

FLORIDA ASSOCIATION OF SCIENCE TEACHERS

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The Florida Association of Science Teachers cannot support a generic certification. It is our position that a deep knowledge of the subject area and appropriate professional development are the pillars on which excellent science teaching rest. Standard-based science instruction is the right approach. Florida has taken the best from the National Science standards and developed a document that will guide instruction and assessment in a positive direction. Many districts are reforming curriculum to address the standards. One strategy for realignment is to teach integrated science to meet the Sunshine State Standards for grades nine through twelve. This course will likely be taught by a teacher with certification in Biology, Chemistry, Earth Science, or Physics. We feel that the current certification and adequate professional development allow a teacher to inform the standards with the richness that come from being a content specialist.

The notion that students must have a general background in science to pass the FCAT therefore teachers should have as well is a fallacy. If the FCAT was a test based only on general ideas and general thinking, then it would be acceptable for teachers to have only a general background. In fact, the FCAT tests for critical thinking, problem solving, and the higher levels of Maslow's hierarchy. Recall of factual knowledge and definitions are fundamental to the mastery of the subject. Teachers must be masters of the subject of their certification in order to pose the questions and inform the discussion at a higher cognitive level.

The shortage of qualified science teachers in the state of Florida is a fact beyond question. In the interest of safety and accountability, the Florida Association of Science Teachers recommends that any course bearing science graduation credit be taught by a person with science certification specific to the subject being taught. We recognize the efforts of stakeholders to remove obstacles to certification and to increase the supply of traditionally certified and alternatively certified science teachers. We feel that the opposite effect will occur if the rules of certification are changed. Consider that a chemist interested in entering the teaching profession would be obliged to attain training in physics, biology, geology, and astronomy even if the chemist was preparing to be a chemistry teacher. Science teachers recognize the value of accountability provided by FCAT and the Sunshine State Standards. Considering the small number of teachers graduating with certifiable credentials in one of the natural or physical sciences, we fear that changes would benefit little and potentially harm the certification process by providing a weak sequence of courses or a weak certification exam.

We owe a great debt to the generalists and to our peers with elementary certification. We owe them the best possible professional development and support available. It is through the efforts of the Florida Association of Science Teachers, the Coalition to Improve Mathematics and Science, the Area Centers for Educational Enhancements, and other public and private entities that we can assure that qualified science teachers are ready for the challenges of classroom and the accountability of our profession. Changes to the current pattern of certification would burden professional development efforts and diffuse the power of the dollars flowing for professional development. Changes would discourage potential science teachers by adding to the college course load or diminishing the opportunity to pursue a thorough course of study in one of the divisions of the natural or physical sciences by requiring a survey approach to all of the natural and physical sciences.