WHOLE SCHOOL REFORM IN MATHEMATICS

<u>Neil A. Pateman</u> University of Hawaii Joseph T. Zilliox University of Hawaii

Nanaikapono Elementary School is situated in a working class neighborhood on the island of Oahu. The school currently records the following percentage ethnicities among its 966 students: 61% Hawaiian or part-Hawaiian, 12% Samoan, 10% Filipino, and 17% Caucasian, Asian, and other Pacific Islanders. The school is struggling to meet the requirements for progress set by the No Child Left Behind Act (NCLB) (2001).

This struggle began with the implementation of state standards set in 2000. (HCPS II, 2000). Three university faculty were informally invited in 2000 to help with that implementation and were more formally engaged to help raise performance levels of the school in mathematics and language to enable the school to meet the requirements of NCLB. We here report the approaches to changing mathematics teaching taken so far and their effectiveness to date.

In mathematics we have adapted the notions of *quantitative literacy* (Steen, 1997) to use as the backdrop to our interventions.

History of intervention

We are now in the third phase of intervention. Earlier phases were informal contacts with faculty, then whole school workshops, and invited visits to individual classrooms. Most recently we are now recently working directly with teachers by grade level on topics of their choice.

Results to date

SAT-9 pre- and post-test differences taken in 2002, and the recent 2003 test results show consistent gains by almost all grade levels. The school has continued to work on developing its own curriculum initiative and was recently recognized in its district as out-performing other schools. More detail will be available during the presentation.

References:

Steen, L. A. (1997). The new literacy. In L. A. Steen, (Ed.), Why numbers count: Quantitative Literacy for tomorrow's America. New York, NY: The College Entrance Examination Board.