

# Handbook of Research on Mobile Devices and Applications in Higher Education Settings

Part of the Advances in Mobile and Distance Learning Book Series

Laura Briz-Ponce (University of Salamanca, Spain), Juan Antonio Juanes-Méndez (University of Salamanca, Spain) and Francisco José García-Peñalvo (University of Salamanca, Spain)

## Description:

Mobile phones have become an integral part of society, as their convenience has helped democratize and revolutionize communication and the marketplace of ideas. Because of their ubiquity in higher education, undergraduate classrooms have begun to utilize smartphones and tablets as tools for learning.

The **Handbook of Research on Mobile Devices and Applications in Higher Education Settings** explores and fosters new perspectives on the use of mobile applications in a classroom context. This timely publication will demonstrate the challenges that universities face when introducing new technologies to students and instructors, as well as the rewards of doing so in a thoughtful manner.

## Readers:

This book is meant to present the latest research and become a source of inspiration for educators, administrators, researchers, app developers, and students of education and technology.

ISBN: 9781522502562

Release Date: June, 2016

Copyright: 2016

Pages: 450

## Topics Covered:

- App-Based Teaching
- Educational App Development
- Information Sharing
- Mobile Communication
- Mobile Curriculum Design
- Mobile Learning
- Student Satisfaction
- Teacher Satisfaction
- Technology-Enhanced Learning

Hardcover +  
Free E-Access:

**\$300.00**

E-Access +  
Free Hardcover:

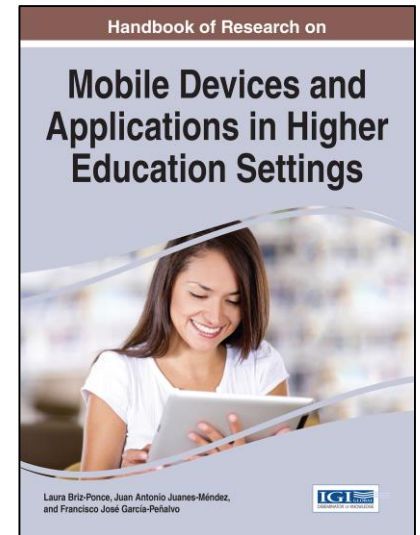
**\$300.00**

1 Year  
Online Subscription:

**\$140.00**

2 Year  
Online Subscription:

**\$235.00**



## Order Information

Phone: 717-533-8845 x100

Toll Free: 1-866-342-6657

Fax: 717-533-8661 or 717-533-7115

Online Bookstore: [www.igi-global.com](http://www.igi-global.com)



## Table of Contents

### Preface

### Acknowledgment

#### Chapter 1

Development Challenges of a Full Integrated app in Higher Education  
*Prof. Anabela Sousa Pereira, University of Aveiro, Portugal*  
*Prof. António Moreira, University of Aveiro, Portugal*  
*Dr. Paulo Chaló, University of Aveiro, Portugal*  
*Prof. Luís Sancho, University of Aveiro, Portugal*  
*Dr. Ana Varela, University of Aveiro, Portugal*  
*Dr. Carla Oliveira, University of Aveiro, Portugal*

#### Chapter 2

Do Mobile Technologies have a place in Universities? The TAM Model in Higher Education  
*José Carlos Sánchez Prieto, University of Salamanca, Spain*  
*Susana Olmos-Migueláñez, University of Salamanca, Spain*  
*Francisco José García-Peñalvo, University of Salamanca, Spain*

#### Chapter 3

Information Sharing and Communications with Mobile Cloud Technology-Applications and Challenges  
*Shantanu Pal, the University of St. Andrews, UK*

#### Chapter 4

Framework to Develop a Learning Analytics System for Smartphone Blended Learning Environment  
*Mazharuddin Syed Ahmed, University of Canterbury, New Zealand.*

#### Chapter 5

Net Generation Features that Enhance Mobile Learning  
*María Soledad Padrón Moctezuma, Sistema Educativo Estatal Regular, Mexico*  
*Miguel Ángel Vasquez Ochoa, Universidad Estatal de Sonora, Mexico*  
*María Soledad Montoya Ramírez, Tecnológico de Monterrey, Mexico*

#### Chapter 6

Academic Libraries' Mobile Initiatives and Research from 2010 to the Present: Identifying Themes in the Literature  
*Barbara Blummer, Center for Computing Sciences, US*  
*Jeffrey M. Kenton, Towson University, US*

#### Chapter 7

The Global Change App: The Creative Transformation of Scientific Research  
*Stephanie B. Borrelle, Auckland University of Technology, New Zealand*  
*Dr. Stanley Frielick Auckland University of Technology, New Zealand*  
*Dr. Roman Asshoff, Zentrum für Didaktik der Biologie, Germany*  
*Dr. Sebastian Leuzinger, Auckland University of Technology, New Zealand*

#### Chapter 8

Virtual Territorial Heritage in Education through mLearning resources: Cities of Salamanca Spain and Santiago of Chile

*Jorge Joo Nagata, Universidad Metropolitana de ciencias de la Educación, Chile*  
*Dr. José Rafael García-Bermejo Giner, University of Salamanca, Spain*  
*Dr. Fernando Martínez-Abad, University of Salamanca, Spain*

#### Chapter 9

A research contribution to the analysis of mobile devices in higher education from medical students' point of view  
*Laura Briz-Ponce, University of Salamanca, Spain*  
*Juan Antonio Juanes-Méndez, University of Salamanca, Spain*  
*Francisco José García-Peñalvo, University of Salamanca, Spain.*

#### Chapter 10

Bespoke Mobile Application Development: Facilitating Transition of Foundation Students to Higher Education.

*Nevan Bermingham, Dublin Institute of Technology, Ireland*  
*Dr. Mark Prendergast, Trinity College Dublin, Ireland*

#### Chapter 11

The Effect of using Mobile Devices on Students' Performance in Writing  
*Marielle Patronis, Zayed University, United Arab Emirates*

#### Chapter 12

Student Use of Cell Phones to Conduct Real-Time Polling  
*Dr. Sheri Stover, Wright State University, US*  
*Dr. Carol Patitu, Wright State University, US*  
*Dr. Roxanne DuVivier, Wright State University, US*

#### Chapter 13

Universities' Point of view to Introduce Mobile Devices in their Classrooms': Redefining Education using a Common Mobile Platform: The Journey through implementation  
*Dr. Victoria Cardullo, Auburn University, US*  
*LeNessa L. Clark, Auburn University, US*

#### Chapter 14

Mobile Journalism, Cellphilms and the Use of the StoryMaker Multimedia Software at a Zimbabwean Media Training University  
*Nhamo Antohony Mihiripiri, Midlands State University, Zimbabwe*  
*Oswelled Ureke, Midlands State University and University of KwaZulu, Zimbabwe and South Africa*

#### Chapter 15

STUMP: a model for the adoption, implementation and use of m-learning or e-learning platform.  
*Nana Kofi Annan, Wisconsin International University College, Ghana*

#### Chapter 16

The Impact of Social Media on Instruction in Higher Education  
*Dr. Pamela A. Lemoine, Columbus State University, US*  
*Dr. Paul Thomas Hackett, Columbus State University, US*  
*Dr. Michael D. Richardson, Columbus State University, US*

#### Chapter 17

Mobile Learning among Students and Lectures in the Developing World: Perceptions Using the UTAUT Model.  
*Lenandlar Singh, University of Guyana, Guyana*  
*Dr. Troy Devon Thomas, University of Guyana, Guyana*  
*Kemuel O. Gaffar, University of Guyana, Guyana*  
*Dwayne Renville, University of Guyana, Guyana*

#### Chapter 18

Engaging Students to Learn Physics and Mathematics through Short High Quality M-Learning Resources: Design and Implementation Recommendations  
*Dr. Luis Neri, Tecnológico de Monterrey, Mexico*  
*Dr. Julieta Noguez, Tecnológico de Monterrey, Mexico*  
*Jessica Morales Whitney, Pfizer, Mexico*  
*Gerardo Aguilar-Sanchez, Tecnológico de Monterrey, Mexico*

#### Chapter 19

Applied competences for students by using m-learning devices in Higher Education: Knowledge, skills and attitudes  
*José Alberto Herrera, Tecnológico de Monterrey, Mexico,*  
*Dr. Darinka del Carmen Ramírez Hernández, Tecnológico de Monterrey, Mexico*  
*Dr. María Soledad Ramirez, Tecnológico de Monterrey, Mexico*

#### Chapter 20

Exploring the use of mobile devices and applications to support Field Experience in Teacher Education Courses  
*Dr. Yiu-chi LAI, The Hong Kong Institute of Education, China*  
*Dr. Pui-wan Pamela LEUNG, The Hong Kong Institute of Education, China*  
*Dr. Tak-wah WONG, the Hong Kong Institute of Education, China*  
*Tze-leung Raymond YUEN, The Hong Kong Institute of Education, China*

#### Chapter 21

Instructor Perceptions and Intentions to Use a Tablet PC for Mobile Learning in a Ghanaian University: An Exploratory Case Study  
*Dr. Stephen Asunka, Ghana Technology University College, Ghana*

### Compilation of References

### About the Contributors

Laura Briz Ponce has a Bachelor Degree of Engineering of Telecommunications from Technical University of Madrid. She also holds a Master Degree of Business Administration from IE Business School. Currently is conducting a research study in University of Salamanca as part of her PhD Programme. She has developed her professional life in telecommunications sector, working as Project Manager and Product Manager. Her main research interests are m-learning, mobile technologies, Computers & Education, Medical Education, Higher Education and medical imaging technologies. In addition, she has participated in different congress and she is a reviewer of several international journals.

Juan Antonio Juanes Méndez is a permanent lecturer at the University of Salamanca, where he obtained his PhD in Medicine and Surgery, and a Software Technician by the Pontificia University of Salamanca. He is a member of the Experts' Board in ACADEMIA programme (Health Sciences Field), in the National Programme of Accreditation for Permanent Lecturers in Health Sciences, at the National Agency of Quality Assessment and Accreditation (ANECA). He is a professor of Human Anatomy and teaches at the Medicine, Psychology and Pharmacy Faculties. He teaches as well in different Master's programmes: Neurosciences, Clinical Neuropsychology and Communication and Information Technologies in Education. Moreover, he is also a teacher of the University Postgraduate Course on Dementia and Alzheimer diseases. Master en Física y Tecnología Médica He has been invited to take part in the Scientific Committee on Information and Communication Technologies (ICTs) in the Spanish Review of Medical Radiology. He coordinates the official research group Advanced Medical Visualization Systems, at the University of Salamanca; and collaborated with the research group: Grup d'Anatomia Virtual i de Simulació, del Centre de Recursos per a l'Aprenentatge i la Investigació, at the University of Barcelona. He has participated as director and collaborator in more than 30 funded research and innovation projects. He has been awarded with 14 research and teaching awards from Royal Medicine Academies and other national institutions. He is a co-author of 20 books of teaching kind. He has collaborated in different projects involving diverse medical and university centres of Spain. He has published more than 170 articles in international and national academic journals, and has delivered more than 350 papers at international and national conferences. The moment being, he has supervised 30 doctoral theses. He has delivered more than 60 lectures in courses, days and symposia. He has been a chair in sessions and round tables at different Conferences and Simposia.

Francisco J. García-Peñalvo holds a PhD in Computer Science (2000, University of Salamanca). He works as a Professor in Computer Science Department of the USAL. He is the GRIAL Group head. He was Technology and Innovation pro-Chancellor of the USAL in charge of the definition, planning and development of the USAL technical management strategy based on Open Source solutions. He has led MIH, TRAILER and VALS European projects. Now, he is the Editor-in-Chief of the International Journal of Information Technology Research and the Education in the Knowledge Society Journal. Besides he is the coordinator of the multidisciplinary PhD Programme on Education in the Knowledge Society.

### Order Information

Phone: 717-533-8845 x100

Toll Free: 1-866-342-6657

Fax: 717-533-8661 or 717-533-7115

Online Bookstore: [www.igi-global.com](http://www.igi-global.com)