

Student Attitudes Toward Synergistic Systems as Compared to Other Classes

Synopsis of Study Review by Brenda LeTendre, Ed.D.

Data Provided by: Patricia Dobrauc, Pittsburg State University

Location: 10 School Sites in Kansas, Nebraska, California, Florida, and Indiana

Date: 1992

Number of Participants (N) = 300

Study Overview

Patricia Dobrauc's thesis from Pittsburg (Kansas) State University compared students' attitudes toward the Synergistic Systems lab and their other classes in terms of use of multimedia, doing research, reading tasks, peer relationships, desire to learn, taking tests, and self-image. Respondents included 300 randomly selected seventh and eighth grade students attending 10 school sites across the country in Kansas, California, Nebraska, Florida, and Indiana. All schools had implemented at least one Synergistic Systems lab. Respondents were almost equally split by gender with 52 percent male and 48 percent female. Most were 8th graders (70 percent) with the remainder seventh graders. Sixty-five percent were Caucasian, 19 percent Hispanic, 10 percent African American, and the remaining 6 percent Asian or American Indian. A large majority (85 percent) of the respondents had completed four or more modules in the Synergistic Systems lab. Kenneth Jerich at Illinois State University and Delwyn Harnisch at the University of Illinois reanalyzed Dobrauc's data using Multivariate Analysis of Variance (MANOVA) to ascertain whether males and females or seventh and eighth graders held differing views concerning the Synergistic Systems lab class and their other classes.

Significant Findings

Dobrauc's analysis of the semantic differential data found:

1. Students hold more positive attitudes toward the Synergistic Systems lab than their other classes in terms of:
 - Use of multimedia
 - Doing research
 - Reading tasks
 - Taking tests
 - Peer relationships
 - Desire to learn
 - Self-image
2. No main effects or interactions involving gender.
3. "[T]echnology labs have stronger impact on students than other classes."

Jerich and Harnisch's reanalysis of the data to ascertain the effects of gender and grade level agreed with Dobrauc's conclusion "that students view participation in the Synergistic lab to be more pleasant and desirable than participation in their other classes."

Strengths Identified by This Study

Dobrauc's study offers evidence that students in a variety of settings across the United States felt more positive about the Synergistic Systems lab class than their other classes. "Schools having implemented Synergistic Systems have good reason to be excited about their program. Research shows that it is a system students respond to and appear to like."