Recommended Websites to Review:

Report of the National Reading Panel

Put Reading First—The Research Building Blocks for Teaching Children to Read, Kindergarten Through Grade 3

Preventing Reading Difficulties in Young Children

Scientifically-Based Research—U.S. Department of Education

Scientifically-Based Reading Research Teacher Tools – North Dakota Department of Public Instruction

SBRR – North Dakota Department of Public Instruction

For Additional Information Contact:

Laurie Matzke
Federal Title Programs Director
Department of Public Instruction
State Capitol, 11th Floor
600 East Boulevard Ave, Dept. 201
Bismarck, ND 58505-0440

Phone: (701) 328-2284
Fax: (701) 328-0203
Email: lmatzke@nd.gov
Website: www.nd.gov/dpi

Scientifically-Based Reading Research

The State of North Dakota
Department of Public Instruction
Kirsten Baesler
State Superintendent
600 E Boulevard Ave, Dept. 201
Bismarck, ND 58505-0440
www.dpi.state.nd.us

Scientifically-Based Reading Research

General Information

In the *No Child Left Behind* Act, the phrase "scientifically-based research" appears 111 times. Clearly, the law requires educators to use research to guide planning and instruction.

The law states that Title I programs must "use effective methods and instructional strategies that are based on scientifically-based research that strengthens the core academic program of the school."

Scientifically-based reading research (SBRR) means that reading instruction goes beyond fads and fashions, beyond having a "gut feeling" that what is being done in the classroom is helping children to read, and beyond the fact that teachers and parents perceive the program as working. SBRR applies rigorous, systematic, and objective procedures to obtain valid knowledge relevant to reading development, reading instruction, and reading difficulties. SBRR employs systematic empirical methods that draw on observation or experiment. SBRR involves rigorous data analyses that are adequate to test the state hypotheses and justify the general conclusions drawn.

Using scientifically-based reading research proves that a reading program, including the many elements and instructional methods in the program, is successful at teaching children to read.

A Reading Program Using SBRR:

1. Employs systematic, empirical methods that draw on observation or experiment,
   - ✓ has a solid theoretical or research foundation that is grounded in the scientific literature.
   - ✓ has an experimental design.
   - ✓ describes how, by whom, and on whom the research was conducted.

2. Involves rigorous data analyses that are adequate to test the stated hypotheses and justify the general conclusions drawn,
   - ✓ research was designed to minimize alternative explanations.
   - ✓ overall conclusions are consistent with research observations.
   - ✓ presents convincing documentation.
   - ✓ clearly defines the population studied.
   - ✓ clearly describes to whom the findings can be generalized.
   - ✓ provides a full description of outcome measures.

3. Relies on measurements or observational methods that provide valid data across evaluators and observational methods across multiple measurements and observations,
   - ✓ gains in student reading achievement have been sustained over time and confirmed through independent third party evaluation.
   - ✓ demonstrated through multiple investigators in numerous locations.
   - ✓ describes sufficient detail to allow for replicability.
   - ✓ explains how instructional fidelity was ensured.

4. Has been accepted by a peer-reviewed journal or approved by a panel of independent experts through a comparable rigorous, objective and scientific review.
   - ✓ unbiased individuals, who were not part of the study, carefully reviewed the findings.
   - ✓ findings were scrutinized and verified.

The Five Essential Components of Reading

According to the April 2000 report from the National Reading Panel, a balanced approach to teaching reading includes five essential components that are a must to include in any reading program. These components have all been validated through years of peer-reviewed and replicated scientific research into the practice of reading instruction.

- Phonemic Awareness—is the ability to notice, think about, and work with the individual sounds in spoken words.
- Phonics—teaches children the relationships between the letters of written language and the individual sounds of spoken language.
- Fluency—is the ability to read a text accurately and quickly.
- Vocabularies—are the words we must know to communicate effectively. There is oral vocabulary, words we use in speaking or recognize in listening, and reading vocabulary, words we recognize or use in print.
- Comprehension—is the reason for reading. Good readers are both purposeful and think actively as they read to make sense of the text.