Abstract
This poster examines the methodology used to form cooperative learning teams for an introductory circuits course at a Historically Black University. In the 2004 school year, the engineering undergraduate population at Tennessee State University was 88% African American and 26% female. How does cooperative learning team formation and composition change when the teams are at a minority serving institution?

Introduction
The primary motivation for this work is to increase the retention of minorities and women in engineering by incorporating active and cooperative learning into the classroom environment. Additionally, a byproduct of this effort will be to teach the student some valuable teamwork skills that they will need as an entry level engineer.

Methods
Teams were formed by using
- Felder-Solomon Index of Learning Styles
- Self-Assessment
- Concept Inventory
- Pre-requisite grades
- Classification
- Race
- Gender
- Major

Results
• 63 students in 17 teams over 3 semesters
• Typically a minimum of 2 women or TSU minorities per team of 3 to 4 students
• All teams had an electrical engineering major
• Most teams had a representative from more than 2 majors
• Only about three teams were racially mixed with African American, Caucasian and/or Asian students
• The majority of the students were juniors

Results
A statistical analysis using SPSS was used to determine if there was any statistical difference in individual and team performance based upon composition. No significant difference at a level of 5% was found for individual student exam grades. However there was a significant difference at a level of 5% with respect to team assignments and the final course grade.

Conclusions
The results indicate that it may not be necessary to have a minimum of two minorities and two females in order to insure team effectiveness but heterogeneous teams are effective. Although, there was a statistical difference in the team project grades, it was not immediately apparent what factor influenced the difference in performance.