

As indicated by *Science for All Americans*, science standards describe the knowledge and skills necessary for life in the 21st century. Therefore, standards specify **what** we intend students to learn, NOT **how** they should be taught. The standards we are proposing neither encourage nor discourage a particular approach to science teaching. At the same time, however, we do believe that science is best taught using a variety of methods and techniques, among them:

- Constructing understanding through experience,
- Making real-world connections,
- Inquiry—both hands-on and minds-on,
- Reflection,
- Experimental design, data collection, interpretation, and display,
- Concept-building where vocabulary is acquired in context, not in isolation, and
- Clear, understandable, accurate communication of the scientific experience.

Please visit the Preamble to the *North Carolina Science Essential Standards* for additional information about the purpose and rationale.

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**Link to Standards**

Visit this link to access the *North Carolina Science Essential Standards*:  
<http://www.ncpublicschools.org/acre/standards/new-standards/>

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**Instructional Toolkit**

Visit this link to access the instructional tools for the *North Carolina Science Essential Standards*:  
<http://www.ncpublicschools.org/acre/standards/support-tools/>

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**Connections:**

- **AIG**
- **EC**
- **ESL**
- **Information and Technology**

The implementation of the *Common Core State Standards* and *North Carolina Essential Standards* must recognize the needs of English Language Learners (ELLs), Exceptional Children (EC), and Academically and/or Intellectually Gifted (AIG) learners. Local coordinators and teachers can collaborate to address students' needs.

The *North Carolina Information and Technology Essential Standards* (ITES) are embedded within all areas of the other curriculum:

- Classroom teachers are responsible for teaching the new ITES standards beginning in 2011-12.
- Media Coordinators and Technology Facilitators, as ITES content experts, will collaborate with teachers to plan, create, teach, and assess effective lessons.