This qualitative case study investigated the professional development for teachers in one Missouri school district from the perspective of principals and teachers to determine whether Knowles’ (1990) adult learning theory assumptions are applied in the planning and implementation of professional development. The definition of professional development utilized in the study was “building capacity of teachers to help students learn” (DiPaola & Hoy, 2014, p. 101). Professional development has been the mode to improve instruction through teacher training ultimately to produce higher student achievement (Miller, Garciduenas, Green, Shatola, & Enumba, 2008). Creating change with teachers required study into how teachers learn (Gregson & Sturko, 2007). Caruth (2014) defined adult learning theory as the study of how adults learn. The study focused on the perceptions of principals and teachers in regards to professional development and its planning and implementation through the lens of the six adult learning theory assumptions: self-directed, need to know, life experiences, readiness to learn, internal motivation, and orientation to learning. A qualitative case study approach allowed the researcher to examine the six assumptions of adult learning theory within one school district. A qualitative case student approach provided opportunities for in-depth answers and richer feedback (Mertens, 2005). For this research, the case study consisted of one school district and two high schools. Semi-structured questions, encouraging open ended answers, were asked to the two building principals and a focus group (containing 5-6 participants) from each building. Through data analysis, the six assumptions of adult learning theory were examined. These themes provided insight as to the perceptions of principals and teachers about the professional development offered within their buildings.