# Table of Contents

Preface .................................................................................................................................................. xiii

Chapter 1
A Language and a Space: Visualizing Learning Online ................................................................. 1
  *Halimat I. Alabi, Simon Fraser University, Canada*

Chapter 2
Advances in Algorithms for Re-Sampling Class-Imbalanced Educational Data Sets .................. 42
  *William Rivera, Institute for Simulation and Training, University of Central Florida, USA*
  *Amit Goel, Institute for Simulation and Training, University of Central Florida, USA*
  *J Peter Kincaid, Institute for Simulation and Training, University of Central Florida, USA*

Chapter 3
An Institution Wide Approach to Learning Analytics ................................................................. 73
  *Jennifer Heath, University of Wollongong, Australia*
  *Eeva Leinonen, University of Wollongong, Australia*

Chapter 4
Developing a Framework for the Effective Use of Learning Analytics: A UK Perspective .......... 88
  *Collette Gavan, Edge Hill University, UK*

Chapter 5
Developing a Framework for the Visualisation of Learning Analytics in UK Higher Education ..... 119
  *Jack Halliday, Edge Hill University, UK*
  *Mark Anderson, Edge Hill University, UK*

Chapter 6
Effective Learning Strategies for the 21st Century: Implications for the E-Learning ...................... 143
  *Catherine Chen, Ball State University, USA*

Chapter 7
Here Be Dragons: Mapping Student Responsibility in Learning Analytics ................................ 170
  *Paul Prinsloo, Unisa, South Africa*
  *Sharon Slade, The Open University, UK*
Chapter 8
Outstanding Student Achievement: A Journey of Pedagogy Informed and Confirmed by Analytics .......................................................... 189
  Richard J. Self, University of Derby, UK

Chapter 9
Personalising the Pathway: Learning Analytics for Leveraging Pedagogically Purposeful Indicators of Academic Performance .......................................................... 214
  Donna M. Velliaris, Eynesbury Institute of Business & Technology, Australia

Chapter 10
Post-Course Survey Development: A Practical Approach with Valid and Reliable Results ............. 242
  Scott Frasard, University of Illinois - Chicago, USA

Chapter 11
Role of Learning Analytics in Enhancing Teaching and Learning .................................................. 259
  Amir Manzoor, Bahria University, Pakistan

Chapter 12
The Role of Learning Analytics in Global Higher Education .......................................................... 282
  Kijpokin Kasemsap, Suan Sunandha Rajabhat University, Thailand

Compilation of References .................................................................................................................. 308

About the Contributors .................................................................................................................. 355

Index ............................................................................................................................................. 360