

1046-F1-686

Carla V. Gerberry* (cliguore@purdue.edu). *Females in mathematics: Why aren't they persisting? And what can we do to encourage them to stay?* Preliminary report.

While current research shows diminishing gender differences in mathematics achievement, females are still failing to persist in STEM fields. This study focused on the self-efficacy beliefs of females in mathematics as a potential reason. The research question for the study was: How are high school females' self-efficacy beliefs influenced by their participation in cooperative group work in mathematics class? Data collected were videotaped sessions of cooperative work, and surveys pertaining to self-efficacy beliefs of females. Preliminary results of the study indicate that those females who adopted roles requiring them to explain and speak to others in the group increased in self-efficacy. This increase may be attributed to the presentation of mathematics in such a way that students verbalize their ideas and are encouraged to think about mathematics in a more nontraditional way. Implications are that presenting mathematics in such a way can increase perceptions of ability and may, therefore, increase persistence in mathematics and other STEM fields. (Received September 10, 2008)