

# TABLE OF CONTENTS

<b>Instructors' and Students' Perception towards Collaborative Technologies Using for Online Education</b> .....	1
<i>Danh Nguyen, Educational Psychology and Leadership, College of Education, Texas Tech University, United States; Lien Nguyen, Curriculum &amp; Instruction, College of Education, Texas Tech University, United States</i>	
<b>Application Process of a Learning Management System for Academia</b> .....	9
<i>Carol Munn, Eisenhower School, United States; Daniel Ward, New Jersey City University, United States</i>	
<b>Artificial Intelligence For Use In An Extra-Terrestrial Learning Environment</b> .....	32
<i>Jaime Reborn, University of North Texas, United States</i>	
<b>Podcasting our Co-Teaching Relationship: Two Notorious Pedagogues Charting their Journey</b> .....	43
<i>Matthew Kruger-Ross &amp; Pauline Schmidt, West Chester University of Pennsylvania, United States</i>	
<b>Integrating Online Student Reflection in a Constructively Aligned College Math Course: a faculty case study</b> .....	47
<i>Bruce Bukiet &amp; James Lipuma, New Jersey Institute of Technology, United States</i>	
<b>Assessing Learners from Diverse Backgrounds: A Literature Review of Current and Future Practices in K-12 and Higher Education</b> .....	57
<i>Kelly Torres, Aubrey Statti, Jessica Evans &amp; Ileana Torres, The Chicago School of Professional Psychology, United States</i>	
<b>Proven Results: The Faculty Driven Assessment Process</b> .....	60
<i>Jessica Fuda Daddio &amp; Manuel Rosa, Keiser University, United States</i>	
<b>The Relationship of Gender, School Attendance, and Grade Level with ACT English and Composite Test Scores</b> .....	64
<i>Shihua Brazill, Montana State University, United States</i>	
<b>From global to local and back: an education framework for the realization of the sustainable development goals</b> .....	70
<i>Ilse Wambacq, Montclair State University, United States; Koen DePryck, Vrije Universiteit Brussel, Inst. of Knowledge Mgmt and Int. Inst. of Education for Development, Belgium; Maryrose McInerney &amp; Janet Koehnke, Montclair State University, United States; Joan Besing, besingj@mail.montclair.edu, United States; Rachel Scheperle, Montclair State University, United States; Jerry Oldenstam, International Institute of Education for Development, Suriname</i>	

<b>Strategies for Enhancing Digital Reading Comprehension</b> .....	74
<i>Myrene Magabo, University of the Philippines Open University and University of Phoenix, United States; Elsie Walker, Faculty University of Phoenix., United States; Shelley Gordon, University of Maryland University College, University of Phoenix and Northcentral University, United States; Richard Kamerman, University of Grand Canyon and University of Phoenix, United States</i>	
<b>Exploring Evaluative Criteria and Production Training of Online Language-Teaching Videos</b> .....	83
<i>Wen-Chun Chen, National Chung-Cheng University, Taiwan, Taiwan</i>	
<b>Developing an Automated Course Alignment Tool: Part 1 the Alignment Process</b> .....	89
<i>Noha Elsherbiny &amp; Katherine Cennamo, Virginia Tech, United States</i>	
<b>Benefits of using quality matters and universal design for learning in developing an online statistics course</b> .....	96
<i>Melanie Shores, The University of Alabama at Birmingham, United States</i>	
<b>Moving from Data to Information – Implementing Explorance Blue in a School of Nursing</b> .....	102
<i>Linda Merillat, Washburn University, United States</i>	
<b>Future Ready Schools – New Jersey: A Collective Impact Success Story</b> .....	106
<i>James Lipuma, Cristo Leon &amp; Jeremy Reich, New Jersey Institute of Technology, United States</i>	
<b>Online Graduate Students’ Globalized Teaching and Learning Experience</b> .....	114
<i>Jiang Tan &amp; Daqi Li, SUNY Oneonta, United States</i>	
<b>LinkedIn as a Tool for Tracking IT Graduates</b> .....	119
<i>Glenda Barlow-Jones, Patrick Ndayizigamiye, Roelien Brink, Stella Bvuma, Rehana Minty &amp; Siyabonga Mhlongo, University of Johannesburg, South Africa</i>	
<b>Infusing 21-century AI skills into Traditional Undergraduate Engineering Curriculum</b> .....	124
<i>Yachi Wanyan, Texas Southern University, United States; Youmei Liu, University of Houston, United States</i>	
<b>Use of Enabling Technology to Enhance Self-Efficacy Beliefs and Social Capital Dispositions: Integrating ArcGIS in an Upper Level Business Course</b> .....	130
<i>Patrick Guilbaud, Matt Hayes &amp; Duha Hamed, Winthrop University, United States</i>	

<b>Innovating the Large Class Experience: Teaming Up! to enhance learning.</b> .....	144
<i>Franco Taverna, Human Biology Program, Faculty of Arts and Science, University of Toronto, Canada; Melody Neumann, Department of Cell and Systems Biology, Faculty of Arts and Science, University of Toronto, Canada; Michelle French, Department of Physiology, Faculty of Medicine, University of Toronto, Canada</i>	
<b>Developing a Game-based Collaborative Learning Method with Adaptive Guidance for Improving Mathematical Problem-Solving Achievement of Students with Disabilities</b> .....	148
<i>Hui-Chuan Chu, National University of Tainan, Taiwan; Chieh Yang &amp; Yuh-Min Chen, National Cheng Kung University, Taiwan; Min-Ju Liao, National Chung Cheng University, Taiwan</i>	
<b>Game Play: Fostering Empathy through Game-Based Learning</b> .....	154
<i>Lorraine Beaudin &amp; Olesha Ratther, University of Lethbridge, Canada</i>	
<b>Training Teachers on the use of Modding to Integrate Games in the Classroom</b> .....	162
<i>Alex Jean-Charles, Missouri State University, United States</i>	
<b>Increasing the Critical Thinking of TESOL Students in Asynchronous Online Discussions</b> .....	168
<i>Esther Smidt, West Chester University, United States; Timothy Kochem, Iowa State University, United States; Emily Dachroeden, West Chester University, United States</i>	
<b>The Benefits of a Peer-mentoring Program at a University in South Africa</b> .....	179
<i>Glenda Barlow-Jones, University of Johannesburg, South Africa</i>	
<b>The model of the Online Gifted Education Support System: By Analyzing FGI and Delphi Surveys</b> .....	184
<i>Yoojung Chae, Global Institute for Talented Education, KAIST, Korea (South)</i>	
<b>Increasing Participation in Instructional App Development</b> .....	191
<i>Ken Luterbach, East Carolina University, United States</i>	
<b>Literature Review of Multiple Intelligences</b> .....	195
<i>Aleen Khamo &amp; Aimee Johnson, The Chicago School of Professional Psychology, United States</i>	
<b>Who Fail to Achieve Mastery in Computer-based Learning Environments?</b> .....	201
<i>Soeyeon Park, Texas A&amp;M University, United States</i>	

<b>Adapting Teaching and Learning: The Role Adaptive Tutorials Played in Supporting a Flipped-Style Chemistry Course</b> .....	208
<i>Heather Weltman, Luke Hunter &amp; Steven Yannoulatos, UNSW, Australia; Samantha Furfari, Oxford, United Kingdom; Nadine Marcus, UNSW, Australia</i>	
<b>Could simulations replace physical manipulatives in early science education?</b> .....	214
<i>Zacharias Zacharia, Marios Papaevripidou &amp; Ivoni Pavlou, University of Cyprus, Cyprus</i>	
<b>Virtual Reality in Pharma Research and Development</b> .....	224
<i>Tom Vasko, i3Logic, United States; Kelly Voight, Pfizer, United States; Valerie Gamble, Pfizer Drug Safety Research and Development and i3Logic, United States; Tracey Trower, Pfizer Drug Safety Research and Development, United States; Cathy Reed-Voorheis, Doug Braunschweig &amp; Bonnie Beresford, i3Logic, United States</i>	
<b>Financial Literacy and the Digital Divide</b> .....	229
<i>Tyonia Wright, Department of Learning Technologies, University of North Texas, United States</i>	
<b>Affordances of Dual Online Video Modes</b> .....	233
<i>Wen-Chun Chen, National Chung-Cheng University, Taiwan, Taiwan</i>	
<b>How Instructional Design and User-Interface Principles Helped Us Develop an Online Academy for Learners with Mental Illness</b> .....	239
<i>Karen Richards, Amy Spagnolo, Rita Cronise &amp; Annette Backs, Rutgers, the State University of New Jersey, United States</i>	
<b>Educational Technology Professional Development Opportunities in South African Schools</b> .....	248
<i>Kelly Torres, The Chicago School of Professional Psychology, United States; Lord Giddie, TCS Education System, United States</i>	
<b>Longitudinal Blended Learning in a Low SES Elementary School</b> .....	253
<i>Paul Macaruso, Community College of Rhode Island, United States; Valerie Marshall &amp; Lisa B. Hurwitz, Lexia Learning Systems, United States</i>	
<b>A Blended Engineering Design Curriculum for Informal Settings: Wise Guys and Gals</b> .....	263
<i>Kristin Sroka &amp; Deborah Hecht, Center for Advanced Study in Education, United States; David Burghardt, Center for STEM Research at Hofstra University, United States</i>	
<b>Promoting Student Agency with Blended Learning: A Mixed Methods Research on the Impact of Perceived Autonomy on Course Experience</b> .....	268
<i>Luis Francisco Vargas-Madriz, University of Alberta, Canada</i>	

<b>Using Virtual Professional Development to Facilitate Engagement and Learning in Informal STEM Learning Environments .....</b>	<b>274</b>
<i>Alison Brockhouse &amp; Deborah Hecht, Center for Advanced Study in Education, The Graduate Center, CUNY, United States; David Burghardt, Center for STEM Research, Hofstra University, United States</i>	
<b>Exploring Factors Affecting Learning Engagement in an Online Education Program Using the Multilevel Model .....</b>	<b>281</b>
<i>Hyejin Park, KAIST Global Institute for Talented Education, Korea (South)</i>	
<b>Online Learning Success The Moderating Role of Hardiness, Resilience, Grit and Growth Mindset A Theoretical Overview .....</b>	<b>288</b>
<i>Wendy Barber &amp; Jill Harvey, Ontario Tech University, Canada</i>	
<b>How are the emotions of students with autism spectrum disorders in game-based e-learning associated with distinct patterns of physiological signals and facial expressions? .....</b>	<b>294</b>
<i>Hui-Chuan Chu, National University of Tainan, Taiwan; Yuh-Min Chen, National Chen Kung University, Taiwan; Min-Ju Liao, National Chung-Cheng University, Taiwan; Chieh Yang, National Chen Kung University, Taiwan</i>	
<b>Instructional Teams and Large Classes: How to Make a Large Class Small .....</b>	<b>300</b>
<i>Kim Livengood &amp; Kinsey Hansen, Angelo State University, United States</i>	
<b>Financial Literacy Improvement Project .....</b>	<b>306</b>
<i>Tyonia Wright, Department of Learning Technologies, University of North Texas, United States</i>	
<b>An Exploratory Factor Analysis of a Teaching Presence Instrument and the ICAP Framework in an Online Computer Applications Course .....</b>	<b>310</b>
<i>Laura McNeill, Margaret Rice &amp; Vivian Wright, University of Alabama, United States</i>	
<b>Critical explorations of online sources in a culture of "fake news, alternative facts and multiple truths" .....</b>	<b>439</b>
<i>Andrea Anderson &amp; Elaine Correa, California State University, Bakersfield, United States</i>	