Meeting: 1003, Atlanta, Georgia, MAA CP A1, MAA Session on Getting Students To Discuss and To Write About Mathematics, I

1003-A1-388 Rapti M. de Silva* (rdesilva@csuchico.edu), Department of Mathematics & Statistics, CSU Chico, Zip 525, Chico, CA 95929-0525. Role of Online Mentoring in Improving Students’ Mathematical Communication and Understanding. Preliminary report.

I will discuss how integration of Online Mentoring (OM) into mathematics courses has helped my students develop a deeper understanding of mathematics by improving their ability to better communicate mathematics. OM, offered through Drexel University’s Math Forum, emphasizes problem solving and communication and engages students in doing mathematics, communicating mathematics, and mentoring students who submit solutions to the Forum’s Problems of the Week (POWs). In particular, my students were required to write their problem solving process in a manner that revealed their mathematical thinking, to respond to and critique their peers’, and to help children submitting solutions improve their skills in problem solving and mathematical communication. Results include an increase in my students’ discussion of mathematics during class time, compared to the previous semesters that I had taught the course. In addition to their required formal presentations being mathematically more precise, they were extremely willing to do impromptu presentations at the board. Their responses to peer work (whether written or oral) were also more tuned to the subtleties of mathematical concepts and accepted representations. (Received September 13, 2004)