# Guest Editorial
# Learning Analytics in IberoAmerica

*Abstract*—Learning analytics is a key knowledge area for the improvement of education that proposes the use of educational data to improve decision making. In the last years, the Iberoamerican region has made a lot of efforts to introduce learning analytics and take advantage of its advantages. In this Special Issue, a set of proposals of learning analytics in this region are presented. The Special Issue includes four articles that cover a wide range of topics of this area, including adoption at the institutional level, analytics applied to academic improvement, video analysis, or visual analytics in learning management systems.

*Index Terms*—Learning analytics, educational data mining, IberoAmerica, adopion, tools, pilots.

## I. INTRODUCTION

IN THE last years, learning analytics has become one of the knowledge areas with more impact for education. The collection of educational data, their transformation, analysis, or visualization can help the different stakeholders of the educational environment for the decision making, and thus providing important benefits at different levels.

Learning analytics is a knowledge area that is developed all over the world, but in some Iberoamerican regions, specially in Latin America, their development has been lower. With the aim to bridge those differences, the LALA (building capacity to use learning analytics to improve higher education in Latin America) project emerged, funded by the European Commission. This project had as objective to improve the adoption of learning analytics in Latin America. Some results of this project were, for example, the LALA framework to help for the adoption of learning analytics solutions in Latin America, the adaptation and pilots of learning analytics tools for prediction and academic counseling.

This Special Issue includes some articles about learning analytics initiatives developed in Iberoamerican regions, but that could be applied in others.

The Special Issue is composed of a total of four articles that cover a wide range of topics related to learning analytics. The first article [A1] presents two case studies at Pontificia Universidad Católica de Chile (PUC) about the adoption of learning analytics tools at institutional level, following different approaches depending on whether the initiative comes promoted by the university managers of by university researchers.

The second article [A2], is part of the topic of academic analytics. Specifically, the article analyzes the trajectories that students follow in some of the degrees of Universidad Austral de Chile (UACH) to explore what can make an influence on the delay of students to get graduated.

The third [A3] and fourth [A4] articles are more focused on the analysis of student behavior on learning platforms. [A3] analyzes different types of videos at the University of Cauca, Colombia, to check which is the most effective for students. Finally, [A4] presents a set of visualizations on the Moodle platform which represent student behavior on that platform.

## ACKNOWLEDGMENT

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He is currently a Full Professor with the Universidad Carlos III de Madrid. He has been the Coordinator of the LALA Project supported by the European Commission for the adoption of learning analytics in Latin America. He has participated in more than 50 research projects at international and national levels, including also several contracts with companies, being the principal investigator of several of them related with learning analytics, educational data mining, and adaptive systems. He is the author of more than 150 scientific publications, including more than 50 in journals indexed in the JCR. He has also coordinated the development and deployment of different learning analytics tools. His skills and experiences include research and development in learning analytics, educational data mining, the evaluation of learning experiences, user studies, gamification, or intelligent tutoring systems.

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**Miguel Ángel Zúñiga Prieto** was born in Cuenca, Ecuador, in 1972. He received the degree in systems engineering from the Universidad de Cuenca, Ecuador, in 1998, and the Ph.D. degree in informatics from the Universidad Politécnica de Valencia, Spain, in 2017. His professional activity is focused on the field of information technology both in industry and academia. In industry, he has managed software development and deployment projects both in Ecuador and in other Latin American countries. In the academic field, he is currently a Teacher and a Researcher with the Faculty of Engineering, University of Cuenca, and also the Director of the Department of Computer Science. He is coordinating research projects both locally and in association with European universities. In the field of research, he works in the domains of learning analytics, model-based software engineering/development, and software architectures.