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Titolo	Invention Pedagogy : The Finnish Approach to Maker Education // edited by Tiina Korhonen, Kaiju Kangas, Laura Salo
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Descrizione fisica	1 online resource (304 pages)
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Nota di contenuto	1. Introduction: Roots and Key Elements of Invention Pedagogy. Part I: Learning by Inventing. 2. Learning by Inventing: Theoretical Foundations. 3. Epistemic Objects and Knowledge Creation in Invention Projects. 4. Collaboration and Co-regulation in Invention Projects. 5. Learning to Create: Creating to Learn. 6. Materiality in Invention Pedagogy. 7. Toward Sustainable Lifestyle by Means of Invention. 8. Framework for Technological Competence in Invention Projects. Part II: Facilitating the Invention Process. 9. Designing and Structuring the Invention Process. 10. Orchestrating Invention Activities through Teacher's Multilayered Work. 11. Team Teaching in Invention Projects. 12. Fostering Invention Projects through Cross-Age Peer Tutoring. 13. Approaches to Student Evaluation in Invention Pedagogy. Part III: Co-developing Inventive School Culture. 14. Learning Environments for Invention Pedagogy. 15. Developing Teachers' Transformative Digital Agency through Invention Pedagogy In-service Training. 16. Toward an Innovative School 2.0. 17. Conclusions: The Cornerstones and Future Directions of Invention Pedagogy.
Sommario/riassunto	This collection, edited and written by the leading scholars and experts of innovation and maker education in Finland, introduces invention pedagogy, a research-based Finnish approach for teaching and learning through multidisciplinary, creative design and making processes in formal school settings. The book outlines the background of, and need for, invention pedagogy, providing various perspectives for designing and orchestrating the invention process while discusses

what can be learnt and how learning happens through inventing. In addition, the book introduces the transformative, school-level innovator agency needed for developing whole schools as innovative communities. Featuring informative case study examples, the volume explores the theoretical, pedagogical, and methodological implications for the research and practice of invention pedagogy in order to further the field and bring new perspectives, providing a new vision for schools for decades to come. Intermixing the results of cutting-edge research and best practice within STEAM-education and invention pedagogy, this book will be essential reading for researchers, students, and scholars of design and technology education, STEM education, teacher education, and learning sciences more broadly.
