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	Nota di contenuto	Notes on Contributors Series Editor's Foreword Acknowledgements Introduction Part 1: Where Are We Now? 1. The NeuroScience of Connections Edward D. Laughbaum 2. ICT in the United States: Where We Are Today and a Possibility for Tomorrow Gail Burrill 3. ICT in France: Development of Usages, Institutional Hesitations and Research Questions Luc Trouche and Ghislaine Gueudet 4. ICT and the English Mathematics Curriculum Sue Pope Part 2: What Does Research Tell Us? 5. The Value of Learning Geometry with ICT: Lessons from Innovative Educational Research Keith Jones 6. Learning Mathematics Using Digital Resources: Impacts on Learning and Teaching for 11- to 14-year old Pupils Don Passey 7. Improving on Expectations: Preliminary Results from Using Network-supported Function-based Algebra Walter Stroup Part 3: Key Pedagogical Issues in Embedding ICT in Teaching and Learning Mathematics 8. Designing Substantial Tasks to Utilize ICT in Mathematics Lessons Colette Laborde 9. Learning from Acting on Objects John Mason 10. A Case Study of Using Multiple Resources to Teach Straight Line Graphs Rosemary Deaney and Sarah Hennessy Part 4: Description of a Range of ICT Tools 11. Emerging Technologies for Learning and Teaching Vanessa Pittard 12. Home and School - Bridging the Gap Russell Prue 13. Personal Portable Technology Adrian Oldknow and

	Peter Hamilton Part 5: Practical Ideas of ICT to Enhance Teaching and Learning 14. Linking the Mathematics Curriculum to Software, Resources and Strategies to Engage Teachers and Learners in Using ICT in the Classroom Linda Tetlow 15. The Uses of Online Resources for Teaching and Learning Mathematics at Advanced Level Bryan Dye What Do the Subject Associations Offer? Ruth Tanner 17. Modelling, Functions and Estimation: A Pizza Problem Chris Olley Part 6: ICT Supporting Cross-curricular Work with Mathematics 18. Using Video Analysis to Develop Modelling Skills in Physics Steve Hearn 19. Bloodhound SSC: A Vehicle for STEM Ian Galloway 20. Modelling Action in Sports and Leisure Matt Pauling and Adrian Oldknow Part 7: Case Studies of Teachers Engaging with ICT 21. Teaching International Baccalaureate Mathematics with Technology Jim Fensom 22. Why Use Technology to Teach Mathematics? Andy Kemp 23. Using ICT to Support Learning Mathematics in the Primary Classroom Mel Bradford and Tina Davidson 24. The Role of a Head of Mathematics Department in Ensuring ICT Provision and Use within Lessons Dawn Denyer and Carol Knights 25. Developing Problem Solving Skills and Cross-curricular Approaches in Mathematics Utilizing ICT Michael Hartnell and Carol Knights Part 8: Implications for Professional Development 26. Supporting Developments within a Local Authority Ron Taylor 27. Supporting Teachers in Introducing New Technologies Alison Clark-Wilson 28. Implications for Professional Development: Supporting Individuals Pip Huyton 29. What Are the Significant Factors Which Support the Integration of ICT in the Mathematics Classroom? David Wright and Pat Woolner Glossary Index
Sommario/riassunto	Mathematics Education with Digital Technology examines ways in which widely available digital technologies can be used to benefit the teaching and learning of mathematics. The contributors offer their insights to locate the value of digital technology for mathematics learning within the context of evidence from documented practice, prior research and of educational policy making. Key pedagogical uses of digital technologies are evaluated in relation to effective mathematics learning and practical ideas for teaching and learning mathematics with digital technology are critically analysed. The volume concludes by looking at future developments and by considering the ways in which ICT could be used as a catalyst for cross-curricular work to achieve greater curricular coherence