

Meeting: 1003, Atlanta, Georgia, SS 19A, AMS Special Session on Mathematicians' Work on Mathematics Education

1003-97-1393 **Michael E. Gage*** (gage@math.rochester.edu), Dept of Mathematics, University of Rochester, Rochester, NY 14627. *Building WeBWorK*. Preliminary report.

I will describe briefly the development of WeBWorK, an on-line homework checker, first designed, programmed, and used by Prof. Arnold Pizer and myself at the University of Rochester in 1996 and since then re-designed and re-built several times with support from the NSF and in collaboration with many colleagues and undergraduates at several universities. The project encompasses the software itself and the creation of a supporting community as well as social mechanisms that we hope will allow the software to be widely useful and to mature gracefully. Currently WeBWorK is being used at over 100 universities, colleges, and high schools.

I will point out those aspects of WeBWorK and its user community that are most likely due to the principal designers' backgrounds as research mathematicians and practicing professors. A group from instructional technology or mathematics education would probably have achieved a project with different strengths and weaknesses. (Received October 05, 2004)