

Perceptions of At-Risk Middle School Students, Teachers, Parents, and Administrators Concerning the Motivational Elements of the Synergistic System

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

Data Provided by: Scott Day, University of Illinois at Urbana-Champaign

Location: Central Illinois

Date: 1999-2000 School Year

Number of Participants (N) = 18

Study Overview

Scott Day's dissertation from the University of Illinois at Urbana-Champaign explored the perceptions of at-risk middle school students, their teachers, parents, and administrators concerning elements within a Synergistic Systems lab that they perceived to motivate students to learn. During the 1999-2000 school year, he collected data through interviews and observations from 18 students attending a middle school that had implemented a Synergistic Systems lab five years earlier to improve its Technology Education curriculum. He also interviewed, using structured protocols, the teachers, parents, and administrators of these students. The middle school where Day collected his data was located in a central Illinois town of 50,000 and enrolled 780 students in Grades 6, 7, and 8. The racial and ethnic composition of the student body included 56 percent White, 35 percent Black, 6 percent Hispanic, and 3 percent Asian. Forty-six percent of the students qualified for the free or reduced lunch program.

Significant Findings

From structured interviews and observations of students, parents, teachers, and administrators, the researcher identified six major perceptions:

1. Use of hands-on activities

All respondent groups said that Synergistic Systems' use of hands-on activities was "a major strength of the program towards engaging and teaching students at this research site." Frequent comments from students included statements such as, "I have more fun in this class because it is not boring, we get to build things." Day found that many of the students expressed a higher level of interest and motivation in the Synergistic Systems lab as compared to their other classes.

2. Use of technology

Respondents perceived the use of technology in the Synergistic Systems lab as an important element for the students' learning. "Based on focus group discussion, individual interviews, and classroom observations; it is clear that technology is perceived to have a powerful impact on at-risk students in this learning environment."

3. Emphasis on students taking responsibility for their learning and behavior

Student responsibility also emerged as an important element in motivating at-risk students in the Synergistic Systems lab. Students enjoyed making decisions about their learning and rarely engaged in disruptive behavior.

4. Use of cooperative learning instructional strategies

Students and adults indicated that they felt cooperative learning was an important aspect in motivating at-risk students to learn. "... At-risk students really shine in this environment. ... They can be successful in a different way." Furthermore, respondents indicated that the cooperative learning activities within the Synergistic Systems lab motivated students.

5. A business-like, high-tech classroom with a facilitator that genuinely worked to help all students succeed

Most respondents "cited the importance of environment in the model classroom" as motivating to students. In particular, a parent commented, "It makes the kids want to be here. In this room, it makes them feel special." Students felt similarly, with one saying, "The room doesn't look like a classroom. The furniture and equipment make it different. I like it here."

6. Use of authentic tasks and assessments

Respondents' comments showed that they saw authentic tasks and assessments as being an important aspect in motivating at-risk students. Students particularly talked about the real-world connection they saw in the activities and content, and how other subjects were integrated into the Module content. "We are learning lots of subjects at once. We don't only learn one subject at a time."