

IDEA 2004: Definition of Scientifically Based Research

The Individuals with Disabilities Education Improvement act of 2004 (IDEA) aligns IDEA closely to the No Child Left Behind Act (NCLB), helping to ensure equity, accountability, and excellence in education for children with disabilities.

IDEA 2004 addresses scientifically based research in the following context:

In implementing early intervening services, LEAs may carry out activities that include:

- *Professional development activities for teachers and other school staff to enable such personnel to deliver scientifically based academic instructional and behavioral interventions, including scientifically based literacy instruction, where appropriate ...*
- *Providing educational and behavioral evaluations, services and supports, including scientifically based literacy instruction. IDEA 2004 (613(f)(2)(A)(B)*

While waiting for the Federal government to provide additional guidance to States within Federal regulations, specifically addressing special education and scientifically based research, LEAs may continue to rely on the definition provided in NCLB to evaluate their curricular programs.

NCLB 2001: Definition of Scientifically Based Research

The No Child Left Behind Act defines the term 'scientifically based research' (A) means research that involves the application of rigorous, systematic and objective procedures to obtain reliable and valid knowledge relevant to education activities and programs; and (B) includes research that:

- Employs systematic, empirical methods that draw on observation or experiment
- Involves rigorous data analyses that are adequate to test the stated hypothesis and justify the general conclusions drawn
- Relies on measurements or observational methods that provide reliable and valid data across evaluators and observers, across multiple measurements and observations, and across studies by the same or different investigators
- Is evaluating using experimental or quasi-experimental designs in which individuals, entities, programs, or activities are assigned to different conditions and with appropriate controls to evaluate the effects of the condition of interest, with a preference for random-assignment experiments, or other designs to the extent that those designs contain within-condition or across-condition controls
- Ensures experimental studies are present in sufficient detail and clarity to allow for replication or, at a minimum, offer the opportunity to build systematically on their findings
- Has been accepted by a peer-reviewed journal or approved by a panel of independent experts through a comparatively rigorous, objective and scientific review.”

Reading First: Definition of Scientifically Based Research

Scientifically based reading research is research that applies rigorous, systematic, and objective procedures to obtain valid knowledge relevant to reading development, reading instruction, and reading difficulties. This includes research that:

- Employs systematic, empirical methods that draw on observation or experiment;
- Involves rigorous data analyses that are adequate to test the stated hypothesis and justify the general conclusions drawn;
- Relies on measurements or observational methods that provide valid data across evaluators and observers and across multiple measurements and observations; and
- Has been accepted by a peer-reviewed journal or approved by a panel of independent experts through a comparably rigorous, objective and scientific review.