The Classroom Peer Ecologies Project (CPEP) is a longitudinal study of children (n=3,691) and teachers in 208 1st, 3rd and 5th grade classrooms. The purpose of this Goal 1 project is to identify teaching practices that are associated with features of the classroom peer ecology and students’ academic and social adjustment. At each of three assessments within a single school year, observers rated teacher–student interaction quality, students completed sociometric assessments and reported on their sense of peer community and school bonding/motivation, and teachers rated students’ social behavior. Teachers also completed end-of-year ratings of their strategies and beliefs regarding the management of classroom social dynamics. Findings indicate substantial between-classroom variance in trajectories and end-of-year levels of most student-report and sociometric measures (ICC’s = .10 to .20). Preliminary analyses with multilevel models indicate several connections between teaching practices, features of the peer ecology and student adjustment. For example: more hierarchical peer status structures were associated with higher levels of victimization; teacher efforts to mitigate classroom status extremes were associated with positive within-year changes in students’ sense of peer community and reduced victimization; and teacher attunement to classroom friendship and victimization patterns, when combined with responsive teaching, was associated with more positive changes in school bonding/motivation. Results are discussed in the context of a conceptual model of how teachers can support healthy classroom peer ecologies.