1046-Z1-1174 Clyde L. Greeno\* (greeno@mathematicsinstitute.org), MALEI Mathematics Institute, P.O. Box 54845, Tulsa, OK 74155-0854. The Promises of Clinical Instructological Research.

This presentation airs a research mode that yields many profound findings about how to improve curricula and instructional practices. A few illustrative findings are sketched – some of which serve to prevent or reduce MLD (Mathematics-Learning Distress: apprehension, anxiety, depression, phobia, etc.).

As an extreme form of case-study research, clinical research is overlaid onto an ongoing program of clinical instructional services – for students who need deeper conceptual understanding and stronger personal mathematical powers than they can acquire through normal instructional practices that follow traditional curricula.

In the MALEI Mathematical Learning Clinic, such research is carried to the next level – instructological research is aimed at learning how the prevailing technologies and practices of curricular instruction can be improved. The student is regarded as being an evolving, internal personal mathematical theory (albeit mostly informal, intuitive, or even subconscious). Following the mode of clinical psychology, the instructional guidance is maximally eductive – telling the students no mathematics that they can be led to construct for themselves. The instructological studies are about what fails and what works, how, and why. (Received September 15, 2008)