

## **WORKING SMART: USING WHAT WE KNOW!**

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**ABSTRACT:** *J/P Associates* is a consulting firm which implements school-wide, whole-system programs of Direct Instruction. Administrators as well as teachers and ancillary personnel receive pre-service and in-service training including in-classroom coaching to conduct high quality Direct Instruction lessons. The critical indicator of teacher performance is student learning, which is evaluated using both program-based criterion-referenced, as well as norm-referenced (standardized achievement), tests. Teaching is adjusted as needed based on student performance. In an evaluation, when a school implemented this on its own, significant achievement gains were noted. When then again implemented with appropriate support and training, scores increased even more. Some classes of mostly minority students obtained top scores in the state.

Since 1990 *J/P Associates* has been working to apply what is already known to educate all children successfully. Empirically derived research has been used to develop a model of administration and teaching that has been applied in school-wide settings to render them significantly more effective for all students (Carnine, Granzin, & Becker, 1988; Carnine, Grossen, & Silbert, in press; Delpit, 1988; Edmonds, 1979). The elements of an effective school are shown in Figure 1.

The model prioritizes the elements of effective schools and identifies their relationship to student achievement. The innermost circle represents the classroom and it is here that student achievement is determined (Murphy, Weil, Hallinger, & Mitman, 1985). *J/P Associates* places the highest priority on developing and coordinating the elements of this crucial, innermost circle—the system of curriculum and instruction that will characterize every classroom in a school. This includes providing teachers with the best instructional technology available and with the necessary training to use it. The core of that technology is Direct Instruction.

Direct Instruction (DI) originated in the Bereiter-Engelmann Preschool at the University of Illinois in the 1960's (Becker, 1992). DI became fully developed as a teaching system under the auspices of the USOE's Follow Through Program. In 1967, the Office of Education invited Siegfried Engelmann (now at the University of Oregon) and others to develop model programs that could be applied in kindergarten

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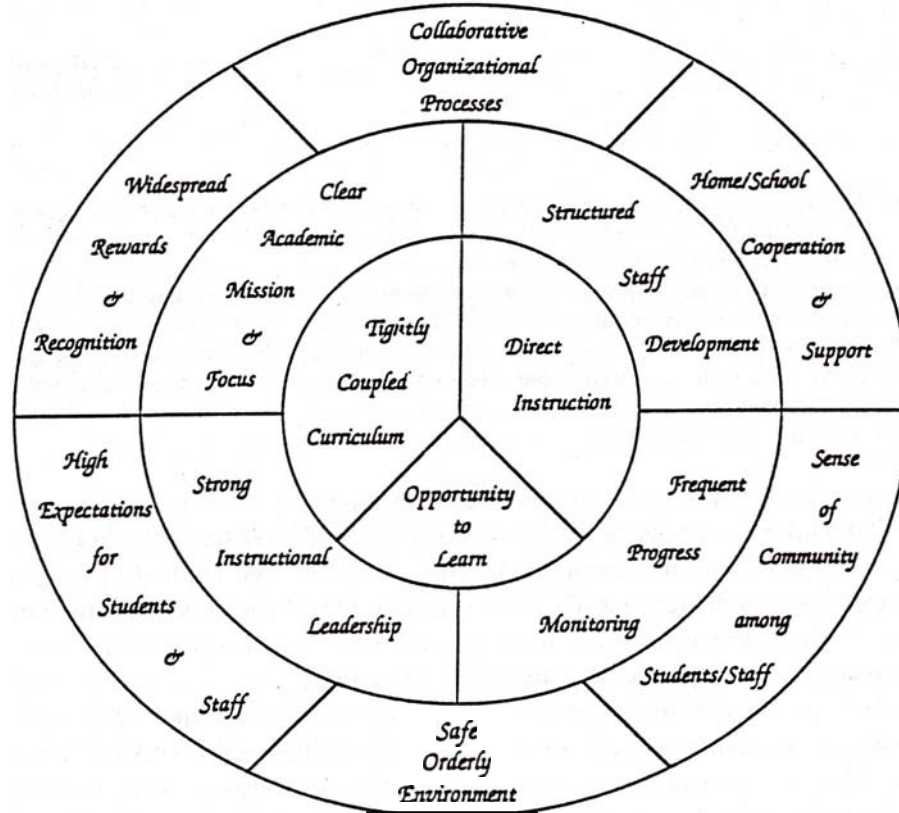


Figure 1. *The Elements of School Effectiveness*

through third grade as a follow-up to Head Start. Eventually, the Follow Through Project became a multi-million dollar, planned variation experiment that involved hundreds of schools and thousands of students from every geographic area and demographic strata of the country (Stebbins, St. Pierre, Proper, Anderson, & Cerva, 1977).

Follow Through rigorously assessed outcomes in three areas: basic skills such as word recognition and math computation, higher-order cognitive skills such as reading comprehension and math problem solving, and affective competencies such as self-esteem and locus of control. The overwhelming empirical evidence pointed to the Direct Instruction Model as the most successful of the many approaches studied: across all models, and by a large margin, Direct Instruction ranked first in all three areas (Haney, 1977; Stebbins et al., 1977). Continued program development

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and rigorous field testing over the past 28 years have expanded the number and sophistication of DI programs, and established Direct Instruction as an effective instructional technology that accelerates learning for all children (Adams & Engelmann, 1996).

Excellent educational technology such as Direct Instruction, however, is not enough. Most schools function as "loosely coupled systems," that is, a system in which the parts are not integrated to support a well-defined, central mission and tend to function independently. Simply having a powerful technology of instruction does not guarantee that it will be implemented or implemented correctly. To guarantee success for every student over time, every classroom in the school must perform well-and do so consistently. The entire school must be organized and directed in support of the innermost circle shown in Figure 1. High performance schools are successful because they are wholly organized in support of a demonstrably effective technology of curriculum and instruction. Thus, the development of such schools also demands a serious commitment to ongoing, long-term staff and organizational development (Edmonds & Frederickson, 1978).

### **Program Description**

*J/P* Associates has applied this model in Mississippi, Arkansas, Tennessee, Georgia, Alabama, Delaware, Minnesota, and New Jersey. In working with a school, *J/P* Associates contracts for a five-year commitment during which they work with the school to (1) implement an effective technology of curriculum and instruction, and (2) develop the organizational infrastructure to manage and refine that technology over time.

Initially, *J/P* Associates establishes the scope and sequence of program implementation with the client school. Typically, the first year's implementation is limited to reading and language in grades K-2 (Gersten, Darch, & Gleason, 1988). During the second year, the reading and language programs are extended to the higher grades while the math programs are introduced in the lower grades. By the end of year three, the full range of DI programs are implemented throughout the school.

*J/P* Associates uses Direct Instruction to teach Direct Instruction. The processes of modeling, leading, providing detailed feedback, and transitioning responsibility are at the heart of the training. Thirty hours of initial staff training is given prior to the start of school; training is mandatory for all staff, including administrators. Since all DI programs are "continuous progress" programs, that is, they employ a highly integrated curriculum whose lessons must be presented sequentially and in their entirety, careful placement testing is crucial. Staff are therefore first trained in placement testing. The bulk of the rest of the initial training is in classroom management, program implementation, and instructional formats. Subsequent training includes 10-15 hours of in-class coaching during the school year by the *J/P* consultant. *J/P* Associates believes the coaching component is the missing link in

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many staff development programs and that it plays a crucial role in the success of the school (Joyce & Showers, 1988).

In addition to in-class coaching, every staff member participates in a series of monthly in-service workshops which refine and extend the DI implementation. Thus every staff member receives about 60 hours of training during the first year of implementation. Although the number of hours per year of training gradually diminishes, this cycle of summer training, in-class coaching, and in-service workshops is repeated annually throughout the duration of the J/P contract.

During the second year of implementation, J/P begins training an in-house cadre of staff to take over the coaching and in-service functions. This takes approximately 2-3 years to complete. This cadre joins with the school administration, a staffperson designated as the DI coordinator, and the J/P Associate consultant to form the school leadership team.

As the principal is a pivotal figure in the leadership team, J/P Associates pays close attention to the development of administrative leadership. J/P Associates works with the principal and leadership team to develop a practical strategy for monitoring organizational effectiveness. Frequent progress monitoring focuses primarily on student performance and, secondarily, on staff performance as the instrumental variable determining student performance (Good & Brophy, 1986).

To accomplish this, a clear, academic mission is translated into measurable, daily goals: In every DI program, students will complete a lesson a day with 90% or better engagement and success rates. Students are expected to pass in-program mastery tests on the first or second trial. Similarly, the distribution of norm-referenced test scores is expected to be heavily skewed toward the high end of the achievement continuum. Principals and leadership teams are taught to collect and analyze data on the number of lessons each student completes, student engagement and success rates, in-program mastery tests, as well as external (usually norm-referenced) assessment data. They are then in a position to structure staff development around data-driven solutions (Loucks-Horsley & Hegert, 1985).

The cost of implementing a J/P Associates-sponsored school-wide program in the first year is approximately \$101 per pupil for materials and \$81 per pupil for training. In following years the materials average approximately \$35 per pupil and training averages approximately \$81 per pupil for training.

## Evaluation

Kreole Elementary School in Moss Point, Mississippi, is a K-6 school located in the heart of the Mississippi Delta. Ninety-nine percent of Kreole students are minority (predominately black); all but 1% of the student body qualifies for "free lunch." Kreole has an instructive history relative to both Direct Instruction and J/P Associates:

- Through 1978, Kreole had no association with Direct Instruction or J/P Associates; in 1979, Kreole began a self-initiated implementation of Direct Instruction in special education and expanded the program to include some

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Chapter I classrooms in 1982; from 1980 to 1985, an external consultant provided annual in-service training and in-class coaching to the special education and Chapter I staff only.

- In 1986, Kreole was forced to drop Direct Instruction for all but some of their special education students because it was "politically incorrect."
- In 1991, Kreole entered into a contract with *J/P* Associates to guide the school's implementation of Direction Instruction on a school-wide basis; during this time the district also received funding from Project Follow Through, which they used to supplement the district's resources devoted to this implementation.

Figure 2 gives the achievement scores for Kreole during these periods.

A comparison of the two DI periods indicates the *J/P* period (1991-94) yielded achievement scores (87th and 79th percentiles respectively) that were twice as high as the self-implemented period and 4 to 5 times higher than either of the non-DI periods. In fact, in 1994, Kreole fourth graders had the 2nd highest reading scores and the 8th highest language arts scores in the entire state of Mississippi. These scores derive from the SAT given to all Kreole students as part of a statewide assessment program mandated and reported by the state of Mississippi.

Kreole's performance indicates the potential of Direction Instruction to accelerate learning in any school toward the achievement of world class standards- if the DI programs are well-implemented and the requisite schoolwide supports are in place.

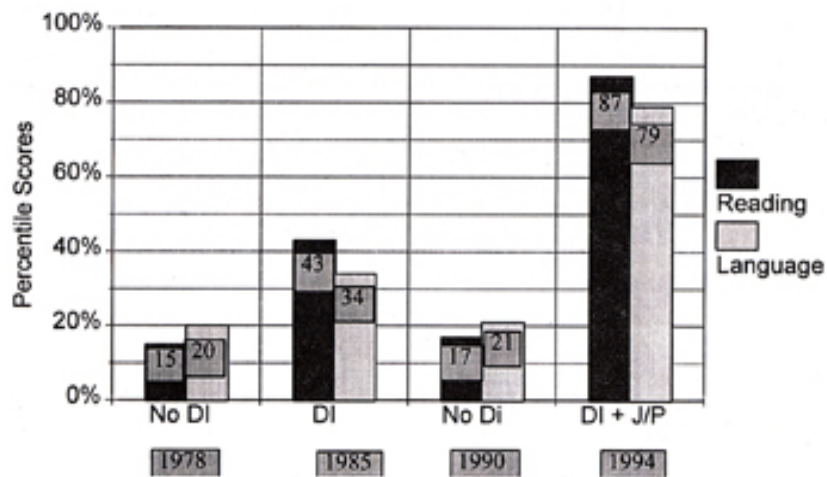


Figure 2. Percentile Scores Comparing DI with No DI in Kreole School

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