C. David Levermore* (lvrmr@math.umd.edu), Department of Mathematics, University of Maryland, College Park, MD 20742. Interdisciplinary Education in a World of Stovepipes. Preliminary report.

Universities are largely structured around the "stovepipes" of disciplinary departments. This structure creates tension that must be overcome in order to establish successful academic programs in what are fundamentally interdisciplinary areas such as applied mathematics, applied statistics, or computational science and engineering. A common perception is that there are just two approaches to overcoming this problem — either to create an interdisciplinary program without full faculty lines, or to create an independent department in the interdisciplinary area. There are well-known examples where each of these approaches has been successful. However, a closer study of existing programs shows there is more than these two approaches. We present a review of the approaches taken to interdisciplinary education by a number of established programs and analyze strengths and weaknesses of each approach. (Received October 04, 2005)