

22. Scientifically Based Research

No Child Left Behind Act of 2001 mandates that schools receiving Title I funds must “use effective methods and instructional strategies that are based on scientifically based research that:

- Strengthen the core academic program in the school;
- Increase the amount and quality of learning time, such as providing an extended school year before-and after school, summer programs and opportunities, and help in providing an enriched and accelerated curriculum; and
- Include strategies for meeting the educational needs of historically underserved populations.

No Child Left Behind Act of 2001 defines Scientifically Based Research as follows:

- Research that involves the application of rigorous, systematic, and objective procedures to obtain reliable and valid knowledge relevant to education activities and programs; and
- Includes research that employs systematic, empirical methods that draw on observation or experiment;
- 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 evaluated using experimental or quasi-experimental designs.
- Ensures that experimental studies are presented in sufficient detail and clarity to allow for replication or, at a minimum, offer the opportunity to build systematically on their findings; 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.

Resources

New Guide on Evidence Based Education—United states Department of Education, Institute of Education Sciences: <http://www.ed.gov/about/offices/list/ies/news.html#guide>

What Works Clearinghouse, United states Department of Education: <http://www.w-w-c.org>