## MATHEMATICS PLACEMENT AND ASSESSMENT AT CENTRAL MISSOURI STATE UNIVERSITY

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For the past decade, a wide range of issues in U.S. education have been the subject of intense scrutiny and introspection from government agencies, legislatures and professional organizations. The mathematical sciences have received a "fair share" of this attention. The Mathematical Association of America, the National Council of Teachers of Mathematics, the American Mathematical Society, the National Research Council and several other organizations and joint boards and committees have produced dozens of documents that express concerns and make recommendations about such issues as the funding levels of mathematical research, the relevance of current mathematics curriculum at all levels, the effectiveness of certain methods of instruction and the mathematical preparation of teachers.

As a result, the re-evaluation and assessment of courses, majors and programs have become common agenda items for mathematical sciences departments at virtually every college and university in the country. Since the fall of 1986, the Department of Mathematics and Computer Science at Central Missouri State University has been studying, implementing and refining several assessment projects and procedures. The task has been both rewarding and frustrating and the results and benefits have been both encouraging and disappointing. It is the intent of this article to report on our department's assessment activities of the past six years. While our efforts are far from complete, the sharing of this information may stimulate some dialogue which will be mutually beneficial.

## Institutional Background

A short description of Central Missouri State University and the Department of Mathematics and Computer Science may provide a useful perspective from which comparisons can be made. Central is a regional, state-supported, comprehensive institution located in Warrensburg, a community of approximately 15,000 some 50 miles southeast of Kansas City. In the fall of 1991 about 11,600 students were enrolled (10,100 undergraduates and 1,500 graduates). The academic departments are organized into four colleges: Applied Sciences and Technology, Arts and Sciences, Business and Economics, and Education and Human Services. In addition the university supports a School of Graduate Studies and Research. Most departments have masters degree programs and a few offer specialists degrees. Criteria for admission to Central is liberal, approaching open-admission.

In 1991 the Department of Mathematics and Computer Science had 24 full-time faculty and 10 graduate assistants. At the undergraduate level the department offers majors in