

## Planting SEED in Benton Harbor

A forest of hands, waving out the answers: three, alpha (fingers struggling to shape the Greek letter), and no! Eyes bright with the fun of the “guessing” game. Without even knowing it, young heads are learning to think big ideas.

Andrews University’s mathematics department brought distributive law and “manyadd” to Benton Harbor schools during the 1971-1972 school year. Five of the university’s mathematics professors joined Project SEED and taught conceptual mathematics for an hour four days a week at Calvin Britain and Martin Luther King Junior Elementary Schools. Ed Graff, Ted Hatcher, Harold Jones, Don Rhoads, and Ed Specht stepped out of the relative comfort of their college classrooms, drove the ten miles to Benton Harbor, and brought their expertise to a new and enthusiastic student population.<sup>1</sup>

The brainchild of California math teacher William F. Johntz, Project SEED enlists math professionals to teach advanced mathematics to elementary school students. Johntz’s goal was to boost confidence in students “who might be struggling against poverty, racism or other challenges.” By fostering success in the “high-status subject” of mathematics, SEED undertook to break a cycle of academic failure.<sup>2</sup> Benton Harbor was a “marvelous laboratory” for SEED, according to Specht.<sup>3</sup>

Johntz and his followers use the Socratic method. When they received their training in the SEED methodology, the Andrews professors learned to teach their new students only by asking questions. “If we are caught lecturing, we get a lecture,” Jones observed.<sup>4</sup> The meth-

ods of teaching, says Rhoads, were all about “self-discovery.”<sup>5</sup> The teachers were even encouraged to make deliberate mistakes that could be corrected by their avid listeners.

To avoid the children’s “hang-ups” with traditional arithmetic, the teachers replaced familiar terms with new ones. Rhoads remembers, “. . . instead of



*Edward Specht teaches in his SEED classroom.*

doing multiplication or ‘times’ we did ‘manyadd.’ We developed all the properties of ‘manyadd’ based on the properties of addition, distributive law and all.”<sup>6</sup>

One day Rhoads walked into his classroom, and one of the boys raised his hand:

“‘Mr. Rhoads, you know that ‘manyadd’ you’ve been talking about?’ I said yes, of course, we’ve been studying manyadd.

“He said, ‘That’s just times.’

“I said, ‘Oh no, it’s manyadd. Don’t you know how we’ve developed all these properties...’ and I began stringing him quite a line, reviewing the properties of manyadd.

“He snapped back, ‘It’s times!’”

In no time the radical thinker had the

whole class chanting in unison: “It’s times!! It’s times!!”

Rhoads says: “Well, I walked out of that room that day with a huge sense of accomplishment. These kids had been disarmed, they learned the rules of arithmetic, and finally they made a connection on their own—observed that this was ‘just times.’ It was great.”

The learning went both ways.

One of the boys admirably informed Jones that his new brown shoes were “bad.” A math teacher never known as a fashion-plate went home highly pleased with this stamp of approval and his new window on the current lingo. Specht says that for him, a 57-year-old teacher who had never taught young children before, the classroom in Benton Harbor was a “moving experience.”

Specht still talks about one student, a fourth-grader, who was all fired up by his math classes with the Andrews SEED teacher. By the end of the year, Mark was doing high-school level mathematics and asking for more. The young achiever went on to complete an engineering degree at Michigan State University—probably only one of the success stories to grow from the small SEED planted by five Andrews professors.

<sup>1</sup> Annette Bradley, “Math Professors Teach in SEED Program,” *FOCUS* (April-May 1972): 24. Reprinted from *Student Movement*.

<sup>2</sup> “Project SEED: History and Philosophy,” <<http://www.projectseed.org/History/history.html>> (10 Aug. 2004).

<sup>3</sup> Edward J. Specht, telephone conversation, 18 Aug. 2004.

<sup>4</sup> Bradley.

<sup>5</sup> Donald H. Rhoads, telephone conversation, 18 Aug. 2004.

<sup>6</sup> Donald H. Rhoads, e-mail message, 10 Aug. 2004.

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