People and Places: Biological Sciences Curriculum Study

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Figure 1. The Biological Sciences Curriculum Study (BSCS) had humble beginnings, but by the 1970s its books were used in most US high school biology programs. This photo, taken in 1960, shows a BSCS exhibit that announced the first chapters of the new BSCS textbooks. Those books, which returned evolution to the biology curriculum, transformed biology books and science education. (Photograph courtesy of BSCS.)
The history of the Biological Sciences Curriculum Study (BSCS) can be traced to the October 1957 launch of the Soviet satellite *Sputnik*, which awakened the American political and educational establishment to the importance of improving science education. The following year, Congress passed the National Defense Education Act, which encouraged the National Science Foundation (NSF) to develop state-of-the-art science textbooks. In the same year, NSF allocated $143,000 to establish the BSCS to educate “Americans in general to the acquisition of a scientific point of view.” By 1959, BSCS had established its headquarters at the University of Colorado.

In the early 1960s, BSCS created new biology textbooks that, unlike other textbooks, stressed concepts rather than facts, and investigations rather than lectures. The three BSCS books published in 1963 became known by the color of their covers: *Blue* emphasized molecular biology, *Green* emphasized ecology, and *Yellow* emphasized cellular and developmental biology. Approximately 70% of the content of each book was identical, but the material was presented using different themes. Although BSCS wanted to avoid the criticism that it was trying to establish a national curriculum, their books—for all practical purposes—did exactly that, for in the 1960s, most schools used BSCS textbooks.

When John Scopes was convicted of teaching human evolution in 1925, publishers feared that discussing evolution in biology textbooks would hurt sales. As a result, biology textbooks published after Scopes’s conviction did not include the word *evolution*. However, BSCS books were different. Instead of relying on professional writers to prepare their textbooks, BSCS recruited the best scientists and teachers in the United States. Not surprisingly, all of the BSCS books stressed evolution. Today, BSCS is credited with putting evolution back into the biology curriculum. BSCS books were an agent in the US Supreme Court’s ruling that laws banning the teaching of human evolution are unlawful (for example, *Ep- person v Arkansas*), as well as in cases involving issues such as instruction about human reproduction and the use of live animals in biology classrooms. Some states, such as Texas (in 1970) and Kentucky (in 1965), banned the BSCS books. Evangelists such as Reuel Lemmons of Austin condemned the textbooks as attacks on Christianity (Engelman 2001).

Today, BSCS is a non-profit corporation headquartered in Colorado Springs, Colorado, that continues to develop high-quality science curriculum materials for all grade levels, including high school biology, while also designing and leading professional development in support of effective science teaching and conducting research on both curriculum and professional development. BSCS materials have been printed in more than 25 languages for use in more than 60 countries. Since its inception, more than 20 million students have used BSCS materials.

**REFERENCES**


**About the Author**

Randy Moore is the HT Morse–Alumni Distinguished Professor of Biology at the University of Minnesota. His most recent book (with coauthor Sehoya Cotner) is *Understanding Galápagos: What You’ll See and What It Means* (New York: McGraw-Hill, 2003).
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