣分公司。陳年興、石岳峻(2000)，建構式網路教學系統設計原則與評量結果，資訊科技在教育之應用，2000 資管年會，國立中山大學。莊雅如(2005)，

以WeBlog為基礎的合作學習之研究，中興大學未出版之碩士學位論文。莊明貞(1997a)，一個新的評量取向—變通性評量在國小開放教室的實施。載於莊明貞（主編），道德教學與評量—多元文化教育觀點。台北：師大書苑。童宜慧(1999)，網路化學習歷程檔案系統之建構與實施，台北淡江大學未出版之碩士論文。湯清二(1997)，另一種評量工具的選擇—學習檔案，教育實習輔導季刊，3(1)，頁23-26。賴羿蓉(2001)，學習成長檔在高職化學課程實施成效之研究，台北國立臺灣師範大學未出版之博士學位論文。張美玉(2000)，歷程檔案評量的理念與實施。科學教育月刊，231期。張美玉(2001)，從多元智能的觀點談歷程檔案評量在教育上的應用。教育研究資訊，9(1)，頁32-54。張瑞芬譯(2000)，電子商務管理與技術，2000 (原著:Electronic Commerce – A Managerial Perspective, Turban., Lee., King., Chung.) 張美玉(2000)，歷程檔案評量的理念與實施。《科學教育月刊》，期231，58-63。張美玉(2003)，歷程檔案評量在概念學習的應用。教師天地，122，4-10。許慧玉(2001)，卷宗評量與紙筆測驗對國小四年級學生數學概念、數學溝通能力及數學學習態度之實驗研究。國立嘉義大學國民教育研究所未出版之碩士論文。黃馨怡(2006)，以科技接受模型探討應用Blog於學習者滿意度及知識分享意願之研究。大葉大學資訊管理研究所未出版之碩士論文。溫其純(2000)，師資培育者建構教學檔案可行性之研究-一個師範學院現場的反思。國立台北師範學院國民教育研究所未出版之碩士論文。盧芸玲、劉瑞瓩(2000)，智慧型代理人在企業知識管理中之應用與展望，IICM，3(2)，頁37-49。施瑞瑄譯(2006)，Cyril Fievet & Emily Turrettini 原著，《誰沒部落格！》(Blog Story)，台北：商周出版。歐坤宗(2004)，建構以RSS為基礎的新聞內容聯合機制-以《大學報》為例。國立台北大學資訊管理研究所未出版之碩士論文。二、英文部分 Armstrong, E., Ball, J., Bodoff, S., Carson, D. B., Evans, I., Fisher, M., Fordin, M., Green, D., Haase, K., Jendrock, E., "The Java? We-Tutorial," <http://java.sun.com/webservices/docs/1.3/tutorial/doc/index.html>, 2003. Arter, J. A., & Spandel, V. (1992). Using portfolios of student work in instruction and assessment. Educational Measurement: Issues and Practice, 11(1), 36-44. Arter, J., & Spandel, V. (1992), Using portfolios of student work in instruction and assessment. Educational Measurement: Issues and Practice, 11(1), 36-44. A. Gomez-Perez, M. Fernandez-Lopez and O. Corcho-Garcia, "Onto-logical Engineering: with Examples from The Areas of Knowledge Management, e-commerce and the semantic web," Springer, New York, 2004. A. Gomez-Perez and O. Corcho, "Ontology Language for the Semantic Web," IEEE Intelligent Systems, pp. 54-60, Jan./Feb, 2002. Bird, T. (1990), The Schoolteacher's portfolio: An essay on possibility In J. Millman & L. Darling-Hammond (Eds.), Handbook of teacher evaluation: Elementary and Secondary Personnel, Second Edition. Newbury Park, CA: Sage. B. Chandrasekaran, J. R. Josephson and V. R. Benjamins, "What Are Ontologies, and Why Do We Need Them," IEEE Intelligent Systems, Vol. 14, No. 1, 1999, pp. 20-26. Carlson, R. D. (1999). Portfolio assessment of instructional technology. Journal of Educational Technology Systems, 27(1), 81-92. Dreske, F. (1981) "Knowledge and the Flow of Information" MIT Press, Cambridge, MA. D. Fensel, Ontologies: A Silver Bullet for Knowledge Management and Electronic Commerce, Springer, 2001. Equitable Assessment. Phi Delta Kappan, 70 (9), 703-13. Guarino, N. 1997. Semantic Matching: Formal Ontological Distinctions for Information Organization, Extraction, and Integration. In M. T. Pazienza (ed.) Information Extraction: A Multidisciplinary Approach to an Emerging Information Technology. 139-170. Springer Verlag. Ginsburg, M. and A. Kambal (1999), "Annotate: A web-based knowledge management support system for document collections," Proceedings of the Hawaii International Conference on System Sciences 1999, IEEE Comp Soc, Los Alamitos, CA, USA, PR00001.. Hart, D. (1994), Authentic Assessment: A Handbook for Educators, Addison-Wesley Publishing Company, Inc. Machlup, F. (1980) "Knowledge: its Creation, Distribution and Economic Significance" Vol. 1 Princeton University Press, Princeton, NJ. Niguidula, D. (1993). The digital portfolio: A richer picture of student performance. Studies on exhibitions. (ERIC ED400261). Sparapani, E. F. (1996). Portfolio assessment: A way to authentically monitor Progress and Evaluate Teacher Preparation. (ERIC ED398195) Steven Gould, "Develop n-tier application using J2EE," Java world, 2001. Tsoi, A. C. (2001). Structure of the internet IEEE Conference on Intelligent Multimedia, 449-452 Paulson, F. L., Paulson, P. R., & Meyer, C. A. (1991). What makes a portfolio a portfolio? Educational Leadership, 48, 60-63 Vance, D. M. (1997), "Information, Knowledge and Wisdom: The Epistemic Hierarchy and Computer-Based Information System" in Proceedings of the Third Americas Conference on Information System, B. Perkins and I. Vessey (eds.), Indianapolis, IN, August 1997. Wiig, Karl M. (1995) Knowledge Management Methods: Practical Approaches to Managing Knowledge. Arlington, TX: Schema. Wiig, K. M. (1997a), "Knowledge Management: An Introduction and Perspective," Journal of Knowledge Management, (1:1), pp. 6-14. Winsor, P., & Ellefson, B. (1995). Professional portfolios in teacher education: An exploration of their value and potential. The teacher Education, 31(1), 68-91. Wiggins, G. (1989). A True Test: Toward More Authentic and Equitable Assessment. Phi Delta Kappan, 70 (9), 703-13. Lengeling, M. M. (1996). The use of portfolios for teacher evaluation. (Ed399819). M. Uschold and M. Gruninger, "ONTOLOGIES: Principles, Methods and Applications," The Knowledge Engineering Review, vol. 11, no. 2, pp. 93-136, Feb. 1996. Zack, M. H. (1999), Managing codified knowledge., Sloan Management Review, 40(4), 45-58. UWA (2000) A Guide to Teaching Portfolios and Their Role in Promotion and Tenure. [Http://www.csd.uwa.edu.au/portfolio.html](http://www.csd.uwa.edu.au/portfolio.html) (The University of Western Australia) "Search Engine Watch" <http://www.searchenginewatch.com/reports/> W3C, The World Wide Web Consortium, available at <http://www.w3.org>, 2003. IMS Global Learning Consortium, Inc. "IMS ePortfolio Information Model V1.0 Final Specification" June 2005. IMS Global Learning Consortium, Inc. "IMS ePortfolio Best Practice and Implementation Guide V1.0 Final Specification" June 2005. Speth, J. (1998). Electronic portfolio using hyperstudio, [Http://www.lacoe.edu/second/portfolio.html](http://www.lacoe.edu/second/portfolio.html).