



1st ed. 2019, XIX, 366 p. 63 illus., 46 illus. in color.

Printed book

Hardcover

129,99 € | £109.99 | \$159.99

^[1]139,09 € (D) | 142,99 € (A) | CHF

153,50

Softcover

89,99 € | £79.99 | \$109.99

^[1]96,29 € (D) | 98,99 € (A) | CHF

106,50

eBook

74,89 € | £63.99 | \$84.99

^[2]74,89 € (D) | 74,89 € (A) | CHF

85,00

Available from your library or
[springer.com/shop](https://www.springer.com/shop)

MyCopy ^[3]

Printed eBook for just

€ | \$ 24.99

[springer.com/mycopy](https://www.springer.com/mycopy)

Pratim Sengupta, Marie-Claire Shanahan, Beaumie Kim (Eds.)

Critical, Transdisciplinary and Embodied Approaches in STEM Education

Series: Advances 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](https://www.springer.com) / or for the Americas call (toll free) 1-800-SPRINGER / or email us at: customerservice@springernature.com. / For outside the Americas call +49 (0) 6221-345-4301 / or email us at: customerservice@springernature.com.

The first € price and the £ and \$ price are net prices, subject to local VAT. Prices indicated with [1] include VAT for books; the €(D) includes 7% for Germany, the €(A) includes 10% for Austria. Prices indicated with [2] include VAT for electronic products; 19% for Germany, 20% for Austria. All prices exclusive of carriage charges. Prices and other details are subject to change without notice. All errors and omissions excepted. [3] No discount for MyCopy.

