

1023-Q1-1296 **Michael L. Berry*** (berry@wwvc.edu), Department of Mathematics, West Virginia Wesleyan College, 59 College Avenue, Buckhannon, WV 26201. *Facilitating Student Understanding of Concepts in Real Analysis*. Preliminary report.

Numerous topics in an introductory Real Analysis course cause student difficulties, stress and possible "turn off" to the entire course. Sequences and their properties are usually the first difficult topics encountered. Many students have some difficulty with the definition, notation used, monotonicity, boundedness and convergence. To facilitate understanding of the concepts, I give the class a number of examples of varying difficulty, then ask the students to identify which attributes each sequence has. For this activity, I want written responses, no collaboration, no use of calculators. I ask them to be honest in their responses. Depending on the answers, I will use numerical, graphical or a combination to aid the students' understanding. I will sometimes ask a student to give an explanation of a response in front of the class. A situation that arises is a student thinking they understand the concept but really do not. Being in front of the class will usually expose any false sense of understanding. In my talk, I will share sequences used, questions asked with student responses and specific illustrations used. Although my talk will focus on sequences, I have used this method for other concepts such as limits of functions and continuity. (Received September 25, 2006)