

Research shows that children formulate extraordinarily interesting and complex mathematical ideas, even at very young ages. The Private Universe Project in Mathematics demonstrates and honors the power and sophistication of these ideas, and explores how mathematics teaching can be structured to resonate with children's sophisticated thinking. When we encourage the invention of children's mathematical ideas, we turn them on to math, and their achievement improves!

THE PRIVATE UNIVERSE PROJECT IN MATHEMATICS includes a one-hour PBS documentary, a series of six K-12 teacher video workshops and a companion interactive Web site. The teacher video workshops:

- offer a rare opportunity to follow the mathematical development of one group of students throughout Grades 1–12;
- observe teachers in the process of redefining what is mathematics for themselves and for their students;
- show students actively engaged in math—debating, convincing, justifying—leading them to master complex math concepts.

Workshop 1—Little Kids, Big Potential

Research is showing that students begin their schooling with some surprising math abilities. Is there a way to keep this interest alive, and these abilities blossoming, all the way through 12th grade?

Workshop 2—Are You Convinced?

Does it make sense to argue about math? Can kids learn math by debating and convincing each other? A long-term study shows that this can be an effective tool for learning.

Workshop 3—Real Math in Real Classrooms

With the support from the district, teachers take the first steps towards implementing a more thoughtful approach to mathematics. What effect will this have on math scores?

Workshop 4—Deeper Connections

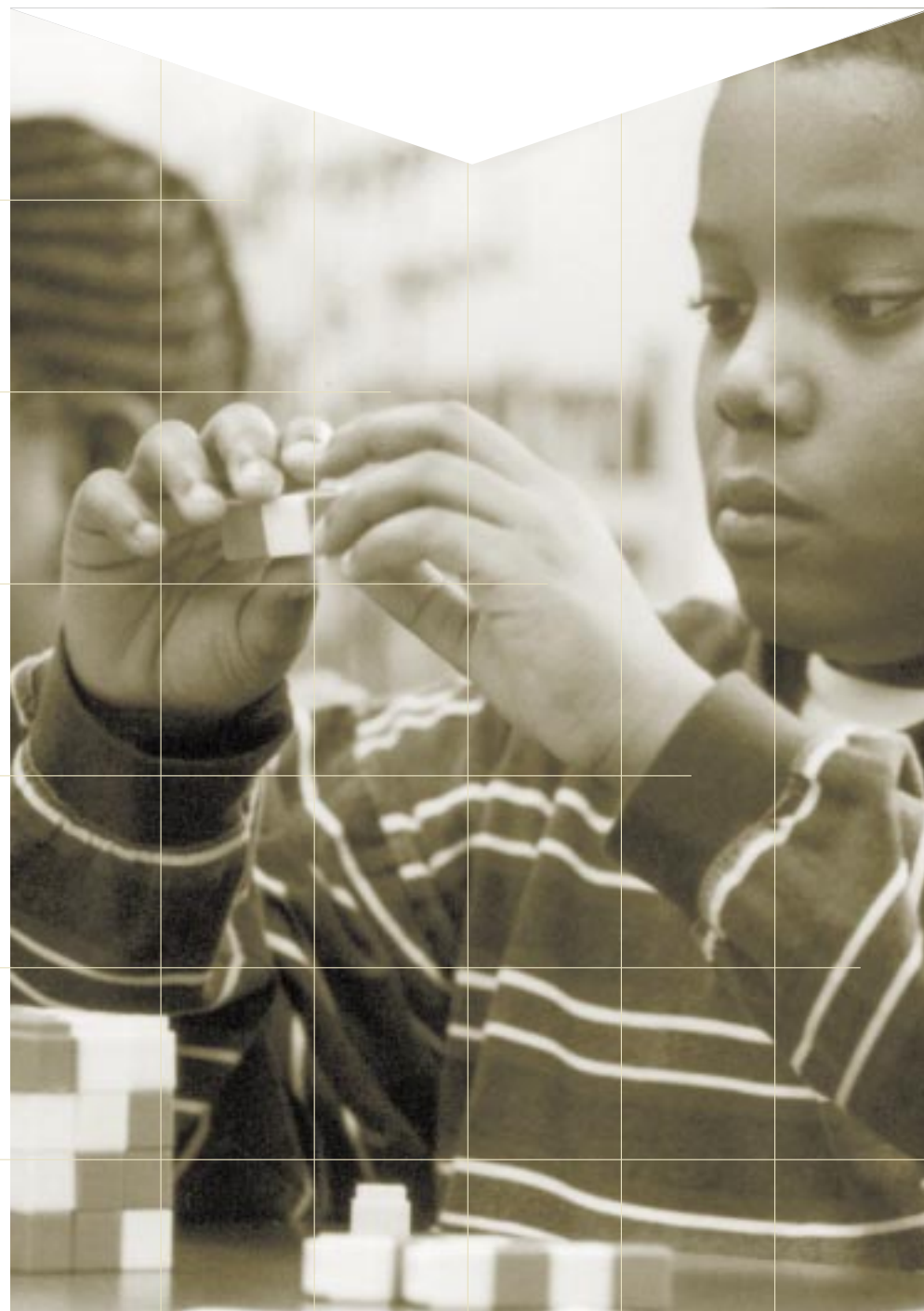
Now in high school, the students take a fresh look at thinking they had done in the early years of the long-term study. What is the process through which students make connections between seemingly unrelated ideas in math?

Workshop 5—Building a Community of Learners

Two teachers, one highly experienced and one just beginning, are creating a community of learners. How does this re-define what it means “to teach”?

Workshop 6—Uncovering the Beauty of Mathematics

Students or professional mathematicians—both go through the same processes of “doing mathematics” when confronted with real-life problems. How can teachers help students uncover the beauty of mathematics?





The Private Universe Project in Mathematics premieres on the Annenberg/CPB Channel Fall 2000 and airs regularly thereafter.

Check www.learner.org/channel/workshops for complete scheduling information.

Call us at 800-228-8030

*Write us at the Annenberg/CPB Channel
c/o Harvard-Smithsonian Center for Astrophysics
60 Garden Street, MS 82
Cambridge, MA 02138*

Email us at channel@learner.org

Fax us at 617-496-7670

The Annenberg/CPB Channel is a free digital satellite channel available to schools and communities across the country. Access to digital satellite receiver equipment is required. Graduate credit is available.

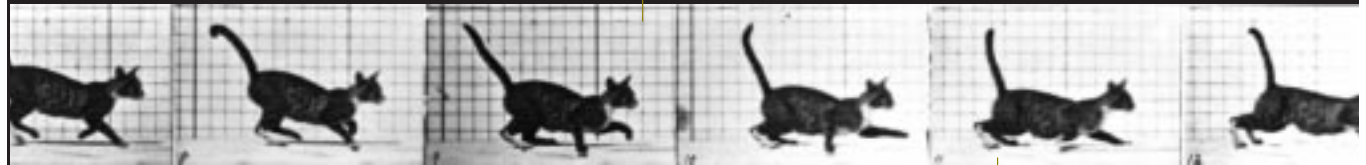
We encourage teachers to participate in this workshop series in groups. Teachers may schedule their workshop around a direct broadcast, or may tape the broadcasts and schedule the workshops at a more convenient time during the week.

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PROFESSIONAL DEVELOPMENT WORKSHOP SERIES

PRIVATE UNIVERSE PROJECT IN MATHEMATICS



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