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Nota di contenuto	Philosophy of Technology and Engineering -- Nomadology: A Lens to Explore the Concept of Technological Literacy -- Teaching Science and Technology -- From Crit to Social Critique -- Religion and Technology -- Curriculum Perspectives in Technology Education -- Action Research for Technology Education -- Design and Technology in England: An Ambitious Vision Thwarted by Unintended Consequences -- Technology Education in the New Zealand Curriculum: History and Rationale -- Teaching and Learning Technology in Different Domains: Tradition and Future Developments -- Food in the School Curriculum: A Discussion of Alternative Approaches -- Textiles, a Dynamic Exchange: Challenges and Opportunities -- Resistant Materials in Technology Education -- Teaching and Learning in Technology --

Learning about Systems -- Authentic Learning and Technology Education -- Problem-Based Learning in Technology Education -- Technology Teacher Education -- Community of Practice: Pedagogical Strategies for Linking Communities of Practice to the Classroom -- Design in Technology Education: Current State of Affairs -- Assessment in Technology Education -- Making Assessment Judgements: Policy, Practice, and Research -- Assessment and Learning: The Proximal and Distal Effects of Comparative Judgement -- Social and Ethical Issues in Technology Education -- Rethinking Teaching of Technology: An Approach Integrating Indigenous Knowledge Systems -- Sustainability as a Transformative Factor for Teaching and Learning in Technology Education -- Media in Technology Education -- Technology and Children's Literature .

Sommario/riassunto

This handbook of technology education offers a state-of-the-art survey of developments in technology education worldwide. It deals with general themes like philosophical foundations, curriculum, teaching and learning, teacher education, and educational technology. It also has some technology-specific topics, such as designing, making, and assessment (portfolios). To focus on the specific learning challenges a separate section of the book is dedicated to sub-domains of technology and engineering, like food, textiles, materials and robotics. Explicit attention is given to the possible role of technology (and engineering) education in Science, Technology, Engineering and Mathematics (STEM) education. Recent developments such as technology concept learning, authentic learning, pre-university engineering education, design-based learning and design-based research for technology education, pedagogical content knowledge for technology educators, and the use of e-portfolios are included. One section deals with social and cultural issues, such as education for sustainability, gender issues in technology education, indigenous technologies, industry involvement and the relation between technology education and communication. As could be expected in a handbook on technology education, there is also a section on the use of technology for teaching about technology: the use of CAD, science fiction movies, animations, internet and social media. All chapters are written especially for this handbook by a selection of authors, some of whom have been part of the history of technology education for many years, some of whom are promising young researchers. The book can be used as a reference by technology education researchers to get a concise introduction into the field. It can also be used as a resource in technology teacher education programmes. Technology teachers can use it as literature for deepening their understanding of the field and thus working on their continuous professionalization. Curriculum developers and policy makers will find it of interest to get an understanding for the need to have technology education in the curriculum and the way it can be realized in practice.