

Cheryl Plettner High School Math Research

Cheryl Plettner, a math teacher at Flathead High School in Kalispell, Montana, felt that her students expected her to explain things to them, and consequently she did most of the talking in her classes. Her goal was to generate more student involvement. She also hoped to increase her students' motivation to read their math assignments. Cheryl decided to investigate whether or not it would be helpful to have her students briefly review the material and generate questions that might arise about the topic before whole group discussion.

In one of her three math classes, Cheryl had students pre-read their assignments in order to identify the concepts they did not understand and to formulate one or two questions concerning these problem concepts. Then she had students meet in pairs and talk about their questions. After these paired discussions, Cheryl listed all of the questions on the board. Students then read carefully and purposefully as they searched for the answers to their questions. All of this occurred before Cheryl explained any of the concepts. It appeared that students were more engaged in the material with this approach. A brief quiz the following day confirmed what Cheryl had suspected; the pre-reading group outperformed the control group. She then shared the data with her classes and found the results initiated some lively discussion about why one class did better on the quiz than the other. Cheryl and her students began to understand the value of pre-reading strategies.