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Troy A. Bupp* (troy.bupp@usma.edu), United States Military Academy, Department of Mathematical Sciences, Building 601 (Thayer Hall, Office TH233), West Point, NY 10996. The Benefits of Using Email to Maintain Instructor Accessibility in Assisting Student-Driven Learning of Mathematics. Preliminary report.

The U.S. Military Academy requires that students arrive to math class having already read their assigned textbook reading and worked through related homework problems prior to that day's classroom instruction. Once in the classroom, instructors often begin class by answering students' well-formed questions or by calling upon them to demonstrate their proficiency in the new material. To reduce potential obstacles to student-driven math learning prior to the classroom, my approach is to maintain availability and responsiveness through email during a structured time period when student preparation is likely to occur. Analysis of student emails during a one-year pilot study of this structured instructor availability reveals a number of qualitative and quantitative outcomes indicating the benefits of this approach. The qualitative outcomes apply both to assist the student in learning math and to assist the instructor with improving lesson preparation. Instructors contemplating to implement a similar email opportunity for their students can leverage the quantitative outcomes provided to shape their own desired results for their class instruction. The presentation will finish with a general discussion about the importance of maintaining accessibility beyond the normal academic day. (Received September 24, 2012)