

# THE BSCS ADVANTAGE

## BSCS SCIENCE: AN INQUIRY APPROACH

STUDENTS MAKE BIGGER GAINS IN GRADES 9 AND 10

### THE RESEARCH STUDY\*

- 4-year study of student achievement in high school science
- Students in grades 9 and 10
- 11 districts, 18 schools, 64 teachers, 4,105 students
- Randomized control trial design
- BSCS Program Group
  - Students received instruction with *BSCS Science: An Inquiry Approach*
  - Teachers received 7 days curriculum implementation support
- Comparison Group
  - Students received instruction with "Business as Usual" curriculum materials
  - Teachers participated in routine professional development

### THE RESULTS

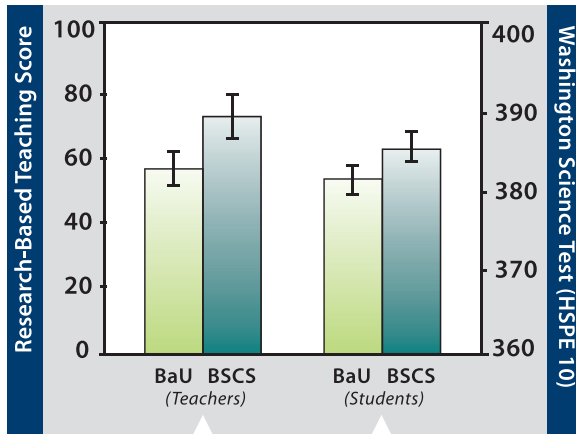
- Students receiving the BSCS science program had higher gains on standardized tests
- By the end of 10th grade, BSCS students were 4 months ahead of those in the Comparison Group
- The BSCS program helped teachers use more effective practices

### THE BOTTOM LINE

**THE COMBINATION OF RESEARCH-BASED CURRICULUM AND HIGH-QUALITY PROFESSIONAL DEVELOPMENT PRODUCED LARGER STUDENT GAINS IN SCIENCE**

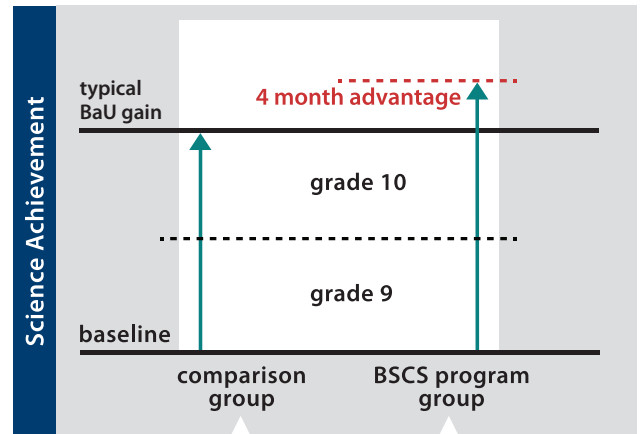
## THE DATA

### Teacher Practice and Student Achievement



Graph shows the difference in teacher practice and student achievement between business-as-usual classrooms and those using the BSCS science program.

### The BSCS Advantage



After two years, students using the BSCS science program were about 4 months of learning ahead of students in business-as-usual classrooms.

## MAKING SENSE OF THE ANALYSIS

BSCS Director of Research and Evaluation Dr. Joseph Taylor says, "These are exciting findings, and even so, they likely underestimate the true effectiveness because unlike the BaU teachers, the BSCS teachers were teaching a brand new program."

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The opinions expressed are those of the authors and do not represent views of the Institute or the U.S. Department of Education.



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