

Remembering Wes Becker (1928-2000)

Wesley C. Becker was a larger than life figure who profoundly influenced a generation of researchers in the fields of special education, psychology, and educational research. Although his accomplishments in these fields were multifaceted, his major era of achievement was as co-director of the Engelmann-Becker Direct Instruction Model for Project Follow Through from 1968–1978. In so many ways, he made history during that epoch.

At the time of its inception in 1968, the era of the War on Poverty and an era committed to equity for minority children, Follow Through was the largest social science experiment ever conducted. It involved over a hundred thousand primary grade students in low income communities throughout the U. S. The goal of Follow Through was not only to provide quality educational services to these students, but to empirically determine the best method of teaching these students using rigorous social science methodology. Follow Through evaluated a dozen divergent approaches for teaching young students.

The Direct Instruction Project (co-directed by Zig Engelmann and Wes Becker) pioneered the concept that the best way to enhance the achievement of low-income students was to provide them with systematic, explicit, clear

instruction in the foundational skills of reading and mathematics. This concept was perceived as heretical in the 1960s; some considered it an assault on traditional theories of developmentally appropriate instruction.

Yet, when the results of the independent evaluation of Project Follow Through conducted by Abt Associates were released, they clearly demonstrated that this approach was effective. In fact low-income backgrounds could reach achievement levels comparable to their middle class peers. The extent of the success of the Direct Instruction Follow Through project would have been impossible without the critical role Wes Becker played. Wes ensured that the vision/concept was actually implemented in 20 sites throughout the U. S. He also ensured that students' progress in the curriculum was assessed regularly and used to guide instruction.

Wes came to Direct Instruction and actually the field of educational research and development through a circuitous route. He completed his bachelors, masters and doctoral degrees in psychology at Stanford University at a breathtaking pace. After completing his doctorate in 1955, he joined the faculty at the University of Illinois. His early studies entailed applications of factor analysis and multivariate methods studying how parents perceive children's behavior. Among the most important were "A circumplex model for social behavior in children" published in *Child Development* and "The matching of behavior rating and questionnaire personality factors" published in *Psychological Bulletin*. They remain seminal works in the field.

He then came under the influence of Sidney Bijou. Bijou was a disciple of B.F. Skinner; many consider Bijou the founder of *applied* behavior analysis, *i.e.*, the application of behavioral theory to pressing social problems. Applied behavior analysis was an attempt to radically reform psychological research by studying only observable behaviors rather than elusive constructs such as anxiety, persistence, etc. The goal of psychological research, in his view, was the systematic study of functional relationships between patterns of observed behaviors to discern causality.

Bijou's influence was profound. Wes' research moved away from complex studies of perceptions and understandings of human perceptions to the systematic study of only observable behavior.

Wes' 1986 text for teachers proclaimed: "The more we as scientists investigate the environmental conditions that control learning...the more convinced we are that *all learning follows lawful processes*, which can be known.... In fact, there are tested principles and procedures that can be applied as a technology of teaching... knowing them will make you a better teacher. Teacher decision making can be guided by this technology rather than by trial and error...."

Becker's next series of research studies had a profound impact on the new field of special education. They were all applied intervention studies whose goal was making teachers more effective in their work or making parents more effective teachers using principles of functional assessment. He authored a profoundly influential book for parents in this era: *Parents are Teachers*. Initial topics included problematic sibling interactions in the home.

Soon the focus switched to specific tools and strategies for classroom management. It is about this time that Becker hooked up with Zig Engelmann and began his decade as co-director of Follow Through.

During the Follow Through years, he conducted field research in some of the poorest communities in the U. S. for a period of ten years involving over 10,000 students. Wes engineered, managed, and implemented, both summative and formative (curriculum-referenced) assessment systems in all 20 sites.

He also helped design and implement a pioneering system of curriculum-referenced assessment that served as model for data-based decision making for a generation. Many of his advances and ideas—ideas he fought so long and hard for against a quite hostile educational establishment—are now embodied in legislation such as the Reading Excellence Act, the Comprehensive School Reform Act, and current national and state beginning reading initiatives.

During the Follow Through era, his most notable publication was "Teaching reading and language to the disadvantaged—What we have learned from field research," published in the *Harvard Educational Review*. This article remains a classic, and extraordinarily timely in terms of contemporary early reading initiatives and drives for educational equity. Wes clearly explained the extraordinarily complex evaluation of Follow Through and its implications. One is struck with how carefully the results of his internal evaluation and the external evaluation funded by the U. S. Office of Education match each other. It is also fascinating how closely his message matches those of contemporary beginning reading researchers and the National Reading Panel's findings.

The Influence of Wes Becker

In his eulogy, his longtime colleague, Siegfried (Zig) Engelmann noted: "Those who worked with him were routinely amazed not only by his skill, but the speed with which he could do things....Perhaps his most impressive quality, however, was the strength of his will." (p.1)

Those who knew and worked with Wes will immediately appreciate the accuracy of both those observations. The speed with which Wes wrote, analyzed data, and conceptualized studies was utterly amazing, especially considering the equally high quality.

As a young researcher who worked for Wes on several longitudinal studies involving Follow Through, I was profoundly impressed by his ability to not only conceptualize—but also to implement with quality and high fidelity—research studies of scope that most others would perceive as impossible. If I were to think of the one key thing that so many of us learned from Wes, it would be the amount of willpower and persistence required to conduct high quality research in the field. Many have the ability to create visions of radical change in educational practice. Wes taught so many of us that willpower and relentless energy and persistence are invariably necessary in order to enact these visions. And that research, after all, is the enactment of these visions with sustained high quality.

Wes will always serve as reminder that in order to conduct high quality research in education (or any social science), will and determination are critical. And his belief that valid data can be collected on the effectiveness of educational programs, and data can and should be used to guide policy, has begun finally to have some influence.

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