

1046-F1-1178 **Clyde L. Greeno*** (greenomathematicsinstitute.org), MALEI Mathematics Institute, P.O. Box 54845, Tulsa, OK 74155-0854. *RASM Reconstruction of the Developmental Mathematics Program.*

Clinical research through casework with students from developmental mathematics programs (DMP) confirms urgent needs for reforming the DMP in accord with the NCTM initiative for learning mathematics through "Reasoning And Sense Making" (RASM).

The typical DMP has only a meager rate (perhaps less than 20%) of preparing its students for genuine academic success in college-level mathematics courses. The failure is due partly to colleges being unwilling to "think outside the box" that they inherited from the high schools – the succession of three, time-locked, progress-graded, courses (arithmetic, basic algebra, intermediate algebra). From "outside the box", it is obvious that DMP students actually need a more viable kind of "personal mathematical fitness" program – in which learning mathematics-as-common-sense serves also as a therapeutic remedy for mathematics-learning distress (MLD).

Whatever its format, a RASM-reformed DMP must pivot around a developmentally continuous mathematical syllabus – one that is fully common-sensible to the students, themselves. Clinical research discloses that, where, and why the traditional DMP badly fails to be so – and how to repair it. Herein are surveyed some of the major mathematical changes needed of a RASM-reformed DMP. (Received September 15, 2008)