

VOLUME 1

Makeology

Makerspaces as
Learning Environments



Edited by
Kylie Pepler,
Erica Rosenfeld Halverson,
and Vanessa B. Kafai

ROUTLEDGE

"Makeology is the first broad and comprehensive examination of the Maker Movement as a catalytic force for young people's learning. Practitioners and scholars interested in implementing and studying making as a force for creative expression and student-centered learning will find in this two-volume collection a wealth of thoughtful and significant information."

—Margaret Honey, President & CEO, New York Hall of Science, USA

"Our goal should be helping children see themselves as good learners, as lifelong learners. The impact of what they create, design, shape, and build will be known in the future, but the time for making it happen is now. This book can increase the opportunities for making in educational settings by sharing the insights of many leading practitioners."

—Dale Dougherty, Founder & Executive Chairman, Maker Media, Inc., USA, from the foreword

"One thing we have in common is our commitment to putting more power in the hands of people from all backgrounds, enabling everyone to develop their voice and express themselves. There's a special opportunity right now. But that moment could also slip away, so it is all the more important to make connections and join forces with other communities with shared values, to make sure that all children have the opportunity to grow up as full and active participants in tomorrow's society."

—Mitchel Resnick, LEGO Papert Professor of Learning Research and head of the Lifelong Kindergarten group at the Media Laboratory at Massachusetts Institute of Technology, USA, from Volume 2

Makeology introduces the emerging landscape of the Maker Movement and its connection to interest-driven learning. While the movement is fueled in part by new tools, technologies, and online communities available to today's makers, its simultaneous emphasis on engaging the world through design and sharing with others harkens back to early educational predecessors including Froebel, Dewey, Montessori, and Papert. *Makerspaces as Learning Environments (Volume 1)* focuses on making in a variety of educational ecosystems, spanning nursery schools, K-12 environments, higher education, museums, and after-school spaces. Each chapter closes with a set of practical takeaways for educators, researchers, and parents.

Kylie Peppler is Associate Professor of Learning Sciences at Indiana University.

Erica Rosenfeld Halverson is Associate Professor of Digital Media and Literacy in the Department of Curriculum & Instruction at the University of Wisconsin-Madison.

Yasmin B. Kafai is Professor of Learning Sciences at the University of Pennsylvania.

EDUCATION

 **Routledge**
Taylor & Francis Group
www.routledge.com/education

Cover image: Daryl Moran

ISBN 978-1-138-84777-4



9 781138 847774