

Abstract

My Wisconsin Teaching Fellows Project focused on developing a Lesson Study Project at the University of Wisconsin-Stout. The Lesson Study team consisted of 5 team members from within the College of Technology, Engineering and Management. The purpose of this project is to determine the effectiveness of using the Lesson Study Program for improving student learning for the topic of Traffic Safety.

A topic in construction safety was chosen because its learning objectives are readily understood by all team members and because of minimal student learning in the past. The team conducted a lesson on traffic safety 2 times, once during Fall 2006 and once for Spring 2007. By using pre/post tests and case studies, the researchers improved student learning and their methodology for delivering the topic.

Methodology used included:

- Delivery of a pre/post test on the topic of traffic safety;
- Having small groups complete a short homework assignment on the topic of traffic safety;
- Having groups analyze several case studies on the topic of traffic safety;
- Videotaping the lesson to make qualitative observations on student learning.

Pre- and post-test results indicate that student knowledge on the topic of traffic safety improved as a result of completing the homework assignment and analyzing several case studies in groups. Furthermore, student engagement increased dramatically compared to watching a video on the subject. Students were sharing personal work experiences, gaining collective insight from each other and working as a team to evaluate the situations, identify common themes and propose solutions.

The Lesson Study program was viewed as an effective tool for instructors as it stimulated self-reflection and dialogue on processes and methods for facilitating student learning. Throughout the process instructors shared new methods for increasing the depth of learning expanding by infusing a variety of approaches into content delivery.

The group's last discussion centered on the fact that the case study-based lesson was highly effective, but that a future lesson for the topic of Traffic Safety might entail students actually setting up a worksite as a hands on activity.

Other relevant observations are that the Lesson Study Process, while beneficial for improving a particular lesson topic and generating appropriate discussion about pedagogy, took a lot of time. Perhaps another Lesson Study method could be developed in order to minimize the time commitment while maximizing the amount of time observing lessons in progress.

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