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Titolo	Mastering 3D Printing in the Classroom, Library, and Lab // by Joan Horvath, Rich Cameron
Pubbl/distr/stampa	Berkeley, CA : , : Apress : , : Imprint : Apress, , 2018
ISBN	1-4842-3501-0
Edizione	[1st ed. 2018.]
Descrizione fisica	1 online resource (315 pages) : illustrations
Collana	Technology in action
Disciplina	621.988
Soggetti	Computer input-output equipment Computer graphics Computer-aided engineering Hardware and Maker Computer Graphics Computer-Aided Engineering (CAD, CAE) and Design
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Introduction -- Section 1. 3D Printing: State of the Art -- Chapter 1. When to Use a 3D Printer -- Chapter 2. 3D printer types and Materials -- Chapter 3. 3D printer workflow and software -- Section 2. Buying and Setting up Printers -- Chapter 4. 3D Printing Technical Issues: Comparing Technologies -- Chapter 5. Living with your 3D printer -- Chapter 6. Modeling -- Section 3. 3D Printing Curriculum Development -- Chapter 7. Classroom general issues -- Chapter 8. Art and Theater -- Chapter 9. Engineering, math and science -- Chapter 10. Language arts and social studies -- Chapter 11. Elementary students -- Chapter 12. The Special-Needs Student -- Section 4. Building Lifelong Skills -- Chapter 13. 3D Printers in the High School or University Lab -- Chapter 14. Where Students Might Go with This -- Appendices.
Sommario/riassunto	Learn how to manage and integrate the technology of 3D printers in the classroom, library, and lab. With this book, the authors give practical, lessons-learned advice about the nuts and bolts of what happens when you mix 3D printers, teachers, students, and the general public in environments ranging from K-12 and university classrooms to libraries, museums, and after-school community programs. Take your existing

programs to the next level with Mastering 3D Printing in the Classroom, Library, and Lab. Organized in a way that is readable and easy to understand, this book is your guide to the many technology options available now in both software and hardware, as well as a compendium of practical use cases and a discussion of how to create experiences that will align with curriculum standards. You'll examine the whole range of working with a 3D printer, from purchase decision to curriculum design. Finally this book points you forward to the digital-fabrication future current students will face, discussing how key skills can be taught as cost-effectively as possible.

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