

*in memory of Luigi Colazzo*

Je-LKS

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

sie-L  
Società Italiana di e-Learning

**LEARNING ANALYTICS: FOR A DIALOGUE  
BETWEEN TEACHING PRACTICES AND  
EDUCATIONAL RESEARCH**

n. 3  
2019  
SEPTEMBER

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).

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

**ANVUR Ranking:** A-Class for Sector 10, 11-D1 and 11-D2

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 Elettì

*University "La Sapienza" Roma, Italy*

Paolo Maria Ferri

*University of Milano Bicocca, Italy*

Demetrios G Sampson

*University of Piraeus, Greece*

Albert Sangrà

*Universitat Oberta de Catalunya, Spain*

Aurelio Simone

## Assistant Editors

Valentina Comba

*Italian e-Learning Association*

Anna Dipace

*University of Modena-Reggio Emilia, Italy*

Annamaria De Santis

*University of Modena-Reggio Emilia, Italy*

Antonio Marzano

*University of Salerno, Italy*

Stefano Moriggi

*University of Milano Bicocca, Italy*

Veronica Rossano

*University of Bari, Italy*

Katia Sannicandro

*University of Modena-Reggio Emilia, Italy*

## Scientific Committee

Adorni Giovanni - University of Genova, Italy;  
Bonaïuti Giovanni - University of Cagliari, Italy;  
Calvani Antonio - University of Firenze, Italy;  
Cantoni Lorenzo - University of Lugano, Switzerland;  
Carbonaro Antonella - University of Bologna, Italy;  
Cartelli Antonio - University of Cassino, Italy;  
Ceconi Luciano - University of Modena-Reggio Emilia, Italy  
Cerri Renza - University of Genova, Italy;  
Cesareni Donatella - University of Roma, Italy;  
Coccoli Mauro - University of Genova, Italy;  
Delfino Manuela - C.N.R. I.T.D of Genova, Italy;  
Faiella Filomena, University of Salerno, Italy,  
Ghislandi Patrizia - University of Trento, Italy;  
Guerin Helen - University College Dublin Ireland;  
Guerra Luigi - University of 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 - University of Salerno, Italy;  
Manca Stefania - C.N.R. I.T.D of Genova, Italy;  
Mandi Heinz - Universitat Munchen, Germany;  
Mangione Giuseppina Rita, INDIRÉ, Italy,  
Maresca Paolo - University of Napoli Federico II, Italy;  
Mich Luisa - University of Trento, Italy;  
Michellini Marisa - University of Udine, Italy;  
Molinari Andrea, University of Trento, Italy,  
Persico Donatella - C.N.R. I.T.D of Genova, Italy;  
Pirlo Giuseppe, University of Bari, Italy,  
Rizzo Antonio - University of Siena, Italy;  
Roselli Teresa - University of Bari, Italy,  
Sarti Luigi - C.N.R. I.T.D of Genova, Italy;  
Trentin Guglielmo - C.N.R. I.T.D of Genova, Italy;  
Vertecchi Benedetto - University of Roma3, Italy.

## Reviewers

Giovanni Adorni, Adalgisa Battistelli, Carlo Alberto Bentivoglio, Martina Benvenuti, Raffaella Bombi, Giovanni Bonaïuti, 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, Letizia Cinganotto, Luigi Colazzo, Alberto Colomi, Valentina Comba, Laura Corazza, Madel Crasta, Daniela Cuccurullo, Vincenzo D'Andrea, Ciro D'Apice, Vito D'Aprile, Marinella De Simone, Nicoletta Dessì, Pierpaolo Di Bitonto, Liliana Dozza, Hendrik Drachler, Valerio Elettì, 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 Laricca, 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 Patrino, Marco Pedroni, Donatella Persico, Maria Chiara Pettenati, Giuseppe Pirlo, Giorgio Poletti, Maria Ranieri, Emanuele Rapetti, Fabrizio Ravicchio, Pierfranco Ravotto, Pier Cosare Rivoltella, Alessia Rosa, Teresa Roselli, Veronica Rossano, Pier Giuseppe Rossi, Maria Teresa Sagri, Susanna Scaccasani, Rossella Santagata, Javier Sarsa, Luigi Sarti, Michele Scalerà, Antonella Serra, Dario Simoncini, Aurelio Simone, Angela Spinelli, Sara Tomasini, Guglielmo Trentin, Andrea Trentini, Roberto Trinchero, Annalisa Vacca, Piet Van de Craen, 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. 15, n. 3, 2019

## LEARNING ANALYTICS: FOR A DIALOGUE BETWEEN TEACHING PRACTICES AND EDUCATIONAL RESEARCH

		Nicola Villa
pag.	5	In memory of Luigi Colazzo
		Antonio Marzano, Antonella Poce
pag	7	Editorial
		<b>PEER REVIEWED PAPERS: Learning Analytics: for A Dialogue between Teaching Practices and Educational Research</b>
		Bojan Fazlagic, Luciano Cecconi
pag	11	Disciplinary and Sidactic Profiles in EduOpen Network MOOCs
		Anna Dipace, Bojan Fazlagic, Tommaso Minerva
pag	29	The Design of a Learning Analytics Dashboard: EduOpen Mooc Platform Redefinition Procedures
		Marina Marchisio, Sergio Rabellino, Fabio Roman, Matteo Sacchet, Daniela Salusso
pag	49	Boosting up Data Collection and Analysis to Learning Analytics in Open Online Contexts: an Assessment Methodology
		Luciano Cecconi, Bojan Fazlagic
pag	61	The Presence and Role of Assessment in UniMoRe MOOCs
		Alice Barana, Alberto Conte, Cecilia Fissore, Marina Marchisio, Sergio Rabellino
pag	75	Learning Analytics to improve Formative Assessment strategies
		Carlo Palmiero, Luciano Cecconi
pag	89	Use of Learning Analytics between formative and summative assessment
		Sergio Miranda, Rosa Vegliante
pag	101	Learning Analytics to Support Learners and Teachers: the Navigation among Contents as a Model to Adopt
		Maria Rosaria Re, Francesca Amenduni, Carlo De Medio, Mara Valente
pag	117	How to use assessment data collected through writing activities to identify participants' Critical Thinking levels

		Claudia Bellini, Annamaria De Santis, Katia Sannicandro, Tommaso Minerva
pag	133	Data Management in Learning Analytics: terms and perspectives
		Annamaria De Santis, Katia Sannicandro, Claudia Bellini, Tommaso Minerva
pag	145	Predictive Model Selection for Completion Rate in Massive Open Online Courses
		Francesco Agrusti, Gianmarco Bonavolontà, Mauro Mezzini
pag	161	University Dropout Prediction through Educational Data Mining Techniques: A Systematic Review
		Alessia Cadamuro, Elisa Bisagno, Chiara Pecini, Loris Vezzali
pag	183	Reflecting A... "Bit". What Relationship Between Metacognition And ICT?
		Gerardo Fallani, Stefano Penge, Paola Tettamanti
pag	197	An Agnostic Monitoring System for Italian as Second Language Online Learning
		Nan Yang, Patrizia Ghislandi, Juliana Raffaghelli, Giuseppe Ritella
pag	211	Data-Driven Modeling of Engagement Analytics for Quality Blended Learning
		Simone Torsani
pag	227	User rating as a predictor of linguistic feedback quality in Question and Answer portals
		Maria Polo, Umberto Dello Iacono, Giuseppe Fiorentino, Anna Pierri
pag	239	A Social Network Analysis approach to a Digital Interactive Storytelling in Mathematics
		Ritamaria Bucciarelli, Roberto Capone, Javier Enriquez, Marianna Greco, Giulia Savarese, Francesco Saverio Tortoriello
pag	251	Learning Analytics -Scientific Description and Heuristic Validation of Languages NLG
		Letizia Cinganotto, Daniela Cuccurullo
pag	263	Learning Analytics from a MOOC on 'language awareness' promoted by the European Commission
		Marta De Angelis, Angelo Gaeta, Francesco Orcioli, Mimmo Parente
pag	287	Improving Learning with Augmented Reality: a Didactic Re-mediation Model from Inf@nzia DigiTales 3.6
		Rosalba Manna, Samuele Calzone, Rocco Palumbo
pag	301	Improving School Settings And Climate: what Role for the National Operative Programme? Insights from a Learning Analytics Perspective
		Nadia Sansone, Donatella Cesareni
pag	319	Which Learning Analytics for a socio-constructivist teaching and learning blended experience