Published on *American Geosciences Institute* (https://www.americangeosciences.org)

Earth Science Makes It Happen

Earth science has been part of the curriculum in American schools for more than 100 years. Yet many people still think that biology, chemistry, and physics constitute a complete science education. In the 21st Century, that attitude is changing.

The National Science Education Standards and the Benchmarks for Science Literacy (AAAS, 1993) define science literacy and reaffirm the centrality of Earth science in education. The Standards promote the idea that Earth science should be taught in parity with biology, chemistry, and physics as part of the country's national strategy for science literacy. Earth science education enhances our understanding and appreciation of critical issues that affect every state, so it is imperative that students in every state graduate with a thorough understanding of Earth science.

In recent years, 49 states have established science learning standards— outlining what students must know and be able to do. In every case, these standards emphasize the importance of Earth science in producing well-rounded literate citizens. State science frameworks across the country note that Earth science is necessary for all students and that schools should include Earth science topics in the curriculum from kindergarten through grade 12. Nearly fifty percent of all states include Earth science content in state-mandated high school exams, and thirty-seven states count Earth science courses towards high school graduation requirements.