Hard-to-Teach Science Concepts: A Framework to Support Learners, Grades 3–5

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Supplemental Resource: Download reproducible resources at go.hbe.com.au

Summary

This well-researched book presents an Instructional Planning Framework for Years 3–5 teachers to use as they tackle hard-to-teach science concepts in their classrooms. The authors counsel educators first to identify students’ prior conceptions, especially misconceptions, related to the content being taught, then to select teaching strategies that both dispel the misunderstandings and promote the greatest student learning.

The four hard-to-teach concepts examined are the flow of matter and energy in ecosystems (life science), matter and its transformations and understanding changes in motion (physical science) and Earth’s shape and gravity (Earth and space science). Sixteen actual lessons and included. But the authors show teachers how to apply the Instructional Planning Framework to whatever science topics they teach.

This is a book for primary school teachers (especially those with limited science-content backgrounds) who have a desire to master a method for teaching challenging science concepts, science educators of preservice classes and middle years teachers who could benefit from a new approach to these four tough topics.

Other Resources

- Hard-to-Teach Biology Concepts, Revised 2nd Edition: Designing Instruction Aligned to the NGSS (NST4681)
- Clones, Cats, and Chemicals: Thinking Scientifically About Controversial Issues (NST0812)
- Mastery Learning in the Science Classroom: Success for Every Student (NST0911)
- The Everyday Science Sourcebook, Revised 2nd Edition: Ideas for Teaching in the Primary and Middle Years (NST0980)