

Furthermore, earth science is related closely to students' natural surroundings. It offers students subject matter that has direct application to their lives and the world around them. It offers many opportunities to collect data, hypothesize, experiment, and draw conclusions, both within school and outside environments. It can be both a teacher's and a student's dream.

Fortunately, many state science frameworks across the country recognize 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 half of all states include earth science content in state-mandated high school exams and 37 states apply earth science courses toward high school graduation requirements. Yet in some states and school districts we find students without the opportunity to study this important science discipline. In 2001, a report issued by the Council of Chief State School Officers indicated that of this country's roughly 13 million high school students, less than seven percent, or 860,000, are taking a high school earth and space science course, a number far fewer than the 88 percent of students taking biology. In 1962, about 8.5 percent of students took a high school earth and space science course. Enrollment is going down at the same time earth science challenges are escalating.

By 2025, eight billion people will live on Earth. If we are to continue to maintain a high quality of life, we need to delve much more deeply into our planet — its processes, its resources and its environment. Only through earth science education can students come to understand and appreciate our complex planet and how to use its fragile, finite resources wisely. As the role of earth science in meeting society's needs continues to grow, it is essential that all students be given the opportunity to study earth science as an integral part of their education. It is time to recognize just how vital earth science education is to the future stewards of this planet — and to the planet itself.

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