

1077-VA-1977 **Todd Moore*** (thm7799@math.ksu.edu). *What Calculus do students learn after Calculus?* Preliminary report.

Engineering majors and Mathematics Education majors are two groups that take the basic, core Mathematics classes. Whereas Engineering majors go on to apply this mathematics to real world situations, Mathematics Education majors apply this mathematics to deeper, abstract mathematics. Senior students from each group were interviewed about function and accumulation to examine any differences in learning between the two groups that may be tied to the use of mathematics in these different contexts. Variation between individuals was found to be greater than variation between the two groups; however, several differences between the two groups were evident. Among these were higher levels of conceptual understanding in Engineering majors as well as higher levels of confidence and willingness to try problems even when they did not necessarily know how to work them. (Received September 21, 2011)