National Science Teaching Association
Position Statement

Principles of Professionalism for Science Educators

Introduction

Science educators play a central role in educating, inspiring, and guiding students to become responsible, scientifically literate citizens. Therefore, teachers of science must uphold the highest ethical standards of the profession to earn and maintain the respect, trust, and confidence of students, parents, school leaders, colleagues, and other community members. The National Science Teaching Association (NSTA) establishes the following expectations and principles to guide the professional conduct of all preK–16 teachers of science, including preservice, novice, and experienced educators.

Quality science instruction is an interdependent process that requires the active participation and shared responsibility of science educators, school leaders, district administrators, school boards, and parents. NSTA calls on science educators to accept the professional responsibility to provide *all* students with quality science education; embrace and promote their professional learning and growth; uphold and strengthen the public image of the profession; and become active leaders and advocates for quality science education in their schools and communities.

Declarations

Principle 1: The Importance of Promoting the Growth of All Students

To provide quality science education for *all* students, NSTA recommends that science educators

- show respect for each individual and value his or her identity and cultural heritage;
- recognize the abilities and strengths of students, as well as their unique learning needs (NBPTS 1999);
- model and emphasize the skills, attitudes, and values of scientific inquiry (NRC 1996);
- help students reflect as learners and use skills of inquiry to become effective problem solvers (NSTA 2004);
- display and demand respect for diverse ideas, skills, and experiences of all students (NRC 1996);

- structure and facilitate ongoing formal and informal discussion based on a shared understanding of rules of scientific discourse (NRC 1996); and
- orchestrate discourse among students about scientific ideas (NRC 1996).

Principle 2: The Importance of Taking Personal Responsibility for Professional Growth

To uphold the highest professional standards, NSTA recommends that science educators

- promote their own personal professional development and recognize that becoming an effective teacher of science is a continuous process that requires a commitment to lifelong learning (NRC 1996, p. 55; NSTA 2006);

- stay current on literature in science and pedagogy and strive to be reflective practitioners who generate new knowledge and share that knowledge with others; and

- seek out formal and informal opportunities to learn, such as becoming active in professional associations; organizing and attending conferences; taking courses and seminars; reading professional publications; visiting other classrooms; and interacting with colleagues, mentors, and coaches to support their personal growth.

Principle 3: The Importance of Being Leaders in the Profession

To promote the profession both inside and outside the classroom, teachers of science should be active leaders promoting collaboration among colleagues, parents, and other members of the community. NSTA recommends that science educators

- promote collaboration among colleagues in the school and in the larger community of science educators to share ideas, discuss problems, and support one another to improve their practice;

- serve as mentors and coaches to support the initial and ongoing professional development of beginning teachers of science (NSTA 2007a);

- promote the improvement of science education by being active leaders in professional organizations at the local, state, and national levels;

- foster positive partnerships with parents to support and enhance student growth and success in science, including helping parents understand the goals of science education at the school, district, state, and national levels, and recognize the need for scientific literacy on a global level;

- work in partnership with school, district, and community members to gain a greater understanding of the cultural fabric of the community and its relationship to achieving quality science education for all students; and

- reflect a professional image to students, parents, and the community through appropriate speech, attire, and actions.

Principle 4: The Importance of Upholding Personal and Professional Ethics

As leaders of students, teachers of science must uphold the highest standards of ethical behavior and be positive role models. NSTA recommends that science educators

- conduct themselves as responsible and ethical citizens in school and community environments and activities; and

- protect, respect, and empower all students.

Principle 5: Support for Professional Teachers of Science

Science educators need the full support and active participation of school and community leaders, district administrators, school boards, parents, and students to meet their responsibilities effectively. NSTA recommends that these stakeholders work together to

- secure a professional, safe work environment and appropriate support to allow science educators to teach and grow effectively (NSTA 2007b, NSTA 2000);

- provide all teachers of science with adequate time for planning, interacting, and collaborating with colleagues and with other stakeholders in the school and community;

- secure adequate resources and materials to teach science effectively in the classroom;

- ensure that all teachers, especially those who are new to the profession, receive a reasonable workload and adequate time for preparation; and

- secure time and resources for effective and continuous professional development opportunities and support for all teachers of science throughout their careers (NSTA 2006).

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References

National Board for Professional Teaching Standards (NBPTS). 1999. *What teachers should know and be able to do*. Arlington, VA.

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

National Science Teachers Association (NSTA). 2007a. NSTA Position Statement: Induction Programs for the Support and Development of Beginning Teachers of Science.

National Science Teachers Association (NSTA). 2007b. NSTA Position Statement: Liability of Science Educators for Laboratory Safety.

National Science Teachers Association (NSTA). 2006. NSTA Position Statement: Professional Development in Science Education.

National Science Teachers Association (NSTA). 2004. NSTA Position Statement: Scientific Inquiry.

National Science Teachers Association (NSTA). 2000. NSTA Position Statement: Safety and School Science Instruction.

Additional Resources

New York State Code of Ethics for Educators. 2002. New York State Education Department. Albany, NY.