

# Je-LKS

Journal of e-Learning and Knowledge Society  
The Italian e-Learning Association Journal

sie-L  
Società Italiana di e-Learning

n. 4  
2016  
SEPTEMBER

# Je-LKS

Journal of e-Learning  
and Knowledge Society

[www.sie-l.it](http://www.sie-l.it)  
[www.je-lks.org](http://www.je-lks.org)

The Journal is issued online three times per year. Je-LKS is an Open Access Online publication. This means that everybody can free access online to abstracts and full length articles.

Libraries or researchers, can subscribe a Reprint Service Subscription. The Reprint Service Subscription is on a yearly basis and you can receive the three printed year issues for a 121€ annual fee (including taxes and shipping expenses).

Associate and members of the Sle-L (Italian e-Learning Association) will receive free printed copies.

In order to join Sle-L:

- [segreteria@sie-l.it](mailto:segreteria@sie-l.it)
- Tel. +39 052 2522521

For more information visit [www.sie-l.it](http://www.sie-l.it)

Registration at the Rome Court in the pipeline.

eISSN: 1971 - 8829 (online)

ISSN: 1826 - 6223 (paper)

Resp. dir. Aurelio Simone

To the authors:

paper can be addressed to:  
[www.je-lks.org](http://www.je-lks.org)

## Editor

Sle-L The Italian e-Learning Association  
[www.sie-l.it](http://www.sie-l.it)

## Editor in Chief

Luigi Colazzo

## Managing and Technical Editor

Nicola Villa

## Associated Editors

Valerio Eletti  
Paolo Maria Ferri  
Demetrios G Sampson  
Aurelio Simone

## General Editors

Giovanni Bonaiuti  
Valentina Comba  
Filomena Faiella  
Giuseppina Rita Mangione  
Andrea Molinari  
Giuseppe Pirlo  
Angela Spinelli  
Teresa Roselli

## Scientific Committee

Adorni Giovanni - Università di Genova, Italy;  
Calvani Antonio - Università di Firenze, Italy;  
Cantoni Lorenzo - Università di Lugano, Switzerland;  
Carbonaro Antonella - Università di Bologna, Italy;  
Cartelli Antonio - Università di Cassino, Italy;  
Cerri Renza - Università di Genova, Italy;  
Cesareni Donatella - Università di Roma, Italy;  
Coccoli Mauro - Università di Genova, Italy;  
Delfino Manuela - C.N.R. I.T.D di Genova, Italy;  
Ghislandi Patrizia - Università di Trento, Italy;  
Guerin Helen - University College Dublin Ireland;  
Guerra Luigi - Università di Bologna, Italy;  
Holotescu Carmen - University of Timisoara, Romania;  
Karacapilidis Nikos - University of Patras, Greece;  
Karlsson Goran - University of Stockholm, Sweden;  
Kess Pekka - University of Oulu, Finland;  
Ligorio Beatrice - Università di Salerno, Italy;  
Manca Stefania - CNR ITD, Genova, Italy;  
Mandl Heinz - Universität München, Germany;  
Maresca Paolo - Università di Napoli Federico II, Italy;  
Mich Luisa - Università di Trento, Italy;  
Michellini Marisa - Università di Udine, Italy;  
Persico Donatella - C.N.R. I.T.D. Genova, Italy;  
Rizzo Antonio - Università di Siena, Italy;  
Sarti Luigi - C.N.R. I.T.D. Genova, Italy;  
Trentin Guglielmo - C.N.R. I.T.D. Genova, Italy;  
Vertecchi Benedetto - Università Roma3, Italy.

## Reviewers

Giovanni Adorni, Adalgisa Battistelli, Carlo Alberto Bentivoglio, Martina Benvenuti, Raffaella Bombi, Giovanni Bonaiuti, Stefano Bonometti, Antonio Calvani, Lorenzo Cantoni, Carlo Cappa, Nicola Capuano, Antonella Carbonaro, Milena Casagrande, Mirella Casini Shaerf, Roberto Caso, Alessio Ceccherelli, Donatella Cesareni, Angelo Chianese, Elisabetta Cigognini, Luigi Colazzo, Alberto Colorni, Valentina Comba, Laura Corazza, Madel Crasta, Vincenzo D'Andrea, Ciro D'Apice, V. D'Aprile, Marinella De Simone, Nicoletta Dessi, Pierpaolo Di Bitonto, Liliana Dozza, Hendrik Drachler, Valerio Eletti, Meryem Erbilek, Filomena Faiella, Giorgio Federici, Michele Fedrizzi, Mario Fedrizzi, Paolo Ferri, Rita Francese, Paolo Frignani, Luciano Galliani, Patrizia Ghislandi, Carlo Giovannella, Katia Giusepponi, Giancarlo Gola, Maria Renza Guelfi, Donato Impedovo, Claudio La Mantia, Stefano Lariccia, Maria Laterza, Beatrice Ligorio, Stefania Manca, Giuseppina Rita Mangione, Nikos Manouselis, Paolo Maresca, Giada Marinensi, Maria Lidia Mascia, Marco Masoni, Silvia Mazzini, Elvis Mazzoni, Luisa Mich, Silvia Michieletta, Tommaso Minerva, Giorgio Olimpo, Giovanni Pascuzzi, Vincenzo Patruno, Marco Pedroni, Donatella Persico, Maria Chiara Pettenati, Giuseppe Pirlo, Giorgio Poletti, Maria Ramieri, Emanuele Rapetti, Fabrizio Ravicchio, Pierfranco Ravotto, Pier Cesare Rivoltella, Alessia Rosa, Teresa Roselli, Veronica Rossano, Pier Giuseppe Rossi, Maria Teresa Sagri, Susanna Sancassani, Rossella Santagata, Javier Sarsa, Luigi Sarti, Michele Scalera, Antonella Serra, Dario Simoncini, Aurelio Simone, Angela Spinelli, Sara Tomasini, Guglielmo Trentin, Andrea Trentini, Roberto Trincherò, Annalisa Vacca, Nicola Villa, Giuseppe Visaggio, Fabio Vitali, Giuliano Vivanet, Alessandro Zorat, Massimo Zotti

## Editing

Nicola Villa

# Je-LKS

Journal of e-Learning and Knowledge Society

The Italian e-Learning Association Journal

Vol. 12, n. 4, 2016

pag.	5	N. Villa Editorial
<b>Peer Reviewed Papers</b>		
pag	9	D'Errico F., Paciello M., Cerniglia L. When emotions enhance students' engagement in e-learning processes
pag	25	Monteiro A., Leite C. Inclusive digital online environments as a device for pedagogic differentiation: a taxonomy proposal
pag	39	Morales-Martinez G.E., Lopez-Ramirez E.O. Cognitive responsive e-assessment of constructive e-learning
pag	51	Turan Z., Goktas Y. The Flipped Classroom: instructional efficacy and impact of achievement and cognitive load levels
pag	63	Or-Kan Soh Examining the reading behaviours and performance of sixth-graders for reading instruction: evidence from eye movements
pag	81	Caroca J., Bruno M.A., Aldunate R.G. Situated Learning based on Virtual Environment for improving Disaster Risk Reduction
pag	93	Cappuccio G., Compagno G., Pedone F. Digital Competence for the improvement of Special Education Teaching
pag	109	Baratè A., Ludovico L.A. Local and global Semantic Networks for the representation of music information
pag	125	Ardimento P., Boffoli N., Convertini V.N., Scalera M. Integrating Fitt's Law in heuristical evaluation checklist
pag	139	Nair L.R., Shetty S.D., Shetty S.D. Interactive visual analytics for Big Data: Tableau vs D3.js