

**Meeting:** 1003, Atlanta, Georgia, MAA CP N1, MAA Session on Teaching Visualization Skills

1003-N1-676      **Therese L. Bennett\*** ([bennett1@southernct.edu](mailto:bennett1@southernct.edu)), Southern Connecticut State University,  
Department of Mathematics, 501 Crescent Street, New Haven, CT 06515. *Spatial Visualization: Is  
There a Gender Difference?*

The questions of whether gender differences in spatial skills exist and if so, whether these differences affect the performance of women in mathematics classes that require spatial visualization have been the focus of many research studies over the past twenty years. As a result, theories ranging from biological factors to culturally based differences in the sexes to performance factors related to testing environments have been proposed and tested. Performance factors include time limits on tests, test taking strategy, previous task experience, and expectations of task success. A summary of some of the gender differences that have been found in the research, the theories that have been proposed, and ways in which the researchers were able to decrease the gender gap by changing the performance factors will be presented. In particular, studies that examined gender differences on the Mental Rotations Test (MRT), which has produced the largest gender gap on record, will be addressed. (Received September 27, 2004)