

## **NCLB High Quality Professional Development Descriptors**

The term professional development includes activities that

- improve and increase teachers' knowledge of the academic subjects the teachers teach, and enable teachers to become highly qualified;
- are an integral part of broad school-wide and district-wide educational improvement plans;
- give teachers, principals, and administrators the knowledge and skills to provide students with the opportunity to meet challenging State academic content standards and student academic achievement standards;
- improve classroom management skills;
- are high quality, sustained, intensive, and classroom-focused in order to have a positive and lasting impact on classroom instruction and the teacher's performance in the classroom; and are not 1-day or short-term workshops or conferences without follow-up;
- support the recruiting, hiring, and training of highly qualified teachers, including teachers who became highly qualified through State and local alternative routes to certification;
- advance teacher understanding of effective instructional strategies that are
  - based on scientifically based research; and
  - strategies for improving student academic achievement or substantially increasing the knowledge and teaching skills of teachers; and
  - are aligned with and directly related to State academic content standards, student academic achievement standards, and assessments; and the curricula and programs tied to the standards
- are developed with extensive participation of teachers, principals, parents, and administrators of schools to be served under this Act;
- are designed to give teachers of limited English proficient children, and other teachers and instructional staff, the knowledge and skills to provide instruction and appropriate language and academic support services to those children, including the appropriate use of curricula and assessments;
- to the extent appropriate, provide training for teachers and principals in the use of technology so that technology and technology applications are effectively used in the classroom to improve teaching and learning in the curricula and core academic subjects in which the teachers teach;
- as a whole, are regularly evaluated for their impact on increased teacher effectiveness and improved student academic achievement, with the findings of the evaluations used to improve the quality of professional development;
- provide instruction in methods of teaching children with special needs;
- include instruction in the use of data and assessments to inform and instruct classroom practice; and
- include instruction in ways that teachers, principals, pupil services personnel, and school administrators may work more effectively with parents;

They may include activities that:

- involve the forming of partnerships with institutions of higher education to establish school-based teacher training programs that provide prospective

teachers and beginning teachers with an opportunity to work under the guidance of experienced teachers and college faculty;

- create programs to enable paraprofessionals to obtain the education necessary for those paraprofessionals to become certified and licensed teachers; and provide follow-up training to teachers who have participated in activities that are designed to ensure that the knowledge and skills learned by the teachers are implemented in the classroom.

#### SCIENTIFICALLY BASED RESEARCH.

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 hypotheses 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 evaluated 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 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.