This dissertation research examined the characteristics of teacher incentive pay programs in the state of Missouri and across the United States. Using the 1999, 2003, and 2007 SASS datasets, this study found that large and ethnically diverse districts in urban areas with less union influence were more likely to offer PRP. However, highly qualified teachers in high demand were no more likely to receive a larger amount of PRP. The 2010 Teacher Compensation Programs survey data showed that poor rural districts were less likely than wealthy suburban districts to offer teacher incentive pay programs. Using statewide longitudinal Teachers Opportunity to Learn survey data, this study found that most of the PRP recipients were evaluated by their school principals, who conducted classroom observations and face-to-face meetings to assess the teaching practice and professional development activities. Only a small percentage of teachers were evaluated by peers or by using teaching portfolios, and only one out of four teachers was evaluated on student achievement data for the PRP award. After controlling for teacher and school characteristics, this study found a modest yet positive association between PRP and improvement in teacher practice of constructivist instruction.

The findings from these studies highlighted the importance of alignment between the actual program implementation and the program goal of recruiting and retaining highly qualified teachers in high demand. In addition, it is essential to include teaching practice data and professional development data into teacher evaluation to improve the students' higher-order and critical thinking skills.