



Minnesota Science Teachers Association, Inc.

Position on Science Teacher Licenses by Praxis Testing

with particular reference to HF 2689, SF 3326 and the House Omnibus Education Bill
April 19, 2006

This statement represents the position of the Executive Committee of the Board of Directors of the Minnesota Science Teachers Association, Inc. (MnSTA) and a consensus of the MnSTA Board of Directors.

We oppose any attempt to reduce the qualifications of science teachers by providing licenses based only on the Praxis test.

- We acknowledge the difficulties of providing qualified and licensed science teachers for all of the science classes in Minnesota. Many science classes are being taught by teachers who may lack qualifications and who are not licensed to teach the subject.
- Effective science teaching and learning requires that teachers have deep understanding in science teaching practices, the nature of science and subject area content. There are skills that are specific to the science discipline. For example, science safety and laboratory/field techniques are quite different for chemistry and geology.
- The science teaching standards of the Minnesota Board of Teaching (MnBOT) are effective guidelines for the preparation for science teachers and the evaluation of licensure candidates. These standards define the specific teaching skills and content knowledge needed for each of the current license areas: General Science 5-8, Chemistry 9-12, Earth and Space 9-12, Life Science 9-12 and Physics 9-12. We encourage provisions that would allow teachers to gain licenses in more than one licensure area through teacher preparation programs.
- In addition to the college preparation programs for science licensure, several programs have emerged to help teachers become qualified for licensure in additional science disciplines. Many of these programs involve targeted classes for teachers in the summer and on-line instruction during the school year. These are aligned with the MnBOT standards in science.
- The MnBOT has developed a thorough portfolio process that allows teachers to demonstrate their qualifications for additional licenses by providing evidence of meeting the teaching standards through course work, professional development activities and teaching experience.
- The Praxis content test only provides a narrow assessment of some of the content knowledge needed for that license. It does not evaluate the deep understanding of unifying principles of the discipline, the ability to translate that knowledge to students, the teaching strategies specific to that discipline, understandings of misconceptions that block student learning and methods of assessing student understanding.

Minnesota is a national leader in quality science education. Maintaining high standards for its science teachers is critical for producing high-quality graduates.

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The Minnesota Science Teachers Assn. fosters excellent science education in Minnesota for all