



VOL.1

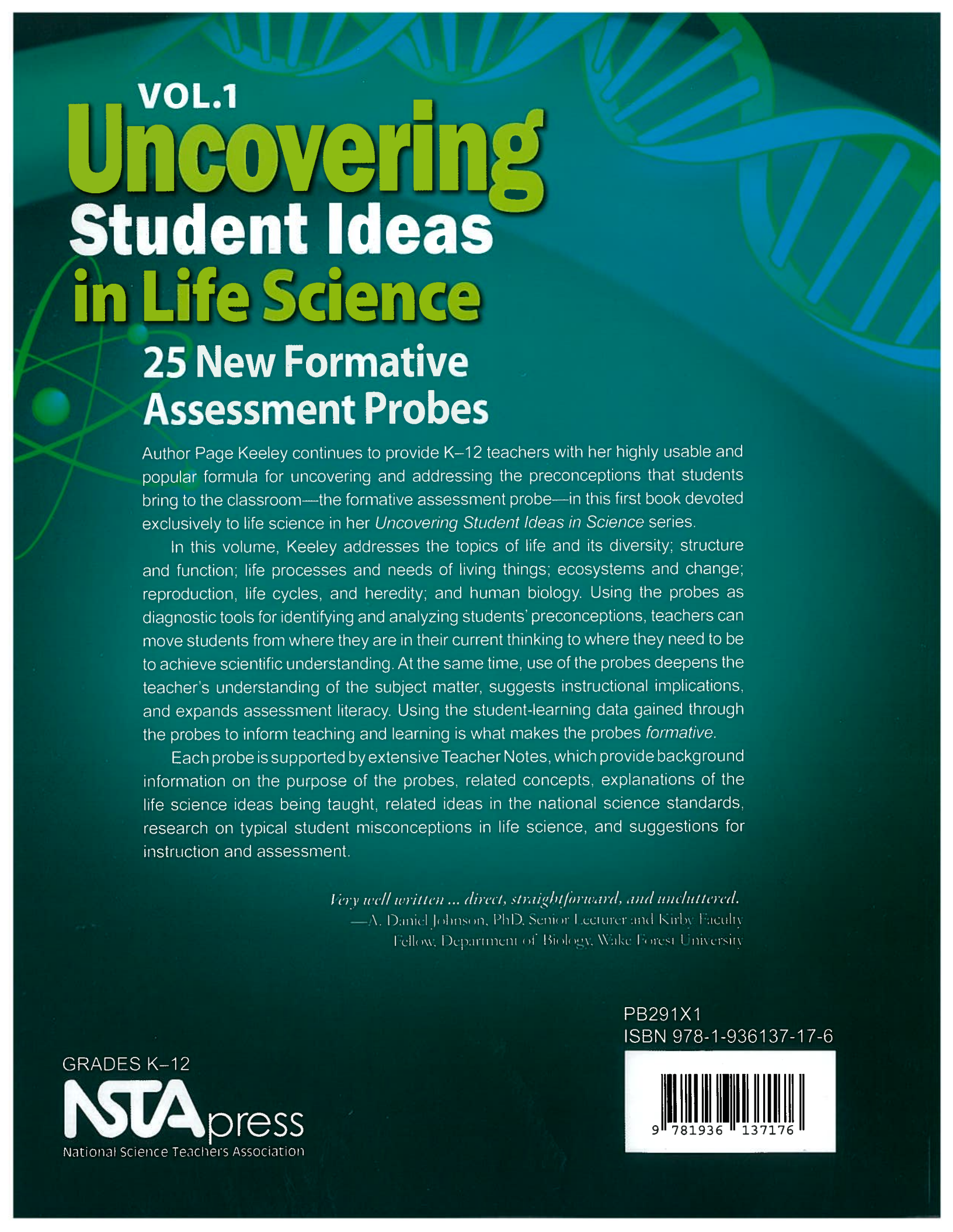
Uncovering **Student Ideas** **in Life Science**

**25 New Formative
Assessment Probes**

By Page Keeley



NSTApress
National Science Teachers Association



VOL.1

Uncovering Student Ideas in Life Science

25 New Formative Assessment Probes

Author Page Keeley continues to provide K–12 teachers with her highly usable and popular formula for uncovering and addressing the preconceptions that students bring to the classroom—the formative assessment probe—in this first book devoted exclusively to life science in her *Uncovering Student Ideas in Science* series.

In this volume, Keeley addresses the topics of life and its diversity; structure and function; life processes and needs of living things; ecosystems and change; reproduction, life cycles, and heredity; and human biology. Using the probes as diagnostic tools for identifying and analyzing students' preconceptions, teachers can move students from where they are in their current thinking to where they need to be to achieve scientific understanding. At the same time, use of the probes deepens the teacher's understanding of the subject matter, suggests instructional implications, and expands assessment literacy. Using the student-learning data gained through the probes to inform teaching and learning is what makes the probes *formative*.

Each probe is supported by extensive Teacher Notes, which provide background information on the purpose of the probes, related concepts, explanations of the life science ideas being taught, related ideas in the national science standards, research on typical student misconceptions in life science, and suggestions for instruction and assessment.

Very well written ... direct, straightforward, and uncluttered.

—A. Daniel Johnson, PhD, Senior Lecturer and Kirby Faculty
Fellow, Department of Biology, Wake Forest University

GRADES K–12

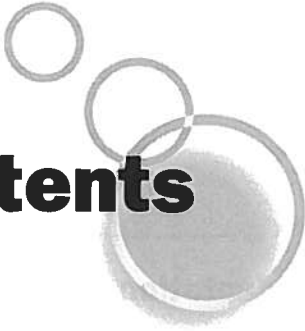
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