PROJECT MENTOR: MEASURING THE GROWTH OF MENTOR AND NOVICE TEACHER MATHEMATICS CONTENT KNOWLEDGE

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In 2002 PREL received funding for five years from the National Science Foundation (NSF) teacher enhancement program to implement Project MENTOR (Mathematics Education for Novice Teachers: Opportunities for Reflection). Project MENTOR staff work with 4-member teams of mentors drawn from departments and ministries of education and institutions of higher education in the 10 U.S.-affiliated Pacific island communities of American Samoa, the Commonwealth of the Northern Mariana Islands, the Federated States of Micronesia (FSM, which includes Chuuk, Kosrae, Pohnpei, and Yap), Guam, Hawai‘i, the Republic of the Marshall Islands, and the Republic of Palau. Project MENTOR established a mentoring program for novice teachers aimed at developing in novice teachers the knowledge, skills and dispositions necessary to become effective teachers of mathematics. One goal of the Project is to increase both mentors’ and novice teachers’ mathematical content knowledge. This report focuses on the tools used for and the results of the initial assessment of the mentors and novice mathematical content knowledge.

A mathematics content test was developed and piloted during early spring of 2003 using a selected group of mathematics and science educators from across the Pacific region who were employed by PREL. After revision, the test was administered to all mentors at regional institutes during May/June 2003. Base line data was gathered from year one and year two novice teachers during the summer and fall of 2003. For comparison purposes, two groups of pre-service teachers from the University of Hawai‘i voluntarily took the test in fall of 2003. This data has been analyzed and results will be reported during the presentation of the paper.

A second administration of the test will be completed with the mentors and selected first and second year novices in May/June 2004. Preliminary results will be available for the conference so that comparisons with the base-line data collected in 2003 can be made. Future administrations (fall 2004, and summers of 2005, 2006 and 2007) of the test will add significantly to the database of results, and generate research-based evidence of the growth, or lack thereof, of both mentor and novice teacher mathematical content knowledge.