

**Zig and the Preschool for Disadvantaged Children**  
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It was through two fortunate coincidences that Zig Engelmann and I got together on a project that was to become the first direct instruction preschool for disadvantaged children. I was on the faculty of the Institute for Research on Exceptional Children at the University of Illinois. Word came around that someone was showing a movie about teaching algebra to preschool children. That sounded interesting enough that I decided to attend, even though I was busy preparing to leave the next day for a project in Mexico. That movie still exists and is available on [zigsite.com](http://zigsite.com). It is in its own way a masterpiece. It shows Zig seated next to 4-year-old Kurt and Owen. Unlike most teaching films that show the teacher frontally and the backs of the kids' heads, this one was shot through a transparent panel so that we saw the faces of all three, although Zig's writing on the panel was mirror-reversed. The movie shows a father spending quality time with his sons, except that in that quality time Zig leads the boys through a demonstration of their prowess in solving linear equations.

The first coincidence was that I had recently received a grant for a series of experiments under the title, "Accelerating Intellectual Development in Young Children." If what I saw Zig doing wasn't "accelerating intellectual development in young children" I didn't know what was. As I said, however, I was about to leave the country and had no time to make contact with Zig. So I wrote my department chairman and asked him to see if he could hire Zig on my project. The next I heard about it was in the form of a fat letter from Zig saying he had been hired and had started work, the rest of the packet containing reports of what he was doing, which consisted of experiments to prove that Piaget was wrong about children's thinking.

When I got back to Urbana in August we had our first meeting, with Zig and two other people already hired for the project—Jean Osborn and Phil Reidford. We started talking about planned experiments when somebody—I know it wasn't me but it might have been any of the other

three—said “Why don’t we just put all the experiments together and start a school?” That was when the second coincidence kicked in. Jean Osborn, who had been hired as a researcher, revealed amazing organizational ability and social skills, which proved essential for turning the idea of a preschool into a reality in a matter of a couple of weeks, recruiting students, find a place that would house the school rent-free, and arranging transportation.. The school would never have come into existence without her. We chose the lowest-performing school in the area as our recruitment site, but we wanted to recruit children for whom the prognosis was especially poor. How do you do that with children who had not yet had a chance to fail in school and without giving a lot of tests? Our makeshift solution was to select children whose older siblings were identified by the school as having serious academic problems. The result was a dozen preschoolers who ranged from bright but difficult to one who essentially could not answer any questions.

The first day of school started like many first days of preschool, with children wailing for their mothers. But instead of nursing them, under Zig’s direction we set them immediately to work with “Can you say this? A dog is not a cat.” It worked like a charm, as it always has since with different kids in different situations. The program followed the model that would soon become standard—high, medium, and low groups, with separate sessions for language, reading, and math. Math, which Zig taught, of course went well from the beginning, and so did language, taught by Jean Osborn. Reading was chaotic, with too many people trying different things. It did not settle down and begin to work well until two years later, when we adopted the Augmented Roman Alphabet—a precursor of the alphabet Zig designed for DISTAR, with a different character for each speech sound.

Results the first year were good, with every child’s IQ rising to above average. Subsequent years were better—although as I have learned since, the effectiveness of every program is judged by the first reported results. The program, which we labeled “Direct Verbal Instruction,” drew a lot of attention. It drew a number of visitors from near and far, one of whom remarked in amazement, “You’re actually doing what you say you’re doing”—evidently a rarity in the world of educational innovation. The preschool was the subject of a *Harper’s Magazine* article titled “A Pressure-Cooker for Four-Year-Old Minds.” “Pressure cooker” immediately became

the label used by the many Early Childhood champions who attacked the program on the usual humanitarian grounds. When I told the author she had done us a lot of damage with that label she was dismayed. She said all she had in mind was that a pressure cooker is a way of cooking things faster, and speeding up learning was what we were about, wasn't it? I suppose we should be glad she didn't call it a microwave oven instead.

The next chapter in the story involves my leaving Illinois for Canada. Valerie Anderson, a protégée of Zig's, went with me, along with two graduate students, but by that time a solid team of skilled teacher-designers had evolved (including Cookie Bruner, whom you will be hearing in a few minutes). The problem my departure did create was the absence of a responsible faculty member. According to Jean Osborn, Zig would be gone and the program would be ended within a year unless some U of I faculty member took it over. She arranged a meeting with Wesley Becker, whom we barely knew but who had made a name for himself at Illinois by turning the clinical psychology program into a radical behaviorist one and who had shown an interest in what was going on in the preschool. We laid out the situation to him, asked if he would consider taking over the program, and to our amazement he eagerly said yes. Wes proved to be much more than a custodian. He partnered with Zig in what seems to have been a high-energy, well-managed partnership. It led the Engelmann-Becker Corporation and to the formation of NIFDI, which promises to continue their work beyond their lifetimes—something the importance of which I have only begun to appreciate at my advanced age.

I have said that were it not for a pair of unlikely coincidences the academic preschool for disadvantaged children would never have happened. I don't mean by this that direct instruction would never have got off the ground. Zig had a lot of drive and imagination. He and Theresa had already published *Give Your Child a Superior Mind*. He would surely have gone ahead in making direct instruction a key part of a caring parent's toolkit, but it might never have made its way into the school world. It might never have been a model that outshone the others in Project Follow Through. Many of the educational innovators I know (especially in America) have given up on schools and have cast their lot with after-hours clubs and the like. But Zig never gave up on schools, despite constant frustrations, and I am sure his most lasting legacy will be in the school. I would like to

think that I, along with those fortunate coincidences, had something to do with getting him through the door of that world.

The period of my partnership with Zig was brief but I believe it had a formative effect on both of us. Jean Osborn credits me with taming Zig's wild side. That's not how I remember it. What I remember is our working well together to produce something that was both academically sound and forcefully positive in its real-world impact, in its effects on the lives of children. We went separate ways but I have continued to see Zig as one of the genuine creative forces at work in education. I know he will be sorely missed, but I hope his work goes on.