The Effect of Multimedia Training on Teacher-Centered Vs. Student Centered Classroom Behaviors

As we enter the 21st century, the questions remain: Are teachers creating active learning environments that enable students to become independent learners and creative problem solvers?

One tool that helps teachers shift the control of learning from teacher to students is the use of multimedia in the classroom. Multimedia can motivate students to explore new learning environments through research, collaboration, and problem solving. Students can gather information from online resources and create interactive presentations that combine text, graphics, sound, and digital video.

In order to integrate multimedia into classrooms, students and teachers must learn both the technical and application nature of multimedia programs. One of the problems with PowerPoint and other multimedia programs is that teachers have the tendency to use these programs to reinforce their presentations. The result is the reinforcement of teacher-centered behaviors.

In this study, 15 teachers from one school district representing various levels from K to 12, enrolled in a one-credit graduate course titled “Instructional Applications of Multimedia Using PowerPoint.” The question asked in this study was “Does the introduction of multimedia training to teachers and students help shift classroom learning from teacher-centered behaviors to student-centered behaviors?”

The purpose of the graduate course was to teach the use and classroom application of Microsoft PowerPoint to practicing teachers. The course was offered at the beginning of the school year and none of the teachers had prior experience using PowerPoint. The school district installed PowerPoint software for all teachers who enrolled in the course. In
addition, PowerPoint was installed in all computer labs throughout the school district.

The graduate course required teachers to create PowerPoint presentations; however, the course also required teachers to have students integrate PowerPoint in student-centered projects. Thus, the teachers had to teach PowerPoint to their students and require students to create classroom projects utilizing PowerPoint software.

At the end of the course teachers were required to report and demonstrate the results of their projects. A survey was also conducted to determine (1) the teachers’ attitude toward multimedia as a learning tool and (2) teacher plans to use multimedia in a teacher-centered vs. student-centered activities.

Some of the other questions this study addressed were (1) What is the teacher perception of the application of multimedia to student-centered activities? (2) What are the difficulties associated with incorporating multimedia into the classroom? (3) What learning difficulties are encountered with special-needs learners and younger learners in creating and using multimedia in the classroom?

Preliminary results indicate that the teachers enrolled in the course had a positive attitude towards multimedia. Most teachers planned to use PowerPoint for both teacher-centered and student-centered activities. Most teachers agreed that they would have the students use PowerPoint for both individual and group projects. Teachers reported problems with lab access, storage on floppy disks. Very few teachers reported technical problems. Teachers reported that the younger learners (K-2) had more problems working with PowerPoint than older learners.

Teachers will be surveyed throughout the school year to determine the frequency and type of PowerPoint use in the classroom.

Final results and recommendations will be reported at the conference.