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Autore	Fisher Kathleen M
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Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Overviee of Knowledge Mapping -- The Nature of Biology Knowledge -- Knowing Biology -- Student Misconceptions in Biology -- Meaningful and Mindful Learning -- Language, Analogy, and Biology -- Using Concept Circle Diagramming as a Knowledge Mapping Tool -- Using Concept Mapping as a Knowledge Mapping Tool -- SemNet® Semantic Networking -- The Paradox of the Textbook.
Sommario/riassunto	Mapping Biology Knowledge addresses two key topics in the context of biology, promoting meaningful learning and knowledge mapping as a strategy for achieving this goal. Meaning-making and meaning-building are examined from multiple perspectives throughout the book. In many biology courses, students become so mired in detail that they fail to grasp the big picture. Various strategies are proposed for helping instructors focus on the big picture, using the `need to know' principle to decide the level of detail students must have in a given situation. The metacognitive tools described here serve as support systems for the mind, creating an arena in which learners can operate on ideas. They include concept maps, cluster maps, webs, semantic networks, and conceptual graphs. These tools, compared and contrasted in this book, are also useful for building and assessing

students' content and cognitive skills. The expanding role of computers in mapping biology knowledge is also explored.