In recent years, much attention has been given to the pre-service preparation and professional development of mathematics teachers at the elementary, middle, and high school levels. Researchers have concluded that strong content knowledge is not enough to insure effective teaching. Yet, many colleges require little to no professional development for their mathematics faculty. Without supports similar to those provided to K-12 teachers, how do college mathematics faculty members develop and improve their teaching of undergraduate mathematics? A department-wide survey and follow-up interviews were used to investigate if and how the mathematics faculty at one research university have acquired and honed skills for teaching undergraduate mathematics. Preliminary analyses of this data will be presented, and feedback for future directions will be solicited. Understanding if and how mathematics faculty currently seek supports for improving their teaching can inform the design of future professional development programs for college mathematics faculty.