

Springer

1st
edition1st ed. 2019, XIX, 366 p. 63
illus., 46 illus. in color.**Printed book**

Hardcover

Printed book

Hardcover

ISBN 978-3-030-29488-5

£ 109,99 | CHF 153,50 | 129,99 € |
142,99 € (A) | 139,09 € (D)

Available

Discount group

Science (SC)

Product category

Contributed volume

Series

Advances in STEM Education

Other renditions

Softcover

ISBN 978-3-030-29490-8

Softcover

ISBN 978-3-030-29491-5

Education : Science Education

Sengupta, P., Shanahan, M.-C., Kim, B. (Eds.)

Critical, Transdisciplinary and Embodied Approaches in STEM Education

- Highlights new theoretical, pedagogical and technological advances in STEM education
- Includes comprehensive design guidelines for STEM integration
- Offers global, pan-continental perspectives on STEM and STEAM education
- Brings together perspectives from critical theory, embodied cognition, educational computing and design of learning environments in the context of STEM education

Over the past decade, integrated STEM education research has emerged as an international concern, creating around it an imperative for technological and disciplinary innovation and a global resurgence of interest in teaching and learning to code at the K-16 levels. At the same time, issues of democratization, equity, power and access, including recent decolonizing efforts in public education, are also beginning to be acknowledged as legitimate issues in STEM education. Taking a reflexive approach to the intersection of these concerns, this book presents a collection of papers making new theoretical advances addressing two broad themes: Transdisciplinary Approaches in STEM Education and Bodies, Hegemony and Decolonization in STEM Education. Within each theme, praxis is of central concern including analyses of teaching and learning that re-imagines disciplinary boundaries and domains, the relationship between Art and STEM, and the design of learning technologies, spaces and environments. In addition to graduate research seminars at the Masters and PhD levels in Learning Sciences, Science Education, Educational Technology and STEM education, this book could also serve as a textbook for graduate and pre-service teacher education courses.

Order online at [springer.com/booksellers](https://www.springer.com/booksellers)**Springer Nature Customer Service Center GmbH**

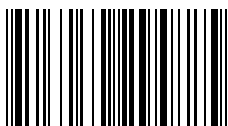
Customer Service

Tiergartenstrasse 15-17

69121 Heidelberg

Germany

T: +49 (0)6221 345-4301

row-booksellers@springernature.com

ISBN 978-3-030-29488-5 / BIC: JNU / SPRINGER NATURE: SCO27000

Prices and other details are subject to change without notice. All errors and omissions excepted. Americas: Tax will be added where applicable. Canadian residents please add PST, QST or GST. Please add \$5.00 for shipping one book and \$ 1.00 for each additional book. Outside the US and Canada add \$ 10.00 for first book, \$5.00 for each additional book. If an order cannot be fulfilled within 90 days, payment will be refunded upon request. Prices are payable in US currency or its equivalent.

Part of **SPRINGER NATURE**