Clyde L. Greeno* (greeno@malei.org), The MALEI Institute, P.O. Box 54845, Tulsa, OK. The Mathematical Fitness Center: An Alternative Program for Salvaging Mathematically Suppressed Students and Pre-students, STEM and Otherwise. Preliminary report.

As a portal into college-level mathematics, the national program for developmental education has been woefully under-productive. A major cause is the constraints imposed by traditionally structured, time-locked, class-paced, swim or sink semester/quarter courses into which students are placed/misplaced by superficial tests and by misleading transcripts. Those constraints minimize instructors' opportunities to make the subject matter commonsensible to the students themselves, or to develop their mathematical thinking/learning powers as needed for genuine success with future courses. Those constraints also greatly hamper faculty efforts to progressively improve their instructional programs.

Also, the present program assists only persons who are enrolled in college programs: not the high-potential adults who would attend college, were it not for their scholastic experiences with curricular mathematics.

Now being developed is a "mathematical fitness center" alternative to the traditionally structured developmental program ... open also to math suppressed adults who are not yet enrolled in college. It is to be a model for how colleges might productively overhaul their developmental programs, while also providing an invaluable service for their respective communities. (Received September 22, 2010)