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Titolo	Guide to Teaching Puzzle-based Learning // by Edwin F. Meyer III, Nickolas Falkner, Raja Sooriamurthi, Zbigniew Michalewicz
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Nota di contenuto	Part I: Motivation and Teaching -- Motivation -- Getting Started -- Icebreakers -- Effective Teaching Approaches -- Part II: Tools, Tips and Strategies -- Understand the Problem -- Reasoning: Logic and Reasoning Backwards -- Pattern Recognition -- Enumerate and Eliminate -- Simplify! -- Perform a Gedanken: "What If?" and "So What?" -- Simulation and Optimization -- Part III: Challenges -- Probabilistic Reasoning -- Logical Reasoning -- Geometric Reasoning -- Grand Challenges -- Summary -- List of Puzzles.
Sommario/riassunto	Puzzle-based Learning is a foundational approach to develop the critical thinking skills and mental stamina essential for solving real-world problems. This Guide to Teaching Puzzle-based Learning provides invaluable insights drawn from the authors' extensive experience in teaching Puzzle-based Learning. Practical advice is provided for teachers and lecturers evaluating a range of different formats for varying class sizes, based on results from classes taught in many different countries. Topics and features: Suggests numerous entertaining puzzles designed to motivate students to think about framing and solving unstructured problems Discusses models for

student engagement, setting up puzzle clubs, hosting a puzzle competition, and various warm-up activities Presents an overview of effective teaching approaches used in Puzzle-based Learning, covering a variety of class activities, assignment settings and assessment strategies Examines the issues involved in framing a problem, and reviews a range of problem-solving strategies Contains tips for teachers and notes on common student pitfalls throughout the text Provides a collection of puzzle sets for use during a Puzzle-based Learning event, including puzzles that require probabilistic reasoning, and logic and geometry puzzles This unique textbook/guide will be of great interest to instructors on all levels who wish to experiment with the Puzzle-based Learning approach. This approach has been successfully applied in universities, high schools, professional organizations and leading companies.
