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Tracey Keck* (keckt@wssu.edu), 601 S. Martin Luther King Jr. Drive, Winston Salem, NC 27110. *Problem-Centered Learning in Mathematics Education.*

Problem-centered learning involves three elements: tasks, groups, and sharing (Wheatley, 1991). The teacher selects challenging tasks, but students are not shown particular procedures for solving them. Rather they work in homogeneous pairs or small groups to devise their own meaningful solutions, and class members come together to share their different solution strategies with each other. The theoretical framework for a problem-centered learning environment is constructivism (von Glasersfeld, 1991). Learning occurs as students construct meanings for their experiences, and the learner acts and interacts with the world, actively trying to resolve conflicts while engaging in purposeful activity (Wood & Sellers, 1996). As students actively engage each other, they try to resolve personal conflicts or differences between their existing ways of thinking and the aspects of their experiences. Resolution of conflicts takes place during genuine communication among students and teacher. Communication in this sense is not linear, from teacher to student or student to teacher. Instead, it is a circular process involving all learners, whereby students actively share, respond, negotiate, and listen while striving to interpret the mathematical meanings embedded within an activity. (Received September 16, 2008)