This study investigated the differences in epistemological beliefs of pre-service teachers in relation to their level of education and their certification area. While there has been little research done on pre-service teachers' epistemology, it is important to understand the beliefs pre-service teachers hold regarding the nature of knowledge construction as their beliefs will influence their teaching practices. For this study, pre-service teachers were asked to complete the Epistemological Beliefs Survey (EBS) which examined their epistemic beliefs on five sub-scales: Speed of Knowledge Acquisition, Structure of Knowledge, Knowledge Construction and Modification, Characteristics of Successful Students, and Attainability of Objective Truth. Two series of ANOVAs were conducted to examine differences in pre-service teachers' levels of epistemic sophistication on these scales. While differences were found for education level (with more advanced students generally holding more sophisticated beliefs), there were no differences found in relation to certification area. This was one of the first studies in the United States to specifically investigate pre-service teachers as a unique population.