1023-G5-1638

Hassan Moore\* (hmoore@jcsu.edu), 1450 Valhalla Drive, Denver, NC 28037, and Gerald Y. Agbegha (gagbegha@jcsu.edu), 100 Beatties Ford Road, Charlotte, NC 28216. Changing Paradigms: A department in a state of flux leading to technology transitions which affect student learning. Preliminary report.

To attack the problem of under-prepared students, new faculty members along with amenable older faculty and the use of technological aids have led to an increase in active and collaborative learning strategies which foster critical thinking measured by well-thought out assessment. These changes show an increase in student retention in mathematics courses and the number of majors in the mathematics department at Johnson C. Smith University. Through a Minority Science and Engineering Improvement Program (MSEIP) grant, initiatives have come about to affect changes which all point to student achievement and fulfillment of the university's mission. The objectives are 1. To train mathematics faculty in the use of various instructional strategies and in the use of technology to help them implement those strategies 2. To reform instruction in College Algebra and Pre-Calculus using leading-edge technology to help students remove deficiencies and begin developing mathematical power 3. To reform the curriculum in Calculus through the introduction and use of a computer algebra system that places a greater emphasis on real world problem-solving, scientific modeling, and scientific computing and 4. To enhance the academic support program for mathematics with a focus on college algebra. (Received September 26, 2006)