1064-97-207 **David A. Smith*** (das@math.duke.edu), 1408 Shepherd St., Durham, NC 27707. Changing the Culture: A 20th Century Vision Delayed.

In the late 20th Century, many mathematics teachers shared a shift in primary objective from "reproducing our own kind" to "mathematical understanding for all". Educational research conducted around the world told us (if we were paying attention) what changes in classroom practice would be necessary if we were to achieve that objective. For many reasons, not the least of which is inertia, those changes have not been implemented widely at the collegiate level, so "mathematical understanding for all" has necessarily become a vision for the 21st Century. In this talk, I will survey briefly what we know about the art of changing students' brains positively for mathematical understanding. (Received September 09, 2010)