Lessons learned from our long-term discrete collaboration in the mathematical preparation of teachers. Preliminary report.

For the past 15 years, the presenters – a mathematics educator and a mathematician – have collaborated on designing professional development programs in discrete mathematics for K-12 teachers and, subsequently, on developing curriculum materials for use in college mathematics courses for prospective K-8 teachers. In the presentation they will discuss these activities and the important role that discrete mathematics can play in enhancing the mathematical understanding of teachers. They will discuss their collaboration in designing such programs and materials – what each partner brings to, and what each partner learns from the collaboration. They will also discuss the implications of such activities and collaborations for the "common ground". (Received September 26, 2005)