

A MODEL OF TEACHING INTEGRATED THEORIES OF TEACHING AND LEARNING

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In 1992 the Taiwanese National Science Council began funding a two-year project which had the goals of: (a) investigating the practicality of implementing problem-centered instruction (Wheatley, 1991) in Taiwan, (b) increasing the possibilities for effective mathematics teaching through teaching strategies change, (c) developing a new model of teaching for Taiwanese teachers. The research results of (a) and (b) have been reported (Chang, 1995, 2000). This paper reports the research results of (c), a new model of teaching (Figure 1).

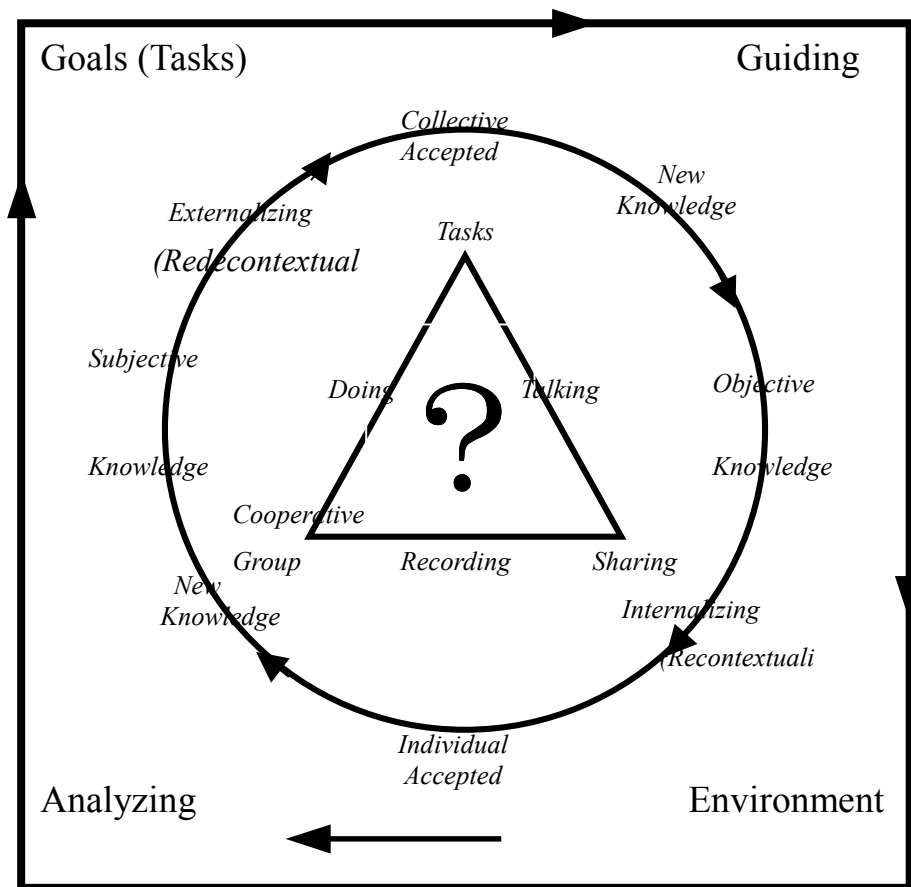


Figure 1. Problem-Centered with Double Cycles (PCDC) Teaching Model

The PCDC model integrated the problem centered learning model of Wheatley (1991), the DO-TALK-RECORD framework of Open University (Brissenden, 1988), the social constructivism of Ernest

(1991), and the recent recommendations of NCTM Standards (1989, 1991).