Public Abstract
Jonathan D. Ulmer
Ph.D.
Agricultural Education
An Assessment of the Cognitive Behavior Exhibited by Secondary Agriculture Teachers
Advisor: Dr. Robert Torres
Graduation Term Summer 2005

Federal initiatives, state legislation, and educational leaders have encouraged educators to teach higher-order thinking skills. Teacher behaviors have been identified as variables of influence for higher-order thinking. The purpose of this study was to investigate the level of cognitive behavior exhibited by secondary agriculture teachers, how they compare to science teachers, and what characteristics are indicators of specific cognitive behaviors. The sample consisted of agriculture teachers in Central Missouri. Biology teachers from each school were utilized as a comparison group. For this descriptive-correlational study, the Florida Taxonomy of Cognitive Behaviors was used. Additionally, an attitudinal questionnaire was used to collect the teachers' attitude toward teaching at higher cognitive levels.

Agriculture teachers had a slightly favorable attitude toward teaching at higher cognitive levels. Eighty-two percent of agriculture teachers' observed class time was spent on lower-order behavior. Science teachers were found to have similar results. No differences were found between agriculture and science teachers' cognitive behaviors. Measures should be taken at both the in-service and pre-service level to inform teachers of the importance of cognitive behavior and techniques for exhibiting cognitive behavior. Teacher, school, and class characteristics did not predict cognitive behavior with the current data.