Conference title:
E-Learn 2015
World Conference on E-Learning

Dates: October 19-22, 2015

Location: Kona, Hawaii

Venue: Waikoloa Beach Marriott Resort & Spa

Conference Chairs/Proceedings Editors:
Curtis Ho & Grace Lin, University of Hawaii, USA

E-Learn 2015 proceedings:
http://www.editlib.org/j/ELEARN/v/2015/n/1/
Dear reader,

These are the proceedings of E-learn 2015, the renowned annual World Conference on E-learning, which took place this year in the beautiful, exotic location of Kona, Hawaii. This great venue in the Waikoloa Beach Marriott Resort & Spa was perfect for our pre-conference workshops, keynotes, paper presentations and poster sessions. The “Big Island” was also an excellent backdrop for our social activities. In general, a perfect combination for a week full of knowledge, networking, reflection and professionalization for the many participants from 32 different countries. Because of the location, people sometimes ask me why we have to organize a working conference in a tourist location, as Hawaii obviously is. For the executive committee, there is one main reason to do that, which has to do with the geographical location of Hawaii and the easy access to it from Asia and Oceania. Once every 5 years we want to make it a little bit easier for our good colleagues and friends from that region to join us at E-learn. For many others, the travel is then a little bit harder, but the conference overall benefits from a wider attendee base and a broadened network of researchers, educators, and professionals working on the cutting edge of e-learning.

This year’s E-learn again covered many different topics from the ever-present MOOCs to learner analytics to more rare topics such as personal innovativeness and semantic text theme generation. It is all included in these proceedings. Noteworthy to mention are also the outstanding award papers. Take a closer look at these. All 5 award papers will be included in AACE’s book *Education and Information Technology Annual 2016: A Selection of AACE Award Papers*. This book is free for download and will available in the EdITLib Digital Library in Spring 2016.

Since we’ve already begun preparations for E-learn 2016, I can tell you that we are already expecting wonderful new keynotes and invited speakers. We hope that we also can again offer many great pre-conference workshops. However, for that we also need your help. If you are an expert in a certain topic please consider a proposal for a workshop. I’m sure that your colleagues are eager to learn from you!

Wishing you all the best until next E-learn,

Theo Bastiaens
Chair of the Executive Committee
E-LEARN COMMITEES

EXECUTIVE COMMITTEE

Chair: Theo Bastiaens - Fernuniversität in Hagen, Germany & Open University of The Netherlands, The Netherlands
Local Program Chairs: Curtis Ho & Grace Lin, University of Hawaii, USA
Immediate Past Chair: Curtis J. Devers - Indiana Wesleyan University, USA

Immediate Past Chair: Curtis Bonk - Indiana University, USA

Jon Dron - Athabasca University, Canada (2014-2017)
Gary Marks, AACE, USA
Charles Miller, University of Minnesota, USA (2012-2017)
Mimi Miyoun Lee - University of Houston, USA (-2017)
Stefanie Panke - University of North Carolina, USA (2012-2017)
Thomas C. Reeves - The University of Georgia, USA

Tom Reynolds - National University-San Diego, USA

PROGRAM COMMITTEE

Caroline Akhras, Notre Dame Univ., Lebanon
Mara Alogic, Wichita State Univ., USA
Naji Al-Qa’ait, Princess Alia Univ. College, Al-Balqa’ Applied University, Jordan
Pete Alston, Univ. of Liverpool, United Kingdom
Valerie Amber, National Univ., USA
Panagiotis Anastasiades, Univ. of Crete, Greece
Yayoi Anzai, Kyushu Univ. Center for Research on Educational Testing, Japan
Leanna Archambault, USA
Michael Barbour, Sacred Heart Univ., USA
James Bartlett, North Carolina State Univ., USA
Theo Bastiaens, FernUniv. in Hagen (Germany) and Open University of The Netherlands (The Netherlands), Netherlands
Scott Beckstrand, College of Southern Nevada, USA
Dustin Bessette, American Meridian Univ., USA
Curtis J. Bonk, Indiana Univ., USA
Curtis J. Bonk, Indiana Univ., USA
Evelyn Brown, Wiley College, USA
Kim L. Brown-Jackson, National Graduate School, USA
Muhammad Abd Hadi Bu’ranyamin, Univ. of Minnesota-Twin Cities, USA
Lawrence Cantoni, Switzerland
Glenda Cartwright, Post Univ., USA
Kan Kan Chan, Univ. of Macau, Macau
Steve Chen, Hudson Valley Community College, USA
Wei-Fan Chen, Penn State Univ., USA
Xi Chen, Texas Tech Univ., USA
Ye Chen, Syracuse Univ., USA
Yin Ling Cheung, Nanyang Technological Univ., Singapore
Hannah Choi, Univ. of Illinois at Urbana-Champaign, USA
Leon Combs, Professor and Head Emeritus, Miss. State Univ., USA
Paul De Bra, Eindhoven Univ. of Technology, Netherlands
Stevi Dram, Univ. of Winnipeg, Canada
Martin Ebner, Department of Social Learning / Graz Univ. of Technology, Austria
Gulsun Eby, Anatolou Univ. of Open Education, Turkey
Larry Ferguson, Norfolk State Univ., USA
Karen Ferreira-Meyers, Univ. of Swaziland, Institute of Distance Education, Swaziland
Denise Ferris, BRAC Uganda People’s Unl., Canada
Solen Feyissa, Univ. of Minnesota, Twin Cities, USA
Alkyna Finch, Strayer Univ., USA
Jennifer Florida, Far Eastern Univ., Philippines
Garry Forger, The Univ. of Arizona, USA
Robert Fox, Centre for Information Technology in Education, Hong Kong
Brigitta Goeres, PanaLearning, Canada
Stephanie Golden, IF&Academy of Teaching and Learning, USA
Wu He, Old Dominion Univ., USA
Janette Hill, The Univ. of Georgia, USA
Curtis Ho, Univ. of Hawaii, USA
Hui-Yin Hsu, New York Institute of Technology, USA
Kun Huang, Univ. of North Texas Health Science Center, USA
Bowen Hui, Univ. of British Columbia Okanagan, Canada
Andrew Hunt, Univ. of Arkansas at Little Rock, USA
Rosanna Ibarra, New Era Univ., Philippines
Pamela Johnson, Department of State, USA
Jared Keengwe, Univ. of North Dakota, USA
Jolene Kennedy, Univ. of Minnesota, USA
Linda Kieffer, Eastern Washington Univ., USA
Mi Song Kim, Univ. of Western Ontario, Canada
Seung Kim, Lewis Univ., USA
Maria Kordaki, Univ. of the Aegean, Greece, Greece
Daryl Ku, Univ. of Melbourne, Australia
Yu-Chun Kuo, Jiangsu State Univ., China
Yu-Tung Kuo, Purdue Univ., USA
Richard N. Landers, Old Dominion Univ., USA
Angela M. Lee, Univ. of Nevada, Reno, USA
Mimi Miyoun Lee, Univ. of Houston, USA
David Levine, St. Bonaventure Univ., USA
Kun Li, Ohio Univ., USA
Meng-Fen Grace Lin, USA
Fuchang Liu, Wichita State Univ., USA
Bianca Lochner, Walden Univ., USA
Laura Lowder, Pfeiffer University of Florida, USA
Eunice Luyegu, Nova Southeastern Univ., USA
Janette Hill, The Univ. of Georgia, USA
Eunice Luyegu, Nova Southeastern Univ., USA
Kun Li, Ohio Univ., USA
Catherine McLoughlin, Australian Catholic Univ., Australia
Christina Metaxaki-Kossionides, Univ. of Thrice, Greece
Fnu Mihir, Univ. of Arkansas - Fort Smith, USA
Robert Moody, FHSU, USA
Patrick Mose, Ohio Univ., USA
Nellie Muller Deutsch, Univ. of Phoenix, Canada
Hasan Mustafa, Educational Banca Univ. Banha - Egypt, Currently with Al-Baha University, Saudi Arabia
Thanh Truc Nguyen, Univ. of Hawaii at Manoa, USA
Hermann Maurer, Graz Univ. of Technology, Austria
Jonathan McKeown, Univ. of Tampa, USA
Catherine McLoughlin, Australian Catholic Univ., Australia
Paulina Pannen, Directorate General of Higher Education Ministry of Technology, and Higher Education, Indonesia
Torsten Reiners, Curtin Univ., Australia
Vytasauj Reklatis, Kaunas Univ. of Technology, Lithuania
Paul Resta, The Univ. of Texas at Austin, USA
Tom Reynolds, National Univ., USA
Sherra Lee Robinson, Newfoundland and Labrador English School District, Canada
Maria Rossario Rodavía, National Univ., Philippines
Guido Roessling, TU Darmstadt, Germany
Allison Rossett, San Diego State Univ., USA
Regina Royer, Salisbury Univ., USA
Jaime Sánchez, Univ. of Chile, Chile
Ieda M. Santos, Emirates College for Advanced Education, United Arab Emirates
Joyce Seitzinger, Faculty of Health, Deakin Univ., New Zealand
Christine Smith, Canada
Mark Smith, The Univ. of New Mexico, USA
Alexandru Spatariu, Houston Baptist Univ., USA
David Stock, Cayman Islands Civil Service College, Cayman Islands
Isagani Mirador Tano, Quezon City Polytechnic Univ. (QCPU), Philippines
Berhan Tecelehaimanot, The Univ. of Toledo, USA
Hery The, Zhejiang YueXu Univ. of Foreign Languages, China
Helen Tracy, Hermsley Fraser, United Kingdom
Christoph Trattner, Graz Univ. of Technology Graz, Austria
Maarten Van de Ven, Leiden Univ., Netherlands
Mathy Vanbuel, ATIT, Belgium
Elena Verdu, General Foundation of the Univ. of Valladolid, Spain
Maria J. Verdú, Univ. of Valladolid, Spain
Rebecca Vivian, The Univ. of Adelaide, Australia
Dina Vyortkina, Florida State Univ., USA
Ellen Walker, Hiram College, USA
Greg Walker, Univ. of Hawaii- Leeward Community College, USA
Shiang-Kwei Wang, New York Institute of Technology, USA
Edgar R. Weippl, Secure Business Austria, Austria
Jillian Wendt, Univ. of the District of Columbia, USA
Melaku Mesrahe woldeamanuel, Dire-DAWA Univ., Ethiopia
Mingli Xiao, The Univ. of Toledo, USA
Serpi Yalcinalp, Baskent Univ., Turkey
Junko Yamamoto, Slippery Rock Univ. of Pennsylvania, USA
Jack Fei Yang, St. John’s Univ., Taiwan
Melda Yıldız, Kean Univ., USA
Invitation to Join

The Association for the Advancement of Computing in Education (AACE) is an international, non-profit educational organization. The Association’s purpose is to advance the knowledge, theory, and quality of teaching and learning at all levels with information technology.

This purpose is accomplished through the encouragement of scholarly inquiry related to technology in education and the dissemination of research results and their applications through AACE sponsored publications, conferences, and other opportunities for professional growth.

AACE members have the opportunity to participate in Special Interest Groups (SIGs), high-quality peer-reviewed publications, and conferences.

Join with fellow professionals from around the world to share knowledge and ideas on research, development, and applications in information technology and education. AACE’s membership includes researchers, developers, and practitioners in schools, colleges, and universities; administrators, policy decision-makers, professional trainers, adult educators, and other specialists in education, industry, and government with an interest in advancing knowledge and learning with information technology in education.

Membership Benefit Highlights

- Gain professional recognition by participating in AACE sponsored international conferences
- Enhance your knowledge and professional skills through interaction with colleagues from around the world
- Learn from colleagues’ research and studies by receiving AACE’s well-respected journals and books
- Receive a subscription to the professional periodical Journal of Online Learning Research (JOLR) [digital]
- Access EdITLib-Education & Information Technology Digital Library, a valuable online resource that is fully searchable and covers 30+ years of academic journals and international conference proceedings.
- Receive discounts on multiple journal subscriptions, conference registration fees, and EdITLib Subscriptions.
- AACE Social Media enables you to connect with colleagues worldwide!

AACE Blog: blog.aace.org  AACE Facebook: facebook.com/aaceorg
AACE Twitter: twitter.com/aace
<table>
<thead>
<tr>
<th>Journal Name</th>
<th>ISSN#</th>
<th>Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Education &amp; Information Technology Digital Library – Electronic</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>EdITLib</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The EdITLib is your research and instructional source for peer-reviewed</td>
<td></td>
<td></td>
</tr>
<tr>
<td>articles and multimedia (100,000+) on the latest research, developments,</td>
<td></td>
<td></td>
</tr>
<tr>
<td>and applications related to all aspects of Educational Technology and</td>
<td></td>
<td></td>
</tr>
<tr>
<td>E-Learning from 100s of journals and international proceedings.</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Journal of Educational Multimedia &amp; Hypermedia (JEMH)</strong></td>
<td>1055-8896</td>
<td>Quarterly</td>
</tr>
<tr>
<td>Designed to provide a multidisciplinary forum to present and discuss</td>
<td></td>
<td></td>
</tr>
<tr>
<td>research, development and applications of multimedia and hypermedia in</td>
<td></td>
<td></td>
</tr>
<tr>
<td>education. The main goal of the Journal is to contribute to the</td>
<td></td>
<td></td>
</tr>
<tr>
<td>advancement of the theory and practice of learning and teaching using</td>
<td></td>
<td></td>
</tr>
<tr>
<td>these powerful and promising technological tools that allow the</td>
<td></td>
<td></td>
</tr>
<tr>
<td>integration of images, sound, text, and data.</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Journal of Technology and Teacher Education (JTATE)</strong></td>
<td>1059-7069</td>
<td>Quarterly</td>
</tr>
<tr>
<td>A forum for the exchange of knowledge about the use of information</td>
<td></td>
<td></td>
</tr>
<tr>
<td>technology in teacher education. Journal content covers preservice and</td>
<td></td>
<td></td>
</tr>
<tr>
<td>inservice teacher education, graduate programs in areas such as curriculum</td>
<td></td>
<td></td>
</tr>
<tr>
<td>and instruction, educational administration, staff development,</td>
<td></td>
<td></td>
</tr>
<tr>
<td>instructional technology, and educational computing.</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Journal of Interactive Learning Research (JILR)</strong></td>
<td>1093-023X</td>
<td>Quarterly</td>
</tr>
<tr>
<td>The Journal’s published papers relate to the underlying theory, design,</td>
<td></td>
<td></td>
</tr>
<tr>
<td>implementation, effectiveness, and impact on education and training of</td>
<td></td>
<td></td>
</tr>
<tr>
<td>the following interactive learning environments: authoring systems, CALL,</td>
<td></td>
<td></td>
</tr>
<tr>
<td>assessment systems, CBT, computer-mediated communications, collaborative</td>
<td></td>
<td></td>
</tr>
<tr>
<td>learning, distributed learning environments, performance support</td>
<td></td>
<td></td>
</tr>
<tr>
<td>systems, multimedia systems, simulations and games, intelligent agents on</td>
<td></td>
<td></td>
</tr>
<tr>
<td>the Internet, intelligent tutoring systems, micro-worlds, and virtual</td>
<td></td>
<td></td>
</tr>
<tr>
<td>reality-based learning systems.</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Journal of Computers in Mathematics &amp; Science Teaching (JCMST)</strong></td>
<td>0731-9258</td>
<td>Quarterly</td>
</tr>
<tr>
<td>JCMST is the only periodical devoted specifically to using information</td>
<td></td>
<td></td>
</tr>
<tr>
<td>technology in the teaching of mathematics and science. The Journal offers</td>
<td></td>
<td></td>
</tr>
<tr>
<td>an in-depth forum for the exchange of information in the fields of</td>
<td></td>
<td></td>
</tr>
<tr>
<td>science, mathematics, and computer science.</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Journal of Online Learning Research (JOLR)</strong></td>
<td>2374-1473</td>
<td>Quarterly</td>
</tr>
<tr>
<td>The Journal of Online Learning Research is a peer-reviewed, international</td>
<td></td>
<td></td>
</tr>
<tr>
<td>journal devoted to the theoretical, empirical, and pragmatic understanding</td>
<td></td>
<td></td>
</tr>
<tr>
<td>of technologies and their impact on primary and secondary pedagogy and</td>
<td></td>
<td></td>
</tr>
<tr>
<td>policy in primary and secondary (K-12) online and blended environments.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>**International Journal on E-Learning (Corporate, Government, Healthcare,</td>
<td>1537-245</td>
<td>Quarterly</td>
</tr>
<tr>
<td>Higher Education)**</td>
<td></td>
<td></td>
</tr>
<tr>
<td>IJEL serves as a forum to facilitate the international exchange of</td>
<td></td>
<td></td>
</tr>
<tr>
<td>information on the current theory, research, development, and practice</td>
<td></td>
<td></td>
</tr>
<tr>
<td>of E-Learning in education and training. This journal is designed for</td>
<td></td>
<td></td>
</tr>
<tr>
<td>researchers, developers and practitioners in schools, colleges, and</td>
<td></td>
<td></td>
</tr>
<tr>
<td>universities, administrators, policy decision-makers, professional</td>
<td></td>
<td></td>
</tr>
<tr>
<td>trainers, adult educators, and other specialists in education, industry,</td>
<td></td>
<td></td>
</tr>
<tr>
<td>and government.</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>CITE – Electronic Journal</strong></td>
<td>1528-5804</td>
<td>Quarterly</td>
</tr>
<tr>
<td>An electronic publication of the Society for Information Technology and</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Teacher Education (SITE), established as a multimedia, interactive</td>
<td></td>
<td></td>
</tr>
<tr>
<td>electronic counterpart of the Journal of Technology and Teacher Education.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### Membership Options

#### Professional Membership
- Subscription to 1 AACE Journal (Digital, See journal list below)
- Full online access to multiyear back issues of that journal
- Discount conference registrations and proceedings
- Discount subscriptions to additional journals
- Access to the AACE Job Board
- All the benefits of AACE Membership

**$125**

#### Student Membership
- All the same benefits of a Professional Membership
- Offered at a discount for students (MUST be enrolled as a full-time student in an accredited educational institution and provide school information below)

**$45**

#### Professional Membership PLUS EdITLib — The Leading Digital Library Dedicated to Education & Information Technology
- All the same benefits of a Professional Membership
- PLUS 1-year subscription to the EdITLib with 100,000+ peer reviewed journal articles, conference papers and presentations, videos, webinars and much more.

**$175**

#### Student Membership PLUS EdITLib — The Leading Digital Library Dedicated to Education & Information Technology
- All the same benefits of a Professional Membership
- PLUS 1-year subscription to the EdITLib
- Offered at a discount for students (MUST be enrolled as a full-time student in an accredited educational institution and provide school information below)

**$75**

#### Virtual Membership
- Registration as a virtual participant for the following events:
  - EdMedia — World Conference on EdMedia & Technology (Value $225)
  - E-Learn — World Conference on E-Learning (Value $225)
- Conference proceedings for AACE events, accessible in EdITLib — Education and Information Technology Digital Library

**$395 (Value $600)**

#### Select Your membership Journals
- Professional & Student Memberships include a subscription to 1 AACE Journal (Digital, See journal list under Library Subscriptions)
- Additional journals can be added to your membership
- Please choose from options below:

<table>
<thead>
<tr>
<th>Number of Journals</th>
<th>1 Journal</th>
<th>2 Journals</th>
<th>3 Journals</th>
<th>4 Journals</th>
<th>5 Journals</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>$125 prof / $45 student</td>
<td>$180 prof / $70 student</td>
<td>$235 prof / $95 student</td>
<td>$290 prof / $120 student</td>
<td>$345 prof / $155 student</td>
</tr>
</tbody>
</table>

**Journal Title(s)**
- International Journal on E-Learning (IJEL)
- Journal of Educational Multimedia and Hypermedia (JEMH)
- Journal of Computers in Math and Science Teaching (JCMST)
- Journal of Interactive Learning Research (JLIR)
- Journal of Technology and Teacher Education (JTATE)
- Journal of Online Learning Research (JOLR) Already FREE with membership

#### Applicant Information
- Membership extends for 1 year from the approximate date of application.

Name: ___________________________ E-mail: ___________________________
Address: ___________________________ City: ___________________________ State: _______
Postal Code: __________ Country: ________________ New Member Renewal Membership # _________
If applying as a student please provide School/Institution Name: ___________________________ Expected Graduation Date: _______

#### Method of Payment (USD)
- Enclosed: Check (U.S. funds & bank, payable to AACE)  
  - Purchase Order (Must include $10 service charge)  
  - Bank Wire (Must include $25 service charge)
- Credit Card:  
  - MasterCard  
  - VISA  
  - AMEX  
  - Discover

Rate ____ x No. of Years ____ = Total $ __________

Card # ___________________________ Card Exp. Date ____/____ Signature: ___________________________

Return to: AACE P.O. Box 719, Waynesville, NC 28786 USA • E-mail: info@aace.org • www.aace.org
The Best Place
to Find the
Perfect Job...
Is Just a Click Away!

No need to get lost on commercial Job boards.
The AACE Career Center is tailored specifically for you.

**Job Seekers**
- Manage your job search
- Access job postings specific to IT in Education & E-Learning
- Post an anonymous resume
- Advanced Job Alert system

**Employers/Recruiters**
- Quickly post job openings
- Manage your online recruiting efforts
- Advanced resume searching capabilities
- Reach targeted & qualified candidates

**Start Your Job Search Today!**

jobs.aace.org

Association for the Advancement of Computing in Education
Connecting IT in Education/E-Learning Professionals & Employers
DOES YOUR LIBRARY SUBSCRIBE?

The EdITLib digital library is the premier aggregated and multimedia resource for peer-reviewed research on the latest developments and applications in Educational Technologies and E-Learning.

Subscribe today to access 125,000+ articles and 16,000 dissertations written by 200,000+ international authors covering 30+ years of advancements in IT in Education!

Individual subscriptions $19/month or $150/year
Libraries $2095/year

Abstracts are available open access so you can try the Digital Library at no cost!

NEW!

• Curated ERIC indexed publications on Educational Technology
• Relevant Content from Proquest Dissertations Just Added

Academic Journals including:

• Journal of Educational Multimedia and Hypermedia
• International Journal on E-Learning (Corporate, Government, Healthcare, & Higher Education)
• Journal of Computers in Mathematics and Science Teaching
• Journal of Online Learning Research
• Journal of Interactive Learning Research
• Journal of Technology and Teacher Education
• Contemporary Issues in Technology & Teacher Education (electronic)

Conference proceedings including:

• EdMedia – World Conference on Educational Media & Technology
• E-Learn – World Conference on E-Learning in Corporate, Healthcare, Government, and Higher Education
• SITE – Society for Information Technology and Teacher Education International Conference
• Global Learn – Global Conference on Learning and Technology
• Global TIME – Global Conference on Technology, Innovation, Media & Education

Newest content additions:

e-Books:
• Handbook of Research on K-12 Online and Blended Learning

Conference Books:
• Education and Information Technology 2015: A Selection of AACE Award Papers

Journals:
• Journal of Open, Flexible, and Distance Learning
... and many more titles!
Final Call for Participation:
January 18, 2016
CALL FOR PARTICIPATION

EdMedia 2016
World Conference On Educational Media & Technology

June 26-30, 2016 • Vancouver, British Columbia
Sheraton Vancouver Wall Centre Hotel

Call for presentations:
December 16, 2015

• Keynote Speakers
• Invited Panels/Speakers
• Full & Brief Papers
• Best Practices • Panels • Roundtables
• Posters/Demonstrations
• Corporate Demonstrations/Literature
• Corporate Showcases
• Workshops • Symposia

VIRTUAL

• Virtual Brief Papers
• Virtual Posters
• Virtual Corporate Showcases

Association for the Advancement of Computing in Education
A CONFERENCE OF AACE
www.aace.org

Education & Information Technology Digital Library
www.EdITLib.org