

Manuscript Number:

Reviewer ID:

Title of Manuscript:

**National Science Education Standards
Content Standards: grades 9-12**

Which of the following NSE Standards are promoted in the author's manuscript?

Standard A: Science as Inquiry

- abilities necessary to do scientific inquiry
- understanding about scientific inquiry

Standard B: Physical Science

- structure of atoms
- structure and properties of matter
- chemical reactions
- motions and forces
- conservation of energy and increase in disorder
- interactions of energy and matter

Standard C: Life Science

- the cell
- molecular basis of heredity
- biological evolution
- interdependence of organisms
- matter, energy, and organization in living systems
- behavior of organisms

Standard D: Earth and Space Science

- energy in the earth system
- geochemical cycles
- origin and evolution of the earth system
- origin and evolution of the universe

Standard E: Science and Technology

- abilities of technological design
- understanding about science and technology

Standard F: Science in Personal and Social Perspectives

- personal and community health
- population growth
- natural resources
- environment quality
- natural and human-induced hazards
- science and technology in local, national, and global challenges

Standard G: History and Nature of Science

- science as a human endeavor
- nature of scientific knowledge
- historical perspectives

<http://www.nap.edu/readingroom/books/nse/6e.html>

Iowa Teacher Education Development Standards

Which of the following ITED Standards is a teacher likely to improve upon by using ideas from the author's manuscript?

Standard 1: Demonstrates ability to enhance academic performance and support for implementation of the school district's student achievement goals.

(For example: provides evidence of student learning to students, families, and staff; Uses student performance data as a guide for decision making; Accepts and demonstrates responsibility for creating a classroom culture that supports the learning of every student; Participates in and contributes to a school culture that focuses on improved student learning)

Standard 2: Demonstrates competence in content knowledge appropriate to the teaching position.

Standard 3: Demonstrates competence in planning and preparing for instruction.

Standard 4: Uses strategies to deliver instruction that meets the multiple learning needs of students.

Standard 5: Uses a variety of methods to monitor student learning.

Standard 6: Demonstrates competence in classroom management.

Standard 7: Engages in professional growth.

Standard 8: Fulfills professional responsibilities established by the school district.

(For example: demonstrates an understanding of and respect for all learners and staff; collaborates with students, families, colleagues, and communities to enhance student learning)

<http://www.state.ia.us/educate/ecese/tqt/tc/doc/itsmc030122.html>