# TABLE OF CONTENTS

**“Is the juice worth the squeeze?”**: ePortfolios and the Experiences of Faculty at the University of Alberta ................................................................. 1  
Pauline Nicholas, Jennifer Branch-Mueller, Martine Pellerin, Carol Tonhauser & Wei Wei, University of Alberta, Canada

**Write On: Digital Graphic Organizers Impact on Developing Writing Skills** ............... 7  
Amy Ackerman, Stockton University, United States; Karen Simmons, Millville Public Schools, United States

**Developing Computational Thinking: Approaches and Orientations in K-12 Education** ............................................. 13  
Stefania Bocconi, Augusto Chioccariello & Giuliana Dettori, Institute for Educational Technology, National Research Council (CNR) of Italy, Italy; Anusca Ferrari & Katja Engelhardt, European Schoolnet, Belgium; Panagiotis Kampylis & Yves Punie, European Commission, DG JRC Institute for Prospective Technological Studies, Spain

**Experiencing mobile learning of senior high school: From the perspective of college teacher** ................................................................. 19  
Eric Zhi-Feng Liu, National Central University, Taiwan; Chun Hung Lin, Chung Yuan Christian University, Taiwan

**Beliefs of In-Service Teachers About Using YouTube in Classrooms** ................. 21  
Mehmet Ozer & Gaspard Mucundanyi, New Mexico State University, United States

**An Authentic Online Community of Learning Framework for Higher Education: Development Process** ............................................. 26  
Jenni Parker, Murdoch University, Australia

**Exam performance and recorded lecture viewing: A closer look** ....................... 35  
Richard Pierce, Shenandoah University, United States; William Carosella, Shenandoah University, United States

**Online Calculus and Pre-Calculus Modules** ......................................................... 42  
Zohreh Shahbazi & Adon Irani, University of Toronto Scarborough, Canada

**Language Education for the Children with Mild Intellectual Disabilities By Utilizing Digital Storytelling** ................................................................. 52  
Jin-kyeong Shin, Korean National University of Education, Korea (South)

**Use Cases and Architecture of an Information system to integrate smart glasses in educational environments.** ......................................................... 57  
Michael Spitzer & Martin Ebner, Graz University of Technology, Austria
Constructivism Through Project Based STEM Transmedia ........................................... 65
Alicia Stansell, University of North Texas; Leander ISD, United States; Tandra Tyler-Wood, University of North Texas, United States

Personal Information Management in Educational Context: the importance of unification to information access ........................................................................... 69
Marco Winckler, Institute of Research in Informatics of Toulouse / Université Paul Sabatier, France; Thaise Costa, Department of Exact Sciences / Federal University of Paraiba, Brazil; Liliane Machado, Informatic Center / Federal University of Paraiba, Brazil; Ana Maria Valença, Department of Clinical and Social Dentistry / Federal University of Paraiba, Brazil; Ronei Moraes, Department of Statistics / Federal University of Paraiba, Brazil

The Changing Landscape of eLearning & eHealth .......................................................... 75
Wenxia (Joy) Wu, Eastern Virginia Medical School, United States; Leslie King, College of Healthcare and Public Administration, Franklin University, United States; Eunice Luyegu, Nova Southeastern University, United States

The CADARN Learning Portal - Presenting Educational Media as Inspirational Tasters of Higher Education and an Agent of Change for Teaching Practice in Wales ........................................................................................................................ 82
Thomas Bartlett & Daniel Pullin, CADARN Learning Portal, Aberystwyth University, United Kingdom

Young Engineers and Scientists of Africa: Creating a Culture for Developing Future Leaders of Innovation ................................................................. 88
Ron Beyers & Seugnet Blignaut, North-West University, South Africa

New Media Literacy of School Students in Singapore .................................................... 98
Der-Thanq “Victor” Chen, National Institute of Education, Singapore; Tzu-bin Lin, National Taiwan Normal University, Taiwan; Jen-yi Li & Ling Lee, National Institute of Education, Singapore

A Needs Analysis for Serious Games to Enhance Statistics Education ...................... 103
Lizanne Fitchat, TYELIT-SA, South Africa; Martin Booth, TELIT-SA, North-West University, South Africa; Seugnet Blignaut, North-West University, South Africa

Mobile Phones and LearningPerceptions of Austrian Students aged from 11 to 14 Years ......................................................................................................................... 112
Margarete Grimus & Martin Ebner, Graz University of Technology, Austria

Demographic Predictors of Social Media Usage among Pre-service Teachers ................................................................. 122
Wilfred W.F. Lau, Joey C.Y. Hung & Morris S.Y. Jong, The Chinese University of Hong Kong, China

Communication Technology Use by Japanese Exchange Students in America: Preliminary Findings ................................................................. 128
Douglass Scott & Shoji Nishimura, Waseda University, Japan
Building Digital Citizenship in Asia Pacific: A Review of Policy Readiness ................................. 129
Maria Melizza Tan, UNESCO Asia and Pacific Regional Bureau for Education (UNESCO Bangkok), Thailand; Jian Xi Teng, Consultant - UNESCO Bangkok, Singapore; Jonghwi Park, UNESCO Asia and Pacific Regional Bureau for Education (UNESCO Bangkok), Thailand

Tablets for a Redefinition of Learning? An Analysis of Video Observations to Determine the Integration of Tablets in the Classroom. ......................................................... 143
Jasmin Bastian, University of Mainz, Germany; Tim Riplinger, University of Mainz, Germany

Toward Student Engagement and Recognition: Developing a Digital Badge Roadmap ................................................................................................................................. 150
Veronica Diaz, EDUCAUSE Learning Initiative, United States

Asynchronous Threaded Discussions and Intercultural Learning: Student Sojourner Perspectives .................................................................................................................. 156
Jane Jackson, The Chinese University of Hong Kong, Hong Kong

Future Teachers’ Computational Thinking and Science Conceptual Changes using Scratch Programming ........................................................................................................... 168
Hanna Kim & Rachel Adler, Northeastern Illinois University, United States

Critical Power Dynamics in the Life Cycle of Online Tutorials: a Comparative Analysis .......................................................................................................................... 175
Adonis Amparo, University of South Florida/ Hillsborough Community College, United States

Service Learning: Preservice Teachers Create E-Books for Inner-City Young Children .......................................................................................................................... 183
Maria Bhattacharjee & Irene L. Chen, University of Houston Downtown, United States

Impact of an ePortfolio Faculty Learning Community on Course Design and Student Learning: A Progress Report on a Case Study ......................................................... 192
Devshikha Bose, Boise State University, United States

Lessons Learned: Implementing a Large-Scale Online Degree Program ........................................... 196
Steve Bounds, Arkansas State University, United States

Teaching Kids to Care: A Needs-Based Intervention to Increase Ethical Sensitivity in Schools ................................................................................................................... 203
Rebecca Friedman, Johns Hopkins University, United States
Cross-national research and publication by virtual team building .............................. 207
Stefanie A. Hillen, University of Agder, Norway; David F. Conway, Melodee Landis & Peter Wolcott, University of Nebraska at Omaha, United States; Mary T Schlegelmilch, Cisco / University of Nebraska Omaha, United States

Student perceptions of the use of multimedia for online course communication ................................................................. 214
Jaclyn Krause, Laura Portolese & Julie Bonner, Central Washington University, United States

Examining Developing Digital Competence in Teachers and Students Over Time: A Mixed Method Case Study of a School That Has Undertaken a Technological Shift in Its Educational Environment ................................................................. 223
Michel Leger & Viktor Freiman, Université de Moncton, Canada

Evaluation of an Instructional Design and Technology Master Level Program ........................................................................... 229
Enilda Romero-Hall, University of Tampa, United States

Moving beyond the hype: The formulation and implementation of a context-specific, integrated and sustainable strategy for the integration of ICTs in teaching and learning .................................................................................................................. 236
Arnold Schoonwinkel & Antoinette Van der Merwe, Stellenbosch University, South Africa

e-Literacy Skills Mismatches at a South African University: a Case Study ................. 242
Dina Van Vuuren Marais, Tshwane University of Technology, South Africa; Seugnet Blignaut, North-West University, South Africa

Analysis of Research into Synchronous and Asynchronous Learning Environments ........................................................................ 253
Adonis R Amparo, University of South Florida/ Hillsborough Community College, United States

Examining Language Learners’ Use of Learning Strategies and Linguistic Output using Synchronous Computer-Mediated Communication during Pre-Task Planning ............................................................................................................. 264
Chikako Aoki, Hokkai Gakuen University, Japan

Don’t Drop Me! - Using the Learning Management System to Alert Students About Their Pending Drop for Non-Payment Status ............................................................................. 270
Sue Bauer & Susan Hicks, University of Central Florida, United States

Examining Social Presence In A Professional Online Conference .................................................. 274
Luisa Castro, University of Hawaii at Manoa, United States
The Journey into Ba: A Phenomenology of Computer-Mediated Communications
Leticia De Leon, The University of Texas - Rio Grande Valley, United States; Kevin Feenan, Rockcliffe University Consortium, United States

Conversational Agents as Historical Figures: Persona Effects in the Absence of Visual Information
Bob Heller, Athabasca University, Canada

Students’ Preferred Media in Online Learning and Online Technology Self-Efficacy
Michiko Kobayashi, Southern Utah University, United States

Best Practices of Digital Inking for Student Engagement
Michael Lafreniere, Ohio University-Chillicothe, United States

Prolonged Educational Needs Analysis of Pre-service Teacher with Web-based Social Fiction Method
Dahwi Lee, Korean National University of University, Korea (South)

Application of Eye Tracking Technology as a Self-Evaluation Tool in the Training Program of Future Online Tutors
Gergely Rakoczi, Vienna University of Technology, Austria

EDR and Design Thinking: Enabling Creative Pedagogies
Thomas Cochrane & Joshua Munn, Auckland University of Technology, New Zealand

Curriculum mapping: An automated solution
Lesley Gardner, Andy Nguyen & Don Sheridan, University of Auckland Business School, New Zealand

Inter-Contextual Design: a New Model for Learning Technologies
Martti Havukainen & Keshav Gupta, University of Eastern Finland, Finland; Charl Wolhuter, North West University, South Africa; Erkki Sutinen, University of Turku, Finland; Teemu H. Laine, Ajou University, Korea (South)

How to Design Effective Healthcare Computer-based Simulation Games
Tuulikki Keskitalo, University of Lapland, Faculty of Education, Centre for Media Pedagogy, Finland; Heli Ruokamo, University of Lapland, Finland

Creative Needs Assessment in Instructional Design: Selected Examples
Stefanie Panke, University of North Carolina at Chapel Hill, United States
3D Printing & The Design Process: A Pilot Project Between University Student Teachers and Grade Four Students  

Marlo Steed, Faculty of Ed, University of Lethbridge, Canada; Mike Wevers, Mike Mountain Horse Elementary School, Canada

Investigating the Performance of Antecedents of Behavioral Intentions to Use Online Learning Technologies  

Paul Bazelaïs & Tenzin Doleck, McGill University, Canada

Students’ Learning Experiences of a Serious Food Service Management Game through the Lens of Eyetracking and Electroencephalography  

Seugnet Blignaut, North-West University, South Africa; Gordon Matthew & Chrisna Botha Ravyse, North-West University, Vaal Triangle Campus, South Africa

The Social Construction of Online 3D Cognition: A Qualitative Study with Elders on Word of Warcraft.  

Emmanuel Duplaa, Faculty of Education, University of Ottawa, Canada

Designing Universal Access for Open and Distance Learning through Human Centered Ecological Design (HCED)  

Gulsun EBY & Hakan Altinpulluk, Anadolu University, Turkey

Measuring Technology Acceptance of Makey Makey as an Input Device in a Human-Computer Interaction Class  

Miguel A. Garcia-Ruiz, Algoma University, Canada; Pedro C. Santana-Mancilla & Laura S. Gaytan-Lugo, University of Colima, Mexico

The Use of Mobile Elderly: A Case Study on Digital Learning Materials  

Tâssia Priscila Grande, Leticia Rocha Machado & Patricia Alejandra Behar, Universidade Federal do Rio Grande do Sul, Brazil

The utility of print: Student use of (e)textbooks in an ultrasound course  

Jenna Kammer & Sharlette Anderson, University of Missouri, United States

Investigation for The improvement of Electronic Textbooks  

Ikram Malti, CLLE lab (Cognition, Langue, Langage, Ergonomie)Editions Nathan, France; André Tricot, CLLE lab (Cognition, Langue, Langage, Ergonomie), France

Evaluations of Policies for Social Networking Use in Higher Education  

Gabriele Meiselwitz & Yuanqiong Wang, Towson University, United States

Eye-Tracking: A Cost-Effective Workstation for Usability Studies  

Andy Nguyen & Don Sheridan, University of Auckland Business School, New Zealand
Human Factors of Cybersecurity Awareness ................................................................. 436
Ludwig Slusky, California State University - Los Angeles, United States; James A. Goodrich, California State University, Los Angeles, United States

Using an environmental game to enhance students’ environmental protection learning ........................................................................................................... 445
Jon-Chao Hong & Ming-Yueh Hwang, National Taiwan Normal University, Taiwan; Kai-Hsin Tai, Department of Industrial Education, National Taiwan Normal University, Taiwan

App Game-Based Learning in Relation to Garden Science ........................................ 450
Ming-Yueh Hwang & Jon-Chao Hong, National Taiwan Normal University, Taiwan; Kai-Hsin Tai, Department of Industrial Education, National Taiwan Normal University, Taiwan

Design and Implementation of a Piano Learning Support System Considering Maintenance of Motivation ............................................................................................... 455
Yoshinari Takegawa, Yuto Fukuya & Hidekatsu Yanagi, Future University Hakodate, Japan

Indigenous Resurgence through Transformative Land-Based and Educational Technology Infused Courses .............................................................................................. 470
Kirsten Mikkelsen & Anna Gillis, Grande Prairie Regional College, Canada; Todd Ormiston, Camosun College, Canada; Scott Gerrity, University of Victoria, Canada

R.I.P. E-Mail * 1965 - # 2015 .......................................................................................... 475
Walther Nagler, Martin Ebner & Martin Schön, University of Technology Graz, Austria

Use of ICT to support Māori students’ learning .......................................................... 485
Sandra Williamson-Leadley, University of Otago College of Education, New Zealand

Theoretical Framework Regarding the Usability of Augmented Reality in Open and Distance Learning Systems ......................................................................................... 487
Hakan Altinpulluk & Gulsun Eby, Anadolu University, Turkey

Design of Distance Learning Systems Using a P-3 Model: Purposeful, Participatory and Project-Based ........................................................................................................ 493
Nella B. Anderson & Dean Gualco, Colorado State University-Global Campus, United States

Detecting Dummy Learner Submitted Annotations in an Online Case Learning Environment .............................................................................................................. 498
Tenzin Doleck, McGill University, Canada; Eric Poitras, University of Utah, United States; Laura Naismith, University Health Network, Toronto Western Hospital, Canada; Susanne Lajoie, McGill University, Canada
<table>
<thead>
<tr>
<th>Title</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Design Science MOOC: A Framework of Good Practice Pedagogy in a Novel E-Learning Platform eLDa</td>
<td>504</td>
</tr>
<tr>
<td>Daniel F. O. Onah &amp; Jane E. Sinclair, The University of Warwick, United Kingdom</td>
<td></td>
</tr>
<tr>
<td>Capacity Building using PhD Education in Africa</td>
<td>512</td>
</tr>
<tr>
<td>Mindel van de Laar, Shivani Achrekar, Larby Lucy &amp; Friederike Rühmann, UNU-MERIT and Maastricht University, Netherlands</td>
<td></td>
</tr>
<tr>
<td>Towards Autonomous Education Online</td>
<td>529</td>
</tr>
<tr>
<td>Harris Wang, Athabasca University, Canada</td>
<td></td>
</tr>
<tr>
<td>Online Student Evaluation of Teachers (SET) Database System: A Faculty Evaluation Tool</td>
<td>539</td>
</tr>
<tr>
<td>Yasele Irene Angela Yambao, UP Open University, Philippines</td>
<td></td>
</tr>
<tr>
<td>Implementation of a Web-based Programming Environment and Automated Grading System</td>
<td>545</td>
</tr>
<tr>
<td>Xue Bai, Ade Ola &amp; Soma Akkaladevi, Virginia State University, United States</td>
<td></td>
</tr>
<tr>
<td>The Relationship between Teacher Characteristics and Their Concerns in Adopting Learning Management Systems</td>
<td>553</td>
</tr>
<tr>
<td>Bianca Lochner, Rita-Marie Conrad &amp; Edward Graham, Walden University, United States</td>
<td></td>
</tr>
<tr>
<td>Using the Participatory Patterns Design (PPD) Methodology to Co-Design Groupware: Confer a Tool for Workplace Informal Learning</td>
<td>563</td>
</tr>
<tr>
<td>john Cook, UWE Bristol, United States</td>
<td></td>
</tr>
<tr>
<td>Evaluating Software for Affective Education: A Case Study of Affective Heuristics</td>
<td>573</td>
</tr>
<tr>
<td>Reza GhasemAghaei, Carleton University, Ottawa, Canada; Ali Arya &amp; Robert Biddle, Carleton University, Canada</td>
<td></td>
</tr>
<tr>
<td>Learning Analytics in MOOCs: Can Data Improve Students Retention and Learning?</td>
<td>581</td>
</tr>
<tr>
<td>Mohammad Khalil &amp; Martin Ebner, Graz University of Technology, Austria</td>
<td></td>
</tr>
<tr>
<td>Autonomic Assessments: An E-Learning Model</td>
<td>589</td>
</tr>
<tr>
<td>Joseph M Woodside, William Sause &amp; Shahram Amiri, Stetson University, United States</td>
<td></td>
</tr>
<tr>
<td>The Future Society that Multi-cultural Children’s Dream: Design Principles with Web-based Social Fiction</td>
<td>592</td>
</tr>
<tr>
<td>Hae-nu-ri Yoon, Korea national university of Education, Korea (South)</td>
<td></td>
</tr>
</tbody>
</table>
IQ-Wall: An Open Standard for Tiled Video Walls that Balances Flexibility, Usability, Performance, and Cost ................................................................. 597
Michael Boyles, Tassie Gniady, Eric Wernert, Chris Eller, David Reagan & Jeff Rogers, Indiana University, United States

The CADARN Learning Portal - Presenting Educational Media as Inspirational Tasters of Higher Education and an Agent of Change for Teaching Practice in Wales ......................................................................................................... 605
Thomas Bartlett & Daniel Pullin, CADARN Learning Portal, Aberystwyth University, United Kingdom

Access to Digital Learning Materials and Student Lecture Attendance Patterns ........................................................................................................ 611
Ben Kei Daniel, University of Otago, New Zealand; Rebecca Bird, University of Otago, New Zealand

iMethod: A Web-based Environment for Harvesting and Visualisation of Learning Analytics on Research Methodology ............................................. 618
Ben Kei Daniel, University of Otago, New Zealand, New Zealand

Building Collaborative Learning Communities in Online Courses .................................................. 622
Funda Ergulec, Indiana University, United States

Learning Management System Software Selection ............................................................................ 637
Malcolm Ferrier, British Columbia Institute of Technology, Canada

Mind vs. Machine: A comparison between human analysis and autonomous natural language processing in the classification of learning outcomes ................................. 641
Mark McMahon, Edith Cowan University, Australia; Michael Garrett, CingleVue International, Australia

Fostering Creativity in the Classroom through Animated Storytelling - Challenges and Potentials for Arts-integration in 21st. Century Learning ............................................. 650
Lisa Gjedde, Aalborg University, Denmark

Exploring the Role of SNS in Dialogic Construction ................................................................................. 654
Ying Tang & Timothy, K.F. Hew, The University of Hong Kong, Hong Kong

Increasing College Students' Engagement and Success Rates in Developmental Mathematics with Web-Based Technologies .................................................. 658
Mario Toussaint & Victoria Brown, Florida Atlantic University, United States
New conceptions for digital technology sandboxes: Developing a Fully Online Learning Communities (FOLC) model .......................... 665
Roland van Oostveen, University of Ontario Institute of Technology, Canada; Maurice DiGiuseppe & Wendy Barber, University of Ontario Institute of Technology, Canada; Todd Blayone, University of Ontario Institute of Technology, Canada; Elizabeth Childs, Royal Roads University, Canada

Team and community building online: Using technology to enhance the student experience ................................................................. 674
Jo Axe, Elizabeth Childs & BJ Eib, Royal Roads University, Canada

Petra Bauer, Johannes Gutenberg-Universität Mainz, Germany; Blair Stevensen & Janne Länsitie, Oulu University of Applied Sciences, Finland; Christian Kogler, University of Education Upper-Austria, Austria

Fashioning spaces for collaborationCross-disciplinary collaboration in fashion: a case study ................................................................. 686
Darren Gray & Katarina Rimarcikova, London College of Fashion, University of the Arts London, United States

Visualizing Design: Using Visuals to Create Quality, Learner-Focused Online Learning Environments .......................................................... 692
Amy Grincewicz, Kent State University, United States

An Analysis of Pair Programming as a Pedagogical Tool for Student Success in Computer Science at a Community College ........................................ 699
Lynette Jackson, Albertha Lawson, Moustapha Diack, Ebrahim Khosravi & Rachel Vincent-Finley, Southern University and A&M College, United States

Which strategies are most effective for kindergarten English language learners? ................................................................. 704
Rahime Filiz Kiremit, Necmettin Erbakan University, Turkey

A Classification of the Tablet PC Utilization -Activity example using by groups in public elementary, junior high and high schools- ........................................ 705
Yuki Kobayashi, Ibaraki University, Japan; Murai Masuo & Yukie Sato, Kanazawa Seiryo University, Japan; Hitoshi Nakagawa, The Open University of Japan, Japan

Supporting online health queries by modeling patterns of creation, modification and retrieval of medical knowledge ........................................ 711
Lauri Lahti, Aalto University School of Science, Finland
Transforming learning environments: Co-constructionism in higher education classrooms ................................................................. 719
Julia Parra & Susan W Bontly, NMSU College of Education, United States

A faculty-led community of practice approach to course development in online environments. ............................................................ 724
Erin Riesland, Jayme Jacobson, Jane Snare & Rick Fehrenbacher, Seattle University, United States

Development of Collaboration Scenario-Based Scale for Emotion Regulation .............................................................................. 729
Takashi Shibata, Graduate School of Integrated Science and Technology, Shizuoka University, Japan; Ritsuko Oshima & Jun Oshima, RECLS, Shizuoka University, Japan

Technology Enhanced Learning Environments Bridging the Distance: Connecting, Learning, and Thinking Online ............................. 734
Ruth Swart, University of Calgary, Canada

Collaborative knowledge in online learning environments. ........................................................................................................... 739
Ellen Taricani, Penn State, United States

Service Learning in Higher Education. How to Develop Social Entrepreneurship - Changemaker ................................................................. 744
Petra Bauer, Johannes Gutenberg-Universität Mainz, Germany

Co-teaching an Online Graduate Course in Designing Digital Instruction .............................................................................. 750
Violet Harada & Michael-Brian Ogawa, University of Hawaii, United States

Design for older adult cohorts: Insights from a series of digital storytelling workshops ........................................................................ 755
Simone Hausknecht, Michelle Vanchu-Orosco & David Kaufman, Simon Fraser University, Canada

Perceptual Training of Foreign Language and Self-efficacy: Consideration from Questionnaire Response after Longitudinal Training for Young Learners ........................................... 757
Yuko Ikuma, Osaka Kyoiku University, Japan

Professional Twitter for Preservice Teachers: Getting Started with a Professional Presence on Social Media ........................................... 761
Karen Johnson, West Chester University, United States
Exploring learners attitudes toward a social e-learning system: A case study of the Edmodo ................................................................. 764
Shu-Sheng Liaw, General Education Center, China Medical University, Taiwan; Hsiu-Mei Huang, Department of Information Management, National Taichung University of Technology, Taiwan; Yen-Ting Angela Liaw, Faculty of Arts, University of British Columbia, Canada; Yen-Hsiang Andrew Liaw, Department of Computer Science, Simon Fraser University, Canada

The Road from K-12 Ground and Mortar Campuses to Higher Education Virtual Classroom .......................................................................................................................... 770
Tina Nixon & Irene Chen, University of Houston-Downtown, United States

Utilising activity theory as a framework to evaluate the implementation of a virtual simulation educational tool .......................................................................................................................... 775
Madeleine Shanahan, School of Health and Biomedical Sciences, RMIT University, Australia

Preparing English Teachers of the 21st Century: Through the Multimedia Teaching Materials Course in a Master’s Program in Taiwan .................................................. 785
Yu-Chih Doris Shih, Fu-Jen Catholic University, Taiwan

Implementing MOOCs: Promise, Prospects and Lessons ............................................ 791
Lyudmila Smirnova, Mount Saint Mary College, United States; Michael Edelstein, Ramapo College of NJ, United States; Nellie Deutsch, University of Phoenix, Canada

Exploration of a Blended Learning Approach to Reading Instruction in Second Grade .................................................................................................................................. 797
Shani Wilkes, Lexia Learning, United States; Paul Macaruso, Community College of Rhode Island, United States; Elizabeth Kazakoff, Lexia Learning, United States; John Albert, California Elementary School, United States

Dana Tindall, The Christ College of Nursing and Health Sciences, United States; Kay Kyeong-Ju Seo, University of Cincinnati, United States

Designing and Implementing a Blended Professional Development Project - Lessons Learned ............................................................................................................................... 803
Mingyuan Zhang, Xiaoping Li & Amy Ford, Central Michigan University, United States

Possible Affordances of The Use and Production of Digital Texts to Better Accommodate a Competency-Based Approach in College-level ESL Courses ................................................................. 812
Nolan Bazinet, Université de Sherbrooke, Canada
Bilingual Digital Publication for Language Majors: An Exploratory Practicum ................................................................. 816
Wen-Chun Chen, National Chung-Cheng University, Taiwan, Taiwan

Prospective Teachers’ Use of Technology in Mathematics Instruction ......................................................... 823
Mustafa Demir, University of Detroit Mercy, United States

Online Dissertation Chairs’ Perceptions: Reflective Mentoring Practices and Changing Student Cross Cultural and Generational Worldviews ................................................................. 829
Barbara Fedock, University of Phoenix, United States

Blogging as a Means of Reducing Teacher Stress? Results of an Online Survey with the Basic Totality of Teachers Blogging about their Profession in Germany ................................................................. 833
Silke Günther & Lisa Wendt, Universität Hamburg, Germany

Teaching teachers to Teach with Non-Didactical Games ................................................................. 837
Silke Günther, Maria Hacker & Felix Hess, Universität Hamburg, Germany

“But All We Really Wanted was a Course!” Teacher Professional Development for Innovative Teaching with ICT ................................................................................................................................. 841
Hanne Wacher Kjaergaard, Aarhus University, School of Communication and Culture, Denmark; Simon Skov Fougt, Metropolitan University College, Department of School and Learning, Denmark

Technology Integration and Teacher Education: Learning with Technology ................................................................. 853
Edward Lomax, University of South Alabama, United States

A Comparison of Two Online Deliveries of a Statistics Course: Improving Classroom Teaching with Electronic Platforms ................................................................................................................................. 859
Kendra Mhoon, University of Houston Downtown, United States

Gamification: Combining components and design to create more effective classroom experiences. ................................................................................................................................. 863
Nancy Moreau, Northampton Community College, United States; Logan Dihel, Richland High School, United States

Flipping an Undergraduate Web Design Course ................................................................. 867
Philip Parisi, Lyndon State College, United States

Teachers’ Perceptions on the Use of a Mobile Math Learning Application in an Elementary Classroom ................................................................. 877
Sunmi Seol & Hye Kyung Lee, Enuma, Inc., United States
Scaffolding Inquiry Learning with Digital Graphic Organizers to Develop Writing Skills ................................................................. 887
Karen Simmons & Amy Ackerman, Stockton University, United States

Empowering Teachers and their Practices of Inclusion through Digital Dialogic Negotiation of Meaning in Learning Communities of Practice ........................................... 897
Hanne Voldborg Andersen & Elsebeth Korsgaard Sorensen, Aalborg University, Denmark

Best Practices and Strategies to Fully Utilize Tablets in the Elementary Classroom from the Teacher and Student Perspectives .......................................................... 898
Kody Willnauer, University of Kansas Graduate student in Educational Leadership & Policy Studies, Olathe Schools, United States

One-minute Paper as a Basis of Automatic Prediction of Student’s Grade .............. 903
Yoshio Yamagishi, Kanazawa Institute of Technology, Japan

Integrating Instructional Technology in Online Learning Environments ............... 910
Imani Akin & Crystal Neumann, American College of Education, United States

What Information Communication Technology (ICT) had been used in preschool education during the recent decade? ......................................................................... 914
Wing Sum Cheung, National Institute of Education, Nanyang Technological University, Singapore; Khe Foon Hew, University of Hong Kong, Hong Kong; Siew Lian Chua, National Institute of Education, Nanyang Technological University, Singapore

Using the Technology Acceptance Model to determine Teachers’ Attitudes towards the introduction of iPads in the Classroom. ................................................................. 921
Pamela Cowan & Jenna Earls, Queen’s University Belfast, UK, United Kingdom

Coaching teachers in using technology ...................................................................... 927
Simone Dinse de Salas, Carsten Rohlfs & Christian Spannagel, University of Education Heidelberg, Germany

Conceptualizing school-based teacher learning from teachers’ points of view: Holistically leveraging formal, informal, and independent learning activities ......................................................................................... 935
Monty Jones, Virginia Commonwealth University, United States; Sara Dexter, University of Virginia, United States

Rethinking teaching and learning at North-West University: The design of a high-collaborative multi-mode professional development program for newly-appointed faculty .......................................................................................................................... 946
Verona Leendertz, North-West University, South Africa
An Analysis of Online Course Ratings using the Community of Inquiry Theoretical Framework, Following Instructor Participation in San Diego State University’s Course Design Institute ................................................................. 954
James Marshall, Sean Hauze, Phil Denman, James Frazee & Mark Laumakis, San Diego State University, United States

What is the Subject for Student Teachers to Use ICT in Education?: Problem Analysis of Teacher Training’s Post-Survey ................................................................. 968
Takeshi Morishita, Shinshu University, Japan; Yoshiaki Fujii, Kamo Elementary School, Japan; Mitsunori Yatsuka & Yoshinori Higashihara, Shinshu University, Japan

Bringing Technology into the Classroom - One Iteration at a Time .......................... 974
Micki Zaritsky, Leah Doryoseph & Anat Goodman, University of Haifa, Israel

Analyzing the Effectiveness of an Interactive Method for Determining Student ER Reading Levels ................................................................. 982
Kurt Ackermann, Hokusei Gakuen University Junior College, Japan

Learning Motivation Assessment for High School Computer Science: Developing a Questionnaire for an Algorithm Learning Tool ................................................................. 986
Aimee Theresa Avancena & Akinori Nishihara, Tokyo Institute of Technology, Japan

A Look Back at "You Better Shop Around: Permitting a Student Preview of Course Syllabi" ........................................................................................................ 996
Sue Bauer & Susan Hicks, University of Central Florida, United States

WBT and Learning Motivation in Health and Nursing Education .................................. 1002
Lina Bern & Christine Schulmann, Fernuniversität in Hagen, Germany; Theo Bastiaens, Fernuniversität in Hagen (Germany) and Open University of the Netherlands (The Netherlands), Netherlands

A Tale of Two Backchannels ................................................................. 1010
Jeffrey Carpenter & Scott Morrison, Elon University, United States

Walking the Talk: Adding Value to the Higher Education Experience Through Innovative Technology Enhanced Learning ................................................................. 1016
Zarina Mariam Charlesworth, HEG Arc School of Business University of Applied Sciences W. Switzerland (HES-SO), Switzerland; Natalie B. Sarrasin, University of Applied Sciences W. Switzerland (HES-SO), Switzerland

Promoting Technology Uses in the Elementary Mathematics Classroom: Lessons in Pedagogy from Zoltan Dienes ................................................................. 1024
Michael Connell, University of Houston-Downtown, United States; Sergei Abramovich, State University of New York at Potsdam, United States
Exploration of Students’ Social Presence and Discussion Interaction Patterns in Online and Blended Course Sections ................................................................. 1032
Gayle V. Davidson-Shivers, Angela Doucet Rand, Sylvia E. Rogers & Angelia L. Bendolph, University of South Alabama, United States

Khan Academy: Learning and Self-Explanation .......................................................... 1040
Christopher Devers, Erin Devers, Thomas Lehman & Timothy Steenbergh, Indiana Wesleyan University, United States; Alexandra Alayan, Wheaton College, United States; Emily Ragsdale, Olivia Hayes, Kelsey Evey, Mackenzie Cook, Arthur Cobb, Kaylin Gandy & Dhiau Reng, Indiana Wesleyan University, United States; Marion Aitchison, Macquarie University, Australia

Video and Written Discussions ..................................................................................... 1045
Christopher Devers, Jon Conrad, Erin Devers & Mackenzie Cook, Indiana Wesleyan University, United States; Alexandra Alayan, Wheaton College, United States

How to demotivate students .......................................................................................... 1049
Jon Dron, Athabasca University, Canada

ICT and Feedback Practices in the Lower-Secondary Foreign Language Classroom ........................................................................................................................ 1057
Hanne Wacher Kjaergaard, Aarhus University, School of Communication and Culture, Denmark

Applying a Learning Outcomes Taxonomy to Ensure Digital Literacy in Undergraduate Units of Study ................................................................................................................. 1067
Mark McMahon & Joo Jung, Edith Cowan University, Australia

Online Teaching and Research: My Stories and Suggested Strategies ..................... 1074
Gayle V. Davidson-Shivers, University of South Alabama, United States

TPACK Assessment in English Language Arts for Teachers of English as a Foreign Language .......................................................................................................................... 1082
Amber Yayin Wang, National Taichung University of Education, Taiwan

Maximizing Millennial’s Mindsets through Multimodal Multimedia Design ........... 1088
Aileen Watts & Mohamed Ibrahim, Arkansas Tech University, United States

The Role of Self-Assessment in Coaching for Tech Integration: The Secret to Empowering, Equipping, and Inspiring Today’s Teachers to Become Tomorrow’s Leaders ............................................................................................................................. 1098
Katie Alaniz & Dawn Wilson, Houston Baptist University, United States
Educational Technology in Kuwait: Pre-service Teachers’ Perception and Intent ................................................................. 1102
Tojan Al-Sharef, Baaska Anderson & Janet Strivens, University of Liverpool, Kuwait

Tectonics informs Digital: Deep learning in the design class ................................. 1108
Antonieta Angulo & Guillermo Vasquez de Velasco, Ball State University, United States

Affordances and Constraints of a Blended Course in a Teacher Professional Development Program ................................................................. 1114
Nesrin Bakir, West Texas A&M, United States; Christopher Devers, Indiana Wesleyan University, United States; Barbara Hug, University of Illinois at Urbana-Champaign, United States

Nested Universal Design for Learning (UDL) in Hybrid Online Courses .................. 1127
Debra Bauder, University of Louisville, United States

Using Multimedia Solutions for Accessing the Curriculum Through a UDL Lens ........................................................................ 1134
Debra Bauder, University of Louisville, United States; Karen Ender, University of Louisville, United States

App Smashing: The Transfer of Innovative Multimedia Design from Teacher Education to the Secondary Level Classroom ................................................................. 1140
Aimee Brenner, Averett University, United States; Janel Hauser, Piedmont Governor’s School, United States

E-Readers as an Instructional Tool for Improving Comprehension for Students with Mild Reading Disabilities Or Does the Yellow Brick Road Lead to the Emerald City? ................................................................................................................................. 1147
Amy Camardese & Eileen Morelli, Westminster College, United States

The Changing Role of Post-Secondary Instruction for Non-Traditional Students: Partnering with Employers for Workplace Development ............................................ 1153
Jason Caudill, King University, United States

Application of scaffolding principles to support transfer of mathematical skills to entry-level algorithm design in a novice programming course. ................................. 1158
Carla Coetzee & Ulza Wassermann, Tshwane University of Technology, South Africa

Gameful Learning as a Teaching/Learning Strategy: Best Practices and Lessons Learned ............................................................................................... 1165
Sandra Davidson & Laurie Candy, University of Alberta, Faculty of Nursing, Canada

Forth to the Past: Digitizing Literature Classes ........................................................................ 1172
Dr. Eman Elsherief, Prince Sultan University, Saudi Arabia
The Role of Recorded Lectures in Online Math Courses. Sandra Fital-Akelbek, Weber State University, United States

Programming instruction with misconception diagnosis and correction Shu-Yu Hsu & Yu-Tzu Lin, National Taiwan Normal University, Taiwan; Xiao Hu, The University of Hong Kong, China

Assessing Preservice Teachers’ Metacognitive Skills in a Flipped Classroom Environment Mohamed Ibrahim & Aileen Watts, Arkansas Tech University, United States

A Formative Analysis of the Use of Blogging in Secondary School Mathematics Robin Kay & Tracy Murray, UOIT, Canada

Changing From Traditional to Blended, Flipped Instruction: Guidelines for Taking the Journey Jane Kenney & Ellen Newcombe, West Chester University of Pennsylvania, United States

Strategies for Applying Formative Assessment with an iPad in an Elementary School Sonia Lara, Universidad de Navarra, Spain; González Álvaro & Nicolás Muraciole, Irabia-Izaga School, Spain; Ángel Sobrino, Universidad de Navarra, Spain

Let the Games Begin! Or Not: Lessons Learned Utilizing On-line Fluency-Building Games To Enhance Certification Exam Preparation for Teacher Education Students Mary Lasater, Sherry Vafa & Ali Tavakkoli, University of Houston - Victoria, United States

Examining Cases of Co-Learning in Digital and Non-Digital Learning Environments Kerrigan Mahoney & Julie K. Marsh, The College of William and Mary, United States

What the students do online in blended learning environments: deep, surface and strategic approach Mike Mimirinis, Middlesex University, United Kingdom

Multimodal Method to Understand Real-world Learning Driven by Internal Strategies Masaya Okada, College of Informatics, Academic Institute, Shizuoka University, Japan; Yasutaka Kuroki, Faculty of Informatics, Shizuoka University, Japan; Masahiro Tada, Faculty of Science and Engineering, Kindai University, Japan
Metacognitive Skills Development: A Mobile Learning Approach among Pre Service Teachers ................................................................. 1258
Eunice Eyitayo Olakanmi & T. Mishack Gumbo, University of South Africa, Pretoria, South Africa

Scaffolding strategies for university students in the Family Guidance course ................................................................. 1266
Sonia Rivas, University of Navarra, Spain

Doing a Somersault: One English Language Arts Classroom Transforms by Flipping ............................................................. 1272
Shelly Shaffer, Eastern Washington University, United States

Educational use of social network sites: Are social media putting the ‘social’ in learning for international students? ............................................................. 1283
Jade Sleeman, La Trobe University, Australia

Getting Them Excited: Designing an online course based on the ARCS Model to encourage attention, relevance, confidence and student satisfaction in a general educational humanities class. ......................................................... 1289
Ingrid Steiner, Gnomon School of Visual Effects, United States

Kick-start your professional development and research eportfolio to enhance lifelong career opportunities ................................................................. 1292
Madhumita Bhattacharya, Tokyo Institute of Technology & New Paradigm Solutions Ltd., Japan; Steven Coombs, Hamdan Bin Mohammed SMART University & New Paradigm Solutions Ltd., United Arab Emirates; Mike Mimirinis, Middlesex University, United Kingdom

Teaching by demonstration: programming instruction by using live-coding videos ................................................................. 1294
Sheng-Rong Tan, Yu-Tzu Lin & Jia-Sin Liou, National Taiwan Normal University, Taiwan

Using Wikipedia to Teach Discipline Specific Writing ................................................................. 1299
Melissa Vosen Callens, North Dakota State University, United States

Using Multimedia Technology to Develop a DVD on Basic Economic Terms for Lower Grades High School Students in Jamaica ................................................................. 1304
Bilhatu Simon M. Yalams & Simon Madugu Yalams, University of Technology, Jamaica

Demonstration of a Web-based Programming Assignment Management System ................................................................. 1308
Xue Bai, Ade Ola & Soma Akkaladevi, Virginia State University, United States
Effect of 3D Printing in Living Technology Course on Technological Creativity
Tsan-Chieh Huang, Yu-Tzu Lin & Cheng-Chih Wu, National Taiwan Normal University, Taiwan; Yu-Ying Huang, New Taipei Municipal Hsin Tien Senior High School, Taiwan

The Dynamic Landscape of Higher Education: The Role of Big Data and Analytics
Hamidreza Mahroeian & Ben Kei Daniel, University of Otago, New Zealand

Virtual Environments for Education: An Empirical Study of Implementing Education into 3D Video Games and Applications
Cheryl Swanier, Cheryl Seals & Robertson Bassy, Auburn University, United States

Teaching About Water Contamination: Camp Lejeune A Digital Inquiry
Carolyn VanZandt, University of Central Florida, United States

Virtual and Augmented Reality as Cognitive Tools for Learning
Nick Zap & Jillianne Code, University of Victoria, Canada

Enhancing children’s understanding of complex systems: A study of the design considerations of an effective learning environment
Reyhaneh Bastani, University of Calgary, Canada

Open badges in online learning environments: Peer feedback and formative assessment as an engagement intervention for promoting agency
Stylianos Hatzipanagos, Kings College London, United States; Jillianne Code, University of Victoria, Canada

Competency-based Curriculum for Digital Fabrication and Makerspaces
Mi Song Kim, University of Western Ontario, Canada; Job Ruters, Ontario College of Art and Design University, Canada

Flipped Learning Design: Experiences in Making Students Engaged
Mei-Chin Lin & Gregory Ching, Graduate School of Educational Leadership and Development, Fu Jen Catholic University, Taiwan, ROC, Taiwan

Conversational Agents as Historical Figures: Individual Differences and Perceptions of Agent and Social Presence
Bob Heller, Athabasca University, Canada

Presentation Skills Training by Using a 360 Degree Camera
Yuichiro Yamashita, Tohoku Fukushi University, Japan; Nakajima Taira, Tohoku University, Japan
# Literacy-Centric Technology Tools and Social Creativity
Natalie Duvall, Johns Hopkins University, United States; Matthew Duvall, Drexel University, United States

# Learning Effectiveness of Adaptive Learning in Real World Context
Ioana Ghergulescu, Conor Flynn & Conor O'Sullivan, Adaptemy, Ireland

# The Impact of a Technology Based Mobile Hands-on Pedagogy on Student Learning, Course Design and Faculty Perceptions of Use in STEM Education
Kathy Gullie & Dianna Newman, University at Albany/SUNY, United States

# Effective use of digital technologies in public high schools of Montevideo and outcomes
Susana Lamschtein, Faculty of Social Sciences, University of the Republic, Uruguay

# Exploring creativity, innovation, and value during a library event: Extending feedback and assessment to interactive places and spaces
H. Patricia McKenna, AmbientEase, Canada; Sarah A. Chauncey, Rockland BOCES, United States

# Investing in Innovation: A Technology-Based Solution to Improving Early Literacy Skills
Haya Shamir, Claudia Miner, Ann Izzo, Kathryn Feehan & Erik Yoder, Waterford Research Institute, United States

# Using Technology to Improve Reading and Math Scores for the Digital Native
Haya Shamir, Kathryn Feehan & Erik Yoder, Waterford Research Institute, United States

# Evaluation of Online Learning Materials with Automatically Collected Interaction Data
David Sichau & Lukas Fässler, ETH Zurich, Switzerland

# The “LABVIDEOTORY” – Online Instructional Videos Enhance Student Learning of Practical Skills in the Undergraduate Science Laboratory
Jastaranpreet Singh, Danielle Denisko & Alistair Dias, University of Toronto, Canada

# Back and Forth Exploration in Reflective Educational Practices by Using the Video Tool “CAVScene”
Sachie Suizu & Ikuko Gyobu, Ochanomizu University, Japan

# Evaluation of E-Textbook Quality Using the Refined Kano Model and Importance-Satisfaction Analysis
Weishen Wu, Da-Yeh University, Taiwan
Adoption and use of social media in learning and teaching - A cross cultural case study ................................................................................................................................. 1464
Pekka Makkonen, University of Jyväskylä, Finland; Kerstin Siakas, ATEI Thessaloniki, Greece; Elli Georgiadou & Harjinder Rahanu, Middlesex University, United States

A Scheduling Algorithms Visualizer using JavaScript ................................................ 1472
Kyohei Nishiyama, Graduate School of Engineering, Kagawa University, Japan; Koji Kagawa & Yoshiro Imai, Faculty of Engineering, Kagawa University, Japan

Cyberscavenger: Support Student Creation and Sharing of Location-Based Evidence Related to Learning Goals ............................................................................................. 1479
Youwen Ouyang, Computer Science and Information Systems, United States; Katherine Hayden, California State University San Marcos, United States

How Do We Prepare Vocational Teachers for the Demands of the Digital World? From Paper Prototype to Teacher Training ................................................................. 1487
Päivi Aarreniemi-Jokipelto, Haaga-Helia University of Applied SciencesSchool of Vocational Teacher EducationFinland, Finland

webAD: Visualizing Algorithms and Data Structures in Educational Environment ..................................................................................................................... 1496
Volodimir Begy & Erich Schikuta, University of Vienna, Austria

Predicting User Learning Performance From Eye Movements During Interaction With a Serious Game ................................................................................................................. 1504
Asma Ben Khedher & Claude Frasson, University of Montreal, Canada

“I fired the chef!” Simulation gameplay for enhancing food service management skills ................................................................................................................................. 1512
Chrisna Botha-Ravyse, TELIT-SA North-West University South Africa, South Africa; Susanna Hanekom, AUTHeR, North-West University, South Africa, South Africa

Standards and Tools for Designing and Developing Interactive Documentaries that Bring About Social Involvement and Change .............................................................. 1521
Susan Cardillo, Piedmont College, United States; Anne-Marie Armstrong, Franklin University, United States

Augmented-Reality as a Scaffolding Tool for Learning Geometry ............................. 1531
Ming-Puu Chen & Cheng-Che Tsai, National Taiwan Normal University, Taiwan

A Dashboard for Affective E-learning: Data Visualization for Monitoring Online Learner Emotions .......................................................................................................................... 1536
Reza GhasemAghaei, Ali Arya & Robert Biddle, Carleton University, Ottawa, Canada
A Multimedia Enriched Problem-Based Learning Environment: Our Research and Development Experiences ................................................................. 1544
Lucas Horton, Min Liu, Sa Liu, Jina Kang, Jeff Hodson & Wenting Zou, The University of Texas at Austin, United States

Comparing Flipped, Active, and Lecture-Based Teaching Approaches in Higher Education .................................................................................................. 1559
Robin Kay, UOIT, Canada; Thom MacDonald, Durham College, Canada

Proposal of a Positioning Learning Support System for Violin Beginners incorporating False and Vague Information ........................................................................... 1566
Marimo Kumaki, Yoshinari Takegawa & Keiji Hirata, Future University Hakodate, Japan

The Effectiveness of Virtual Science Experiments ................................................................. 1577
Hiroshi Matsuda & Yoshiaki Shindo, Nippon Institute of Technology, Japan

Adoption and Integration of Online Learning Environments in Higher Education Institutions: Two Cases from Turkey ................................................................. 1586
Asil Ali Özdo#ru, Üsküdar University, Turkey; Ozan Varl#, Koç University, Turkey

Visual Spatial Math Training Tool: An iPad Application for Training Visual-Spatial Abilities in Preschoolers ................................................................. 1594
Tahereh Pazouki & Véronique Cornu, University of Luxembourg, Luxembourg Centre for Educational Testing (LUCET), Luxembourg; Romain Martin, University of Luxembourg, Luxembourg

NatureWatch 2.0: Reconnecting Canadians with Nature in a Digital Age .................. 1603
Richard G Pinet, University of Ottawa, Canada

A Framework for Designing Instructional Computer-Based Simulations: Research-Based Strategies for Appropriate Design ................................................................. 1604
Enilda Romero-Hall, University of Tampa, United States

Contextualizing Motivational Interviewing Through Cognitive Apprenticeship .......... 1612
Zach Warner, University of Cincinnati, United States

Exploring the Embodied Interactive Learning Effects – Designing an Instructional Scenario with Unity3D and Kinect V2 Sensor ................................................................. 1618
Xinhao Xu, Fengfeng Ke & Dan Huang, Florida State University, United States

Cyber-CYP: A Student Self-Directed Interactive Animation Tool for Learning Cytochrome P450 ............................................................................................................ 1624
James Doyle & Judy Teng, Albany College of Pharmacy and Health Sciences, United States
Mobile Apps for 21st Century Skills: A Quantitative Analysis of Educational Mobile Apps on Graphite.org .......................................................... 1630
Tuyet Hayes, University of Hawaii at Manoa, United States

Detecting Learners’ Hesitation in Solving Word-Reordering Problems with Machine Learning for Classification .......................................................... 1638
Yoshinori Miyazaki, Naho Atsumi & Mitsumasa Zushi, Shizuoka University, Japan; Ken Norizuki, Shizuoka Sangyo University, Japan

Development of Mapping Application with Tablet Type Terminals for Visualization of Students’ Thinking .......................................................... 1647
Hitoshi Nakagawa, The Open University of Japan, Japan; Masuo Murai & Yukie Sato, Kanazawa Seiryo University, Japan; Yuki Kobayashi, Ibaragi University, Japan; Naruyoshi Tabe & Junnosuke Abe, Sky Co., Ltd, Japan; Aritomo Iwasaki, Iwami Junior High School, Japan

SAITE Store: a tool to improve elderly health .......................................................... 1653
Ana Emilia F de Oliveira, Rômulo Martins França & Elza Bernardes Ferreira, UNA-SUS/UFMA, Brazil; Paulo R Volpato Dias & Marcia M Pereira Rendeiro, UNA-SUS/UERJ, Brazil; Sabastião B de Brito Filho, UFMA, Brazil

What is your eLearning Swiss Army knife? .......................................................... 1660
Jane Snare, Seattle University, United States

YouTube in the Classroom: A Scoping Review of the Research Literature ........................................................................................................... 1661
Chareen Snelson, Boise State University, Department of Educational Technology, United States

It Just Clicked! Designing and Producing Interactive Modules in a Flipped Calculus Course ................................................................................ 1667
Paula Torres, NYU Information Technology, United States; Selin Kalaycioglu, NYU Courant Institute of Mathematics, United States

Enhancing Student Success: Disseminating a Growth-Mindset and Social-Belonging Intervention with Smartphones ........................................ 1674
Christopher Devers, Douglas Daugherty, Timothy Steenbergh, Jason Runyan & Lorne Oke, Indiana Wesleyan University, United States; Alexandra Alayan, Wheaton College, United States

Learning Mathematics is Fun: An Expression of “little ones” in STEM using Digital Storytelling tools ............................................................. 1678
Albertha Lawson & Temitope Olokunde, Southern University and A&M College, United States

Examining Children’s Interactions with Mathematics Virtual Manipulatives on iPads: Proactive and Reactive Attribute Modification ................... 1683
Stephen Tucker & Teri Johnson, Virginia Commonwealth University, United States
Virtual Reality and Empathy Education: Exploring the Intersection of Human Technology Interaction, Social Intelligence, and the Social Construction of Technology

Giuliana Cucinelli, Concordia University, Canada

Readiness of Forklift Operators to Train with Serious Games

Pieter De Villiers, TELIT, North-West University, South Africa; Seugnet Blignaut, North-West University, South Africa

Improving digital competence in teacher training: the design and implementation of learning tasks in 3D virtual learning environments

Mercè Gisbert, Vanessa Esteve-González & Jose Luis Lázaro, Universitat Rovira i Virgili, Spain

Fostering Collaboration in a Virtual World: Sustaining Mutual Engagement

Joe Sanchez, Rutgers, The State University of New Jersey, United States

Applying Virtual Reality to Business Simulations for E-Learning

William Sause, Joseph Woodside & Shahram Amiri, Stetson University, United States

Improving digital competence in teacher training: the design and implementation of learning tasks in 3D virtual learning environments

Mercè Gisbert, Vanessa Esteve-González & Jose Luis Lázaro, Universitat Rovira i Virgili, Spain

Knowledge management and explorative teaching/learning with a blog - Forschungscommunity

Petra Bauer, Johannes Gutenberg-Universität Mainz, Germany; Fabian Geib, Johannes Gutenberg University Mainz, Germany; Maresa Getto, Johannes Gutenberg-University, Germany

Big Data to Knowledge Open Educational Resources: Development and Dissemination Considerations

Bjorn Pederson, Nicole Vasilevsky, William Hersh, Shannon McWeeney, Melissa Haendel & Jackie Wirz, Oregon Health and Science University, United States

OER Assistant: Finding Learning Materials with Text Analytics

Russell Walker, DeVry University, United States

E-Learning Facilities Usage Assessment by Economic and Management Science (EMS) Teachers in Eastern Cape Province, South Africa

Emmanuel Olusola Adu, University of Fort Hare, South Africa

Perceptions of Peer Review using Cloud-based Software

Gjoa Andrichuk, BC Institute of Technology, Canada

Games that work - Increasing student engagement and learning in the classroom through gamification and games

Marguerite Cronk, Harding University, United States
DSM-5 and ICF Online Tools: Cultural and Environmental Applications

William Garner, University of Arkansas at Little Rock, United States

Facebook in schools.

Elias Goulart, University of Sao Caetano do Sul, Brazil; Päivi Aarreniemi-Jokipelto, HAAGA-HELIA School of Vocational Teacher Education, Finland

Implementation and Experiences with a Learning Management System in an Urban Secondary School

Heather Holbrook, Gwinnett County Public Schools, United States; Samuel Jennings, Radford University, United States

Connecting University Early Childhood & Family Educators’ Democratic Innovation Experiences with Student iPads to Pedagogical and Cultural Shifts

Nicole Masek, Texas Woman’s University, United States

Online Learning Options for Rural Schools: A Blended Learning Experiment

Mark Miller & Amy O’Brien, Buckeye Local School District, United States

Enhancing the Flipped Classroom Experience with the Aid of Inclusive Design

Jorge Reyna, University of Technology Sydney (UTS), Australia; Yvonne C Davila & Peter Meier, University of Technology Sydney, Australia

Universal Design Best Practices: Recommendations for Blended and Online Learning in Higher Education with Instructure Canvas

Candice-Ann Kar-On Lee, Simon Fraser University, Canada

Emerging Technologies for Face-to-face and online teachers: Use of Tablets

Mamta Roy, Cleveland State University, Cleveland, OHIO, USA; Regina Giraldo-Garcia, Cleveland State University, United States; Anup Sam Mathew, Cleveland State University, United States; Ursula Matias, Cuyohoga Community College, United States; Indraneel Bommisetty, Devi Learning Solutions, India


Laurie O. Campbell & Tracey Planinz, University of Central Florida, United States; Melodi Miller, The University of Central Florida, United States