

**Research Grant Proposal**

**LEARNING MODALITY, PREFERRED TEACHING STYLE, AND  
INSTRUCTIONAL TECHNOLOGY: EXPLORING HOW THEY RELATE TO  
EACH OTHER AND SHAPE THE LEARNING PROCESS IN  
UNDERGRADUATE MANAGEMENT COURSES**

**Submitted to the Faculty Development Committee  
Elmhurst College**

**By**

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## I. Project Summary

The purpose of this research is to explore the relationships between teaching styles, learning styles, and the use of technologies as instructional tools. In addition, I also consider how technology can be utilized to enhance learner-instructor interactions.

I am requesting a \$500.00 research grant to offset the costs of creating and mailing a survey to be administered to professors of management. The survey will be designed to collect information on respondents' teaching styles, learning styles, and use of instructional technology. Data received from respondents will be analyzed to determine the extent to which technology is used in the instruction of management courses, and the extent to which there are underlying relationships across teaching and learning styles as they relate to the use of technology.

## II. Narrative

Business instructors have access to a wide range of technologies that can be used to better, or in some cases replace, traditional teaching methods. Instructors may use lecture-enriching technology, such as PowerPoint presentations or take advantage of video conferencing to bring guest lectures from distant places into the classroom. Computer-based technologies can also be used to facilitate communication between the instructor and student via electronic mail, web pages, chat rooms, and electronic bulletin boards.

With so many choices, it is sometimes difficult to determine what technology should be used to best enhance the learning experience of students and why a particular technology is chosen. I have found there is limited amount of literature on the connections between technology and teaching and learning styles. The research I did consult offers weak empirical support for the ability of technology to promote learning (Grasha & Yangerber-Hicks, 2000). Related research shows that some college instructors are primarily concerned with technology as a teaching aid. For example, Neal (1998) found that professors who promote technology tend to emphasize the delivery of instruction rather than the ability of the technology to promote a "learning experience" for students. Technology can also result in less face-to-face communication between professor and student creating an impersonal element (Neal, 1998) that negatively effects some learners.

It appears that understanding why one should use technology and when one should use technology in the classroom are critical areas that we do not yet fully understand. The research I am proposing will provide information about the pedagogical use of instructional technology in management courses. My theory is that instructors with certain preferred learning styles and certain preferred teaching styles will be more likely to be successful with technology in the classroom.

## References

Grasha A.F., and Yangerber-Hicks N., 2000. Integrating teaching styles with instructional technology. College Teaching, 48(1):2-10.

Neal E., 1998. Using technology in teaching: We need to exercise healthy skepticism. Chronicle of Higher Education, June.

### 1. Current Situation

I am currently developing a survey instrument to collect primary, self-reported data from professors of management who teach primarily in midwestern colleges and universities.

The survey instrument will be pre-tested in a teaching workshop I am conducting at the 2001 meeting of the Midwest Academy of Management on April 20th. Participants in the workshop will complete the survey and have an opportunity to provide me with feedback on its structure and content. I will then create the final survey to be used in a mass mailing. I plan to conduct the final phase of data collection and analyze the results during the summer of 2001.

### 2. The Project Plan

The current plan is to conduct a mailing of around 500-750 survey instruments to members of the Midwest Academy of Management. Data will later be analyzed. The objective is to uncover information that helps answer the following research questions:

- 1) What is the relationship between teaching styles and learning styles?
- 2) Do instructors with specific learning styles prefer certain instructional technology?
- 3) Do instructors with specific teaching styles prefer certain instructional technology?
- 4) Does teaching style and/or learning style impact ones successful use of technology in the classroom?

The results of this preliminary study will provide information on the relationships across instructor learning styles, teaching styles, and instructional technology. The understanding of these relationships can help guide our use of technology in the classroom. For example, findings may show that professors with a kinesthetic learning modality are inclined to use computer simulations in the classroom. This technology may be chosen primarily because 'learning by doing' is the professor's preferred learning method, and not because the computer simulation is the 'best' pedagogical approach. A greater understanding of what drives one's choice of instructional technologies can help instructors make effective decisions about technology in the classroom.

### 3. Faculty Expertise

The current project is a research area that is relatively new to me. I consider this study a "start-up" activity because I'm venturing into a new research arena. However, I am working with at least two colleagues with expertise in the field of education and management. Judy Fiene, visiting professor of education here at Elmhurst, has been my teaching styles and learning styles consultant. Judy helped me gather resources on learning styles and teaching styles for the aforementioned teaching workshop. I hope to continue working with Ms. Fiene on this project. Dr. Joy Peluchette, Professor of Management at the University of Southern Indiana is my other research partner. Dr. Peluchette has done research on how a student's preferred learning style impacts independent learning of basic software packages. We are all interested in discovering how, when, and why we use technology in our courses. Results will hopefully provide us with some answers to our questions so that we understand how to use technology more effectively. In turn, we can share this knowledge with other management educators.

#### Plans for Evaluation and Dissemination

Research on issues related to management education is best evaluated using a double-blind, peer-reviewed method. We plan to submit the results of this study to the annual Midwest Academy of Management for presentation. Academy members and reviewers are some of the most esteemed academicians in the field of management, and therefore the best source of highly qualified reviewers of our work. The Midwest Academy of Management is a professional society composed of professors who conduct research and teach management in midwestern colleges, universities, or research institutions. The purpose of the Academy is to foster the general advancement of research, learning, teaching, and practice in the management field. The Midwest Academy is affiliated with the Academy of Management that publishes two top-tier journals in the field: *The Academy of Management Journal* and *The Academy of Management Review*. The annual midwest meetings attract around 500 participants.

The final paper will be submitted to the Journal of Management Education for review. The editorial mission of this publication is "to publish articles that advance significantly the thinking, scholarship, and practice of management education." I would also be honored to share the results of this study with the College via a faculty lecture or as a participant in a Faculty Research Forum.

II. Budget

Allocation of Funds:

Letterhead and envelopes for mailing questionnaires	\$ 250.00
Postage and photocopying	<u>250.00</u>
Total:	\$500.00