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Dr. Christopher D. Ingersoll
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Dr. Christopher D. Ingersoll:

The purpose of this letter is to request **research funds** in the amount of **$300.00** dollars to pay for proposed dissertation research expenses and to request **professional development funds** in the amount of **$200.00** dollars to travel to a workshop at Cornell University in Ithaca, NY to learn the Concept System© statistical analysis computer software program developed by Bill Trochim[1].

Proposed Research
The purpose of the research is to examine and define expert knowledge management (KM) models based on the premise that topical, virtual communities provide an aggregate environment for effective connections among students of distance learning programs. Through a discovery of knowledge management models, cross-rated with portal vendor solutions and through a case study and conceptual mapping technique this research will develop and expand KM models for a conceptual framework related to a closely connected virtual environment.

Need
Knowledge management (KM) procedures and communication methods have been a very hot topic in industry for quite some time; and, we are now beginning to see academic institutions join in on KM endeavors, as well. Vast amounts of literature, vendor solutions and specific knowledge management tools for information sharing practices have recently gained widespread attention as a means to gain control over the abundant amount of information (knowledge) that most organizational institutions produce.

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[1] Trochim, W.M.K. (2001). "An introduction to concept mapping for planning and evaluation." Obtained from the WWW on March 21, 2001 at http://trochim.human.cornell.edu/research/epp1/epp1.htm.

However, according to Jackson, multiple areas need improvement for true knowledge-based environments that would be suited for a topical virtual (2001)[2].

Several key questions need to be answered including:
1. Can a conceptual mapping technique be used to map student activities within an online virtual community for managing knowledge, information, and data based on knowledge management via a portal vendor solution?
2. Would a portal environment close the digital gap for a centralized knowledge base?
3. Should the knowledge base be a closed information processing method or an open system?
4. Can educational institutions truly follow a business model architectural platform for a knowledge-based topical virtual community?

Thus, the purpose of this study is three fold. The first purpose is to develop a comprehensive review of KM models and portal solutions with virtual community needs and characteristics as the focus; the second is to cross rate vendor findings with one of many researched KM models and focused needs and characteristics; and, the third purpose, based on a particular vendor solution, is to offer a case study of a centralized model in its infancy and statistically validate the perceived value and relative importance from a group-centered conceptual mapping analysis.

Methodology Approach
The research literature reviews will reference multiple issues to identify the existence of certain needs and characteristics presented by Hagel and Armstrong[3], along with the architectural design for managing a topical, virtual community environment based on several expert KM models and/or processes[4]. However, it is clear that additional research findings will be needed to substantiate a viable platform for a topical, virtual community environment for distance learning students via a full service portal infrastructure.

The research will be undertaken through a conceptual mapping study soliciting general statements form an appropriate respondent group to create a statistically acceptable multivariate method for further supporting analyses. This concept mapping design is based on Bill Trochim's technique. Trochim and other significant authors suggest six steps for developing a concept mapping study[5]. The study will make use of Trochim's

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[2] Jackson, C. (2001) **"Process to product: creating tools for knowledge management. Obtained from the WWW on February 26, 2001 at Knowledge Management World Association's site located at http://www.brint.com/members/online/120205/jackson/secn1.htm. .

[3] Hagel, J. & Armstrong, G. G. (1997). Net Gain: Expanding Markets Through Virtual Communities. Harvard Business School Press: Boston.

[4] Boling, E. Cai, W., Brown, J.P., & Bolte, J. (2000). Knowledge base development: The life cycle of an item in the Indiana University knowledge base. Technical Communication 47 (4), 430-543.

Davenport, T.H. (1997). Information Ecology. Oxford University Press: New York.

Malhotra, Y. (2000). Knowledge management for e-business performance: Advancing information strategy to "Internet time." The Executive Journal, 16 (4), 5-16.

[5] Cook, J.A. & Trochim, W.M.K. (1994). "Using concept mapping to develop a conceptual framework." Journal of Consulting and Clinical Psychology, Vol 62. #4: p. 766-775.

method and provide a non-metric ranking model for multidimensional scaling (MDS) and a cluster analysis that seeks organization of data collected from a homogeneous group.

Based on an interval measurement of concepts this research will seek to build on the body of knowledge for topical, virtual communities based on expert KM models for capturing, storing, and delivering information, knowledge, and data for distance learning students. Hence, two multivariate techniques will be designed via a concept mapping process and significant other research using this technique will be summarized as a means to substantiate this study. The MDS and cluster analyses will be presented in a mapped pictorial view; and, the qualitative results of the research will present both logical and statistical findings.

Funding Request
Requested grant dollars will be used to support research expense funding. The grant would also be used to supplement development funding for travel to the appropriate workshop. The proposed budget for this funding is as follows:

Item	Cost
Proposed Research Funding	
Office Supplies (Pens, Pencils, Paper, Toner)	$200.00
Photocopying (Research, Articles)	$100.00
Professional development Funding	
Concept System© Workshop Air Travel	$200.00
Total	**$500.00**

Summary
Funding from the School of Graduate studies would be instrumental in completing this proposed research project. This research will contribute to the body of research related to topical, virtual communities, and knowledge management models for community based distance learning. Beyond contributing to key educational decision makers, this research provides a greater understanding and offers a practical guide to all communicators (i.e. distance education instructors, IT professionals, and knowledge management professionals), Chief Information Officers, and Chief Information Technology Officers. This research will also provide a valid case study and conceptual mapping technique for validation and practical use. It is my hope that Indiana State University's School of Graduate studies will join me in responding to these exciting opportunities.

Sincerely,

Cindy P. Stevens
Ph.D. in Technology Management, Consortium Student

Trochim, W.M.K. (2001). "An introduction to concept mapping for planning and evaluation." Obtained from the WWW on March 21, 2001 at http://trochim.human.cornell.edu/research/epp1/epp1.htm.
Vail, E.F. (1999). Knowledge mapping: Getting started with knowledge management. Information Systems Management 16 (4), 6-23.