

# Presentación

Introduction

---

## University & the Cloud

La Universidad y la Nube

Prof. Dr. Daniel Burgos, Universidad Internacional de La Rioja  
(UNIR Research, UNESCO Chair on eLearning) (España)  
Dr. Rubén González Crespo, Universidad Internacional de La Rioja (School of Engineering) (España)  
Dr. Fabio Nascimbeni, MENON Network, University of Sao Paulo (USP) (Brasil)

Campus Virtuales (ISSN: 2255-1514), as a multidisciplinary scientific journal regarding the use of information and communication technologies (ICT) in education, releases this special issue focusing on University & the Cloud, with the aim of gathering researchers' personal experiences and institutional virtual campus developments. This special issue concentrates on all those resources, content, methodologies, systems, standards, skills, awards, recommendations, data analysis, approaches, user experiences, pilot experiments, and more, which revolve around decentralization, aggregation, and integration of the university model.

The UNESCO Chair on eLearning at Universidad Internacional de La Rioja (UNIR) along with UNIR Research (the research department at UNIR) actively support Open Educational Resources through a number of Research & Development Europe-funded projects like, i.e. eMundus and Virtual Mobility Passport. In addition, they provide an active support to students, researchers, and lecturers to play their role anytime, anywhere, thanks to online-web services, cloud resources and distributed networks.

Nowadays we can easily find much information about cloud computing in learning environments; in fact, it is said that within one year, cloud computing in K-12 schools is expected to consume a quarter of the entire IT budget (Nagel, 2013); probably four years from now, that figure will grow to 35 percent. But what exactly is cloud computing and why are so many people using it?

In brief, cloud computing is computing that involves a large number of computers connected through a communication network such as the Internet, similar to utility computing (Mariana Carroll, 2012). This helps decreasing IT costs as well as simplifies content management processes for universities, schools, and educational systems. For instance, a number of Pearson K-12 Technology products can be hosted in the Cloud: PowerSchool, Schoolnet, Interoperability products, and others (K-12, 2014).

Modern University requires an honest, drastic and immediate update to the current media status. It should combine academic and research excellence with the needs of the professional market and Industry. European and Latin American universities are a living proof about the academic part. However, the connection to Industry is more complex and quite often intertwined with general or

# Presentación

Introduction



purely academic skills; this approach provides a hybrid system which is not that successful so far. In this scenario, teaching methods, learning strategies, official regulations, social requirements and a long list of factors become a challenge for adaptation to the environment, users and time. In addition, the usefulness and efficiency of technological resources and structures play a vital role.

Technologies, as a resource, are as good as the fulfilled need that they are meant for, and satisfactorily address. University lecturers and support staff require leading, reliable tools fully adapted to their requirements. Furthermore, students require and benefit from the same technology. In this context, decentralization of services and resources means a significant progress to the University community. This distribution includes user data like, i.e. behavior, interaction, performance, and compliance with administrative procedures that any member of the academic community enjoys on a daily-basis.

So, what benefits are there to using the Cloud in education? There are many advantages in that, a quick list that would be especially useful for both students and educators are:

- **Storage:** The Cloud allows the users to store almost any type of content and data including multimedia, audio, documents, eBooks, applications, pictures, and other educational resources.
- **Multi-device access:** Any data stored in the Cloud can be accessed from any device including mobile devices such as phones or tablets. Several trends like Internet of Things can be addressed from the cloud and used easily into the classroom, virtual or physical.
- **Collaboration:** The Cloud allows infinite users to work on and edit documents at the same time; it enables effortless sharing and brainstorming. With this feature, group projects and collaborative lesson plans can be optimized for both, teachers and students.
- **Digital divide:** The Cloud reduces the digital divide so that it facilitates learning and teaching to a large diversity of population, mostly with no real need for physical attendance.
- **Back-up:** Automatic back-up of resource, so that it becomes almost impossible to lose or delete any valuable material, of course with an appropriate set-up of the systems and software.

Therefore, even if a computer crashes or users destroy their further relevant data by an error, all documents and content will remain safe, saved, and accessible in the cloud.

- **Optimisation of Resources and Time:** The availability of online content allows teachers to save time and resources on printing or copying large documents or lesson plans. Furthermore, the community is able to retrieve homework assignments, lesson notes, and other resources online, anytime, anywhere. The Cloud permits teachers to post assignments online.

University is a natural home for progress and advanced methodologies and strategies in learning, lecturing, collaboration, team work, and many other activities that facilitates individual knowledge and collective awareness. The Cloud approach facilitates a fast, active and lively interaction between the various shareholders of the educational community. This special issue provides some hints on how to do it, from a number of views: technical, behavioral, social, and, of course, educational. We hope that the following pages provide some useful insights and guidelines for future, immediate, and successful implementation.

### References

K-12, P. (2014). Pearson K-12.

Mariana Carroll, P. K. (2012). Securing Virtual and Cloud Environments. *Cloud Computing and Services Science*, 73-90.

Nagel, D. (2013). Cloud Computing To Make Up 35% of K-12 IT Budgets in 4 Years. *The Journal*.

### RESUMEN DE LOS TRABAJOS:

Alberto Corbí y Daniel Burgos diseñan y desarrollan, en “LIME: un modelo de recomendación para entornos de aprendizaje online formal/informal”, un modelo de aprendizaje online adaptativo para redes sociales de ámbito restringido, que da relevancia a la interrelación entre el LMS, redes sociales y otras fuentes externas.

Joe Cullen and Cristina Castellanos explore in ‘Cloud Cuckoo Land: evidence from a study of student drop-out’ whether the new technologies of teaching and learning are able to preserve the integrity of ‘reflexive dialogue’ that seems to reflect the core value of our higher education institutions and present evidence from an EU-funded project – STAY IN – which is researching student drop out and how it can be reduced through online services – as a contribution to these debates.

Luis De La Fuente Valentín and Daniel Burgos develop in ‘Am I doing well? A4Learning as a self-awareness tool to integrate in Learning Management Systems’ a tool that can be integrated within the LMS to provide the students with a visual representation their similarity with others as an awareness mechanism, so that the students can determine the achievements of similar students in previous courses and estimate their own performance.

‘Active Algorithms: Sociomaterial Spaces in the E-learning and Digital Cultures MOOC’ by Jeremy Knox analyzes YouTube and a bespoke blog aggregator to show the algorithmic properties of these systems with respect to functions of teachers using these systems or to authors who create software.

David Luis La Red Martínez y Carlos Enrique Podestá Gómez buscan determinar los patrones de éxito y de fracaso académico de los alumnos para, de esta manera, predecir la probabilidad de los mismos de desertar o tener un bajo rendimiento académico, permitiendo así encarar acciones tendientes a revertir tal situación. Y todo ello a través de la descripción y los resultados de una serie de modelos de minería de datos orientados a la educación estudiados en “Metodología de Estudio del Rendimiento Académico Mediante la Minería de Datos”.

Fernando López y Luis De La Fuente Valentín describe, in ‘Geo-Positioned Activity-Based Collaborative Educational Mobile Platform’, the criteria that guided the construction of such a mobile platform for collaborative learning and the difficulties identified during its construction.

Carlos Augusto Mezarina, Heverd Páez, Orlando Terán y Raúl Toscano aportan con “Aplicación de las TIC en la educación superior como estrategia innovadora para el desarrollo de competencias digitales” evidencias de cómo influye en el proceso educativo la utilización de una plataforma de gestión de contenido con tecnologías emergentes para desarrollar competencias digitales.

Fabio Nascimbeni shows ‘The increased complexity of Higher Education collaboration in times of Open Education’, focussing on emerging technologies and on emerging practices of students and staff mobility enhanced by ICT.

Raquel Ureña Joyanes y Marina Mattera explore, through ‘Breaking the Seventh Heaven: How Implementation of New Technologies Could Affect the Young Generation in the Happiest Countries’, the insights of Economics of Happiness and its interrelation with technological advances in developing nations, considering that the implementation is most widespread among youngsters within and outside the educational scope.

Daysi García-Tinizaray, Karla Ordoñez-Briceño y Juan Carlos Torres-Díaz determinan los factores de una potencial deserción en los entornos virtuales a través de “Learning analytics para predecir la deserción de estudiantes a distancia”.

Cómo citar este artículo / How to cite this paper

Burgos, D., González, R. & Nascimbeni, F. (2014). La Universidad y la Nube. *Campus virtuales*, 3(1), 7-10.

Burgos, D., González, R. & Nascimbeni, F. (2014). University & the Cloud. *Campus virtuales*, 3(1), 7-10.