# Chapter 31 Object-Oriented Faculty Development: Training Teachers with Learning Objects

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### **ABSTRACT**

The study outlined in this chapter simulated a faculty development program that utilized a demonstration/simulation -- a learning object that digitally demonstrates a task then asks the student to replicate it. In this learning environment, participants were given the chance to learn a skill from a teaching tool that they in turn could use in their classrooms. In addition, half the participants were asked to evaluate their learning styles by taking a Multiple Intelligence inventory before working with the demonstration/simulation. Overall, the participants felt that this study was an enlightening experience for them -- they became more aware of how they learn, which gave them insight on how their students learn. Faculty development designers, human performance training professionals, and instructional technology designers can use the results of this study to gain a greater understanding of object-oriented faculty development programs that improve human performance and appropriate ways to implement them.

### INTRODUCTION

Distance education has taken many forms over the years. Beginning as a means for people to learn by corresponding through the mail, it now includes delivering education over the Internet through online courses -- offering education to students in an anywhere, anytime, easily-accessible package. This style of learning gives adults who do not have the

time to attend face-to-face classes and/or who live in areas where training specific to their jobs is not available an opportunity to become involved in a learning community in a budget-friendly manner. It is this combination of convenience, accessibility, community oriented learning, and affordability that has motivated education professionals to integrate online coursework into their faculty development (Bush, 2005; Pittinsky, 2005) and human performance training programs.

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Such programs are used by educational institutions of all levels to assist their instructors in improving their teaching practice (Pittinsky, 2005) and human performance development skills. Utilizing online coursework in such a way not only provides faculty with a chance to learn new skills, but it also provides them with a chance to become students -- thus giving them a new perspective on teaching methods and practices. Placing teachers in a student role gives them a chance to develop personally -- and, as Lipka and Brinthaupt (1998) point out, professional development and personal development:

...serve to complement each other. In fact, however, the major way that these two parts of a teacher's identity complement each other is unidirectional -- few people would argue that training a teacher to become a competent technician is the best way to open up new avenues for personal and self-related exploration. (p. 2)

This becomes particularly important when a teacher is assisting students in understanding their own learning processes and building student confidence (Lipka and Brinthaupt, 1998). Thus, when offering teachers faculty development human performance training, it is wise to utilize a method that allows for self-reflection, personal growth, and that emphasizes the learner's experience. Multiple Intelligence (MI) theory, when utilized in adult education, can provide such a learning environment (Shore, 2004).

Online teacher training programs often utilize learning objects -- digital, reusable, sharable chunks of learning information that offer flexibility in developing coursework. While this is a great opportunity for teachers and instructional designers to open up new windows for their students, it also brings up questions for them to answer, such as: How do I use learning objects to best accommodate my students' learning preferences? How do my students process the information presented to them in a learning object? In order to answer these questions and to assist online coursework developers in understanding the value of learning

objects in human performance and teacher training, the study presented in this chapter exposed a group of teachers to MI theory and documented their responses to a software demonstration/ simulation. A software demonstration/simulation provides the student with a digital demonstration of a software task followed by an interactive simulation in which the student assesses what was learned. Teachers and instructional designers can use the data gathered from the participants in this study as a guideline for developing more effective demonstration/simulations in their faculty development and human performance training programs. In the following pages, when reference is made to an instructional designer developing a course, this information can also be applied to an instructor or any individual who utilizes instructional technology for faculty development and human performance improvement.

This study addressed the following objectives:

- Discover ways to assist teachers in understanding what learning processes take place when utilizing a demonstration/ simulation.
- Understand how having teachers evaluate their MI strengths assists them in developing online coursework.
- Have teachers analyze their own responses to a learning object and record whether or not it gives them information that they can use to improve their teaching practice.
- Discover what best practices can be followed when utilizing learning objects.

### BACKGROUND

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