



Science Teachers Association of Texas

Leading Science Education in Texas

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Well-prepared PreK–12 science teachers are critical if Texas students are to have adequate knowledge and skills in science to ensure economic and cultural viability in the future. Thus, the Science Teachers of Texas (STAT) recommends strong, performance-based preparation and certification standards. These standards require a demonstration of a deep understanding of content and science pedagogy beyond the depth and breadth needed to teach the curriculum at their assigned grade level. Essential to the student understanding of fundamental science concepts and scientific ways of thinking and investigating is the use of inquiry and other meaningful laboratory and field activities. Program accreditation and state licensure standards for science teacher preparation should equal or exceed those articulated in the NSTA *Standards for Science Teacher Preparation*. Certification standards should be informed by the research, best practices, and vision of professional science teachers, science teacher educators, and pure and applied scientists. Science teachers should be certified only when grade-appropriate conceptual and procedural understanding are demonstrated.

References:

National Research Council (2001). *Educating teachers of science, mathematics, and technology: New practices for the new millennium*, Washington, DC: National Academy Press.

National Research Council (1996). *National science education standards*, Washington, DC: National Academy Press.

National Science Teachers Association (2003). *Standards for Science Teacher Preparation*, Arlington, VA: National Science Teachers Association.

National Science Teachers Association (2004). *Science Teacher Preparation*, Arlington, VA: National Science Teachers Association.