Alma Steingart* (almas@mit.edu), Massachusetts Institute of Technology, Building E51-098, 77
Massachusetts Avenue, Cambridge, MA 02139. "It Is No Good Baking Cakes If Pies Are Wanted":
The American Mathematics Community in the 1970s Job Market Crisis. Preliminary report.

"This is not a good year for mathematicians looking for a job," lamented a 1970 report on the job market. Reese Prosser, the report's author, blamed the doctoral degree for producing specialized mathematicians. Faced with decreased funding for the sciences, Prosser argued, mathematics departments must graduate students with diverse interests able to work across disciplines. Mathematics departments needed to "redesign their product" because, as he put it, "It is no good baking cakes if pies are wanted." By 1974, the Council of the AMS approved a recommendation to begin a series of summer institutes that would provide mathematicians with continuing education in fields such as statistics, computing, and operations research. Another resolution went further, suggesting that every PhD in mathematics, regardless of his or her expertise, be required to acquire a second "saleable skill" in an area of applied mathematics. This talk analyzes various educational reform proposals forwarded by the AMS and MAA in light of the 1970s funding crisis. I analyze these suggested programs and the reactions they triggered among mathematicians in order to demonstrate how mid-century epistemological shifts in mathematics were conditioned by broader socioeconomic and political changes. (Received September 20, 2011)