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| | Art - Study and teaching |
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| | Technical education |
| | Science Education |
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| Nota di contenuto | Introduction: Creativity and the creative product -- Part I: Creative Dispositions and Processes – Defining creativity, synergies between inquiry and creative approaches to STEM learning and teaching -- Chapter 1. Children's Creativity: A systematic Literature Review -- Chapter 2. Teachers' reflections on their changing roles and young |

childre's learning in creative, inquiry based STEM education -- Chapter 3. Growing children's questioning skills for creative inquiry in STEM -- Chapter 4. Creative learning contexts and fostering children's motivation to learn science -- Chapter 5. Child-focussed science inquiry: Can the right balance be found between curiosity, curriculum objectives and assessment requirements? -- Chapter 6. Working with STEM inquiry: Activities to encourage divergent thinking -- Part II: Characteristics of Creative STEM Learning Environments -- Chapter 7. STEM in Preschool: Working with educators to support child-initiated learning experiences -- Chapter 8. Using preschool children's natural curiosity as a leaver to STEM learning -- Chapter 9. Characteristics of learning environments and teachers' supports for children's creative STEM inquiry in Japan -- Chapter 10. Bush Kinders in Australia: A creative place for outdoor STEM learning -- Part III: Creative Approaches to Teaching STEM -- Chapter 11. Exploring STEM: Engineering design and young children's creativity -- Chapter 12. Dramatising inquiry learning: Reflections on how to use a historical story to actively and imaginatively engage children in resolving a STEM problem -- Chapter 13. Leonardo da Vinci's Apprentices or tinkering belles and boys at play -- Chapter 14. Introducing the nature of science in early childhood science education: A way to inspire children's curiosity, inquiry and play -- Part IV: Digital Creativity in Children's STEM Learning - Looking forward in the digital era -- Chapter 15. Integrating tangible technologies with young children's STREAM projects -- Chapter 16. The creative in computational thinking -- Chapter 17. Young children's playful engagement and learning with a fairy-tale themed augmented reality coding app -- Chapter 18. Preparing Greek pre-service kindergarten teachers to promote creativity: Opportunities using Scratch and Makey -Makey.

| Sommario/riassunto | This edited volume brings together international research that explores children's creativity in STEM inquiry. It takes the position that creativity is relevant in all aspects of life and is essential for adaptable and innovative thinking. The research informed content of the book, highlights both challenges and opportunities for growing children's creativity. The book focuses on fostering children's creativity and natural curiosity in the world around them through STEM inquiry. Through STEM inquiry, children are learning through a cross-disciplinary approach where they apply concepts from multiple fields as they are thinking creatively, problem solving and constructing solutions. Educators play a critical role in encouraging children's creativity by modelling creativity, providing creative projects for children and importantly, establishing rich culturally connected environments where children have the resources, conditions and opportunities for acting and thinking creatively. The book provides a lens for looking at children's creativity in a range of different cultural settings. It offers insight and guidance to future research and will build educators' capacity for developing children's creative practices. |