## Contents

### Part I  Project Method and Overview

1. **The ATC21S Method** ................................................................. 3  
   Patrick Griffin and Esther Care

### Part II  Conceptual Framework for Internet Based Collaborative Assessment Tasks

2. **A Framework for Teachable Collaborative Problem Solving Skills** ..................................................... 37  
   Friedrich Hesse, Esther Care, Juergen Buder, Kai Sassenberg, and Patrick Griffin

3. **Assessment of Learning in Digital Networks** ........................................ 57  
   Mark Wilson and Kathleen Scalise

### Part III  Delivery of Collaborative Tasks, Their Scoring, Calibration and Interpretation

4. **Collaborative Problem Solving Tasks** .................................................... 85  
   Esther Care, Patrick Griffin, Claire Scoular, Nafisa Awwal, and Nathan Zoanetti

5. **Platforms for Delivery of Collaborative Tasks** ........................................ 105  
   Nafisa Awwal, Patrick Griffin, and Sam Scalise

6. **Automatic Coding Procedures for Collaborative Problem Solving** ..................................................... 115  
   Raymond Adams, Alvin Vista, Claire Scoular, Nafisa Awwal, Patrick Griffin, and Esther Care

7. **Task Characteristics and Calibration** ................................................... 133  
   Patrick Griffin, Esther Care, and Susan-Marie Harding
### Part IV  Participating Countries in the Field Work

8  **Australia in the Context of the ATC21S Project** ........................................ 183  
   Esther Care, Claire Scoular, and Myvan Bui

9  **Student and Teacher Responses to Collaborative Problem Solving and Learning Through Digital Networks in Singapore** ............................................................................ 199  
   Chew Leng Poon, Sean Tan, Horn Mun Cheah, Pik Yen Lim, and Hui Leng Ng

10  **Introducing Assessment Tools for 21st Century Skills in Finland** ...... 213  
    Arto K. Ahonen and Marja Kankaanranta

11  **Case Study on the Implementation of ATC21S in the United States** .................................................................................. 227  
    Kathleen Comfort

12  **The Adaptation and Contextualization of ATC21STM by Costa Rica** ....................................................................................... 245  
    María Eugenia Bujanda and Elsie Campos

13  **ATC21S Trials of Collaborative Problem Solving Tasks in the Netherlands** .................................................................................... 257  
    Diederik Schönau

### Part V  Implementation at Classroom and System Levels

14  **Linking Developmental Progressions to Teaching** ............................ 267  
    Kerry Woods, Roz Mountain, and Patrick Griffin

15  **Policy Pathways for Twenty-First Century Skills** .............................. 293  
    Frank Adamson and Linda Darling-Hammond
Assessment and Teaching of 21st Century Skills
Methods and Approach
Griffin, P.; Care, E. (Eds.)
2015, XII, 310 p. 70 illus., 50 illus. in color., Hardcover
ISBN: 978-94-017-9394-0