Georgia Takes on 'Evolution'

By ANDREW JACOBS

Correction Appended

ATLANTA, Jan. 29 — A proposed set of guidelines for middle and high school science classes in Georgia has caused a furor after state education officials removed the word "evolution" and scaled back ideas about the age of Earth and the natural selection of species.

Educators across the state said that the document, which was released on the Internet this month, was a veiled effort to bolster creationism and that it would leave the state's public school graduates at a disadvantage.

"They've taken away a major component of biology and acted as if it doesn't exist," said David Bechler, who heads the biology department at Valdosta State University. "By doing this, we're leaving the public shortchanged of the knowledge they should have."

Although education officials said the final version would not be binding on teachers, its contents will ultimately help shape achievement exams. And in a state where religion-based concepts of creation are widely held, many teachers said a curriculum without mentioning "evolution" would make it harder to broach the subject in the classroom.

Georgia's schools superintendent, Kathy Cox, held a news conference near the Capitol on Thursday, a day after The Atlanta Journal-Constitution published an article about the proposed changes.

A handful of states already omit the word "evolution" from their teaching guidelines, and Ms. Cox called it "a buzz word that causes a lot of negative reaction." She added that people often associate it with "that monkeys-to-man sort of thing."

Still, Ms. Cox, who was elected to the post in 2002, said the concept would be taught, as well as "emerging models of change" that challenge Darwin's theories. "Galileo was not considered reputable when he came out with his theory," she said.
Much of the state's 800-page curriculum was adopted verbatim from the "Standards for Excellence in Education," an academic framework produced by the Council for Basic Education, a nonprofit group. But when it came to science, the Georgia Education Department omitted large chunks of material, including references to Earth's age and the concept that all organisms on Earth are related through common ancestry. "Evolution" was replaced with "changes over time," and in another phrase that referred to the "long history of the Earth," the authors removed the word "long." Many proponents of creationism say Earth is at most several thousand years old, based on a literal reading of the Bible.

Sarah L. Pallas, an associate professor of biology at Georgia State University, said, "The point of these benchmarks is to prepare the American work force to be scientifically competitive." She said, "By removing the benchmarks that deal with evolutionary life, we don't have a chance of catching up to the rest of the world."

The guidelines, which were adopted by a panel of 25 educators, will be officially adopted in 90 days, and Ms. Cox said the public could still influence the final document. "If the teachers and parents across the state say this isn't what we want," she said, "then we'll change it."

In the past, Ms. Cox, has not masked her feelings on the matter of creationism versus evolution. During her run for office, Ms. Cox congratulated parents who wanted Christian notions of Earth and human creation to be taught in schools.

"I'd leave the state out of it and would make sure teachers were well prepared to deal with competing theories," she said at a public debate.

Educators say the current curriculum is weak in biology, leading to a high failure rate in the sciences among high school students across the state. Even those who do well in high school science are not necessarily proficient in the fundamentals of biology, astronomy and geology, say some educators.

David Jackson, an associate professor at the University of Georgia who trains middle school science teachers, said about half the students entering his class each year had little knowledge of evolutionary theory.

"In many cases, they've never been exposed to the basic facts about fossils and the universe," he said. "I think there's already formal and informal discouragements to teaching evolution in public school."

The statewide dispute here follows a similar battle two years ago in Cobb County, a fast-growing suburb north of Atlanta. In that case, the Cobb County school board approved a policy to allow schools to teach "disputed views" on the origins of man, referring to creationism, although the decision was later softened by the schools superintendent, who instructed teachers to follow the state curriculum.

Eric Meikle of the National Center for Science Education said several other
states currently omit the word "evolution" from their science standards. In Alabama, the state board of education voted in 2001 to place disclaimers on biology textbooks to describe evolution as a controversial theory.

"This kind of thing is happening all the time, in all parts of the country," Mr. Meikle said.

Dr. Francisco J. Ayala, the author of a 1999 report by the National Academy of Sciences titled "Science and Creationism," vehemently opposes including the discussion of alternative ideas of species evolution.

"Creation is not science, so it should not be taught in science class," said Dr. Ayala, a professor of genetics at the University of California at Irvine. "We don't teach astrology instead of astronomy or witchcraft practices instead of medicine."

But Keith Delaplane, a professor of entomology at the University of Georgia, says the wholesale rejection of alternative theories of evolution is unscientific.

"My opinion is that the very nature of science is openness to alternative explanations, even if those explanations go against the current majority," said Professor Delaplane, a proponent of intelligent-design theory, which questions the primacy of evolution's role in natural selection. "They deserve at least a fair hearing in the classroom, and right now they're being laughed out of the arena."

**Correction: Jan. 31, 2004, Saturday**

An article yesterday about proposed guidelines for science classes in Georgia that delete the word "evolution" misstated the sequence of events preceding a news conference on the proposal by the state schools superintendent. The news conference was held on Thursday after an article about the deletion appeared that day, not Wednesday, in the Atlanta Journal-Constitution. The proposed changes were first reported Wednesday morning on the Web site of an alternative weekly newspaper, Creative Loafing.