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**Conrad D. Lotze\*** ([conrad@american.edu](mailto:conrad@american.edu)), Conrad Lotze, Dept. of Mathematics & Statistics - AU, 4400 Mass. Ave. NW, Washington, DC 20016. *Online Mathematics Tutoring - An Alternative to Face-to-Face Tutoring?* Preliminary report.

This paper will focus on the progress of an ongoing dissertation study exploring online mathematics tutoring(OT) as an alternative to face-to-face tutoring.(FT) The OT environment under investigation consists of the use of an Internet based whiteboard along with webcams, digital notepads and microphones used by tutors and tutees meeting online for mathematics tutoring. The study seeks to answer the following questions of interest to the researcher: Is online mathematics tutoring effective? Does it take longer to tutor effectively online than face-to-face? Does learning occur in the online tutoring environment? Are there technology-oriented anxieties on the part of either tutor or tutee that might degrade the tutoring process for some individuals? Conversely, may there be individuals for whom interacting with technology is a motivator, possibly inspiring someone to seek tutoring who would not otherwise do so? Are there distractions or difficulties caused by using the software/hardware/medium of the Internet? What are the differences, in the minds of both tutors and tutees, between OT and FT? Are the differences detrimental to learning mathematics, and if so, to what degree? The hardware and software used will be demonstrated, and preliminary results will be presented. (Received September 15, 2000)