1035-D1-398 Helen E Burn* (hburn@highline.edu), PO Box 98000, Des Moines, WA 98198-9800. Factors that Shape Community College Mathematics Faculty Members' Reasoning About College Algebra Reform: A Multiple Case Study.

The central research question in this study was: What factors shape community college mathematics faculty members' curricular reasoning about college algebra reform, and how do these factors exert influence? The primary data source for this case study was 27 semi-structured interviews with mathematics faculty in three community colleges mathematics departments engaged in college algebra reform. The student was the leading influence on the respondents' curricular reasoning. Yet organizational factors, including course transfer and articulation and departmental culture, mediated the student influence. There was widespread agreement that much of the traditional content was unimportant or useful to the bulk of the student audience and that the course should contain more end knowledge relevant to students' educational goals. Few respondents reasoned that the reform involved changes to course purpose. Instead they reasoned that the reform represented mainly changes to instructional strategies, sequencing, and assessment. The norms of the discipline of mathematics appeared as a potent curricular influence that limited the respondents' ability to reconceptualize course purpose and to articulate modeling competencies. The study concludes with implications for practice and research. (Received September 05, 2007)