

# ASSUMPTIONS for Data-Based INSTRUCTION



## RIPS

Research Institute  
for Problem Solving

### Assumption 1:

Education is a universal intervention to promote academic and social competence for all children. Among the most relevant competences are basic skills and dispositions that enable an individual to meet the standards of conduct and performance expected in society. Basic academic skills, communication, self-care, and pro-social behavior are among the standards that function as cultural imperatives. It is, therefore, the first priority of our education system to ensure that all students make sufficient progress toward those and other cultural imperatives.

### Assumption 2:

Education can be guided by the outcomes of research with an emphasis on evidence-based practices; however, there is insufficient knowledge to specify a program for an individual child that is certain to be effective. For this reason, plans for individualized programs should function as instructional hypotheses that are tested through ongoing assessment and evaluation.

### Assumption 3:

Single case research designs are uniquely suited to test instructional hypotheses for individual children.

### Assumption 4:

Testing instructional hypotheses with single case research design requires data to evaluate instructional effects. Assessments used to monitor and evaluate progress should be valid, reliable, and sensitive indicators of student progress towards standards of conduct and performance associated with cultural imperatives.

### Assumption 5:

Individualized instruction requires that educational professionals have the knowledge and skills to generate relevant instructional hypotheses from evidence, implement interventions, use data to test hypotheses, draw valid conclusions about when and how to ensure program effects, and communicate and collaborate with administrators, colleagues, and parents.

Adapted from Stanley L. Deno & Phyllis K. Mirkin, "Data-Based Program Modification: A Manual," University of Minnesota, 1977.



<http://www.cehd.umn.edu/EdPsych/RIPS/>

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