

TECHNICAL REPORT  
GRIAL-TR-2018-002  
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# Scientific Production Report (2011-2017)

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## ABSTRACT

The research GRoup in InterAction and eLearning (GRIAL) is a Recognized Research Group of the University of Salamanca and, currently, a Consolidated Research Unit by the Regional Council of Castile and León. Its biggest defining characteristic is that it is a multidisciplinary research group which arise around the creation and application of educational technology; therefore, it is composed fundamentally by computer engineers and educationalists, but it also includes humanists, biotechnologists, philosophers, philologists among other professional profiles. This report aims to present the research group's most outstanding scientific production in the 2011-2017 time interval, but previously, the research group's history and evolution will be contextualized, as well as its current composition and its reseach areas. This report also includes information about the proper use of the group's corporate image.

## KEYWORDS

GRIAL; Scientific production; Research projects; Research contracts; Identity manual.

## SUGGESTED CITATION

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# 1. Introduction

The research GRoup in InterAction and eLearning (GRIAL, <https://grial.usal.es>) was constituted in March 2006 as a Recognized Research Group of the University of Salamanca and after a year, it received the Recognized Group of Excellence mention by the Regional Council of Castile and León (GR-47) [1]. In 2015, with the Regional Council of Castile and León's change of strategy regarding research groups, excellence research groups disappeared to conform the so-called Consolidated Research Units (UIC, in its Spanish acronym). The GRIAL Group was postulated, obtaining the Consolidated Research Unit mention in July 2015, with the UIC-081 reference. These units must be renewed every 3 years, hence, in February 2018, GRIAL has requested the renewal of its UIC mention, which is expected to be obtained as the group widely fulfills the minimum criteria required.

The GRIAL Group was created in 2006 as an initiative and a personal quest of Dr. D. Francisco José García Peñalvo, head of the group until the present day, with the goal of pursuing research lines related to the development and use of educational and learning technologies. Given the relationship with other researchers from other areas, because of its membership to the Research Institute for Educational Sciences<sup>1</sup>, the group was born with a clear multidisciplinary nature, combining fundamentally Computer Engineering and Education, but also accompanied by researchers from other disciplinary fields (Philosophy, Philology, Humanities, etc.), providing one of the identity signs of the group, to which researchers with many different profiles are still joining, enriching it and allowing the evolution of its research lines. At this initial moment, the group was fortunate to count on the support and the academic guidance from two major figures from the University of Salamanca. On the one hand, Dr. D. Joaquín García Carrasco, Professor of Theory and History of Education at the University of Salamanca (now retired, but not from academic life and collaboration with the group), from whom the taste and commitment for scientific mixing is inherited, leaving alongside personal egos in the interest of a collective and collaborative growing [2]. On the other hand, Dr. D. Antonio López Eire, Professor of Greek Philology, maybe one of the greatest Spanish Hellenists and an internationally recognized personality, who led the Communication Theory research line, which was crucial in the GRIAL group's conception about eLearning [3-8], until he lost his life, unfortunately, in a traffic accident in 2008 [9].

On this basis, a subgroup of GRIAL, along with other group's collaborators, achieved the Group of Excellence mention by the Regional Council of Castile and León in November 2007, regulated by the Order EDU/1623/2006 [10], and in July 2008, the project *eLearning sin barreras: Nuevos paradigmas de comunicación, servicios y modalidades de interacción para la formación en línea* [11] was obtained. Among the researchers that joined GRIAL for this Excellence group section are Dra. Dña. M<sup>ª</sup> Cruz Sánchez Gómez, from the Area of Knowledge of Research and Diagnosis Methods in Education, who will join definitely GRIAL on an individual basis shortly thereafter, and Dra. Dña. M<sup>ª</sup> José Rodríguez Conde, Professor of the Area of Knowledge of Research and Diagnosis Methods in Education, and now head of the Research Institute for Educational Sciences, who at that time managed the Educational Evaluation and Guidance Group (GE20). The high levels of collaboration and synergy between

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<sup>1</sup> The Research Institute for Educational Sciences was accredited as a Research Institute by the ACSUCYL in July 2008.

the GRIAL and GE20 groups lead to their fusion in 2010 under the name of GRIAL, initiating a structuration of subgroups within GRIAL.

The next significant milestone in the GRIAL Group's evolution comes from the change of strategy of the Regional Council of Castile and León Government regarding their Excellence Groups recognized by the Order EDU/1623/2006 [10]. These groups would maintain their condition until February 29<sup>th</sup>, 2016, but the Order EDU/1623/2006 was repealed in December 2014 by the Order EDU/1006/2014 [12], regulating the Consolidated Research Units (UIC from the Spanish *Unidades de Investigación Consolidadas*) of the Regional Council of Castile and León.

These units aim to be more competitive gathering researchers who, having a common demonstrable trajectory, meet important requirements regarding recognition, production and funding, so they can only be composed by experienced researchers, showing an implicit message about merging efforts of related groups to create more powerful research macro structures.

The GRIAL Group decided to apply for the UIC recognition because of the policy change and its Excellence Group condition, and also because on the date of calling and being selected a subset of its most recognized members on the basis of six-year research periods, it met the required criteria to obtain the aforementioned recognition. However, given the fact that there are other recognized research groups working closely with GRIAL in the Research Institute for Educational Sciences context that request joining the UIC proposal led by GRIAL, new members from these groups are incorporated to the UIC application. At this moment join the group Dra. Dña. Ana García-Valcárcel Muñoz-Repiso, Professor of the Area of Knowledge of Didactic and School Organization and Head of the recognized group GITE (Research Group of Innovation in Educational Technology, in English), which has, in turn, the Recognized Group of Excellence mention by the Regional Council of Castile and León (GR213), Dr. Juan Antonio Juanes Méndez, Senior Lecturer of the Area of Knowledge of Human Anatomy and Embryology and Head of the recognized group VISUALMED and Dr. Roberto Therón Sánchez, Senior Lecturer of the Area of Knowledge of Computer Science and Artificial Intelligence and Head of the Research Unit VisUsal.

The grant of the UIC mention to the GRIAL group (UIC 081) in July 2015 overlaps with a regulatory change in the Recognized Research Groups of the University of Salamanca [13], for which the members of a UIC must belong to the same Recognized Research Groups of the University. This makes some researchers that supported the UIC determine to not to continue within the Unit in order to avoid losing their identity as a Recognized Research Group, other researchers (as in the case of the GITE Group) became integrated in GRIAL and the rest of researchers remained in a situation of no resolved uncertainty as in the case of VISUALMED, which maintained its Recognized Research Group identity and its director, Dr. Juanes Méndez, remained a member of the UIC 081 for Regional Council of Castile and León.

The renovation of the UIC 081 has been requested in February 2018, given the fact that it has been 3 years since its grant and it is a mandatory procedure if the group wants to maintain the aforementioned recognition. Taking advance of this renovation, it has been requested the removal of recently retired researchers, like Dr. D. Francisco Javier Tejedor Tejedor, Professor of the Area of Knowledge of Research and Diagnosis Methods in Education (shall these words serve as an appreciation for his contributions to the Group, the University of Salamanca and the Scientific Community in general), or members that want to explore the creation of its own UIC in the near future; moreover, researchers that have enough recognition to contribute to

the required criteria regarding recognized six-year research periods in the UIC have been registered. Being consulted the new University of Salamanca governing team about the policy and regulation of the Recognized Research Group in the internal context of this University, they have expressed their intention to modify the current regulation in order to decouple the composition of the UIC from the composition of Recognized Research Groups. Once the confirmation of the regulatory change is made, the GRIAL's subgroup GITE will request again the recovery of their own identity as a Recognized Research Group, even though the close relation between both groups will be maintained, and members of the GITE Group will remain as part of the GRIAL UIC.

The main goal of this document is to become a reference that will evolve through time and to summarize the structure, research lines and the main scientific production of the group in the last 7 years (2011-2017). For that purpose, the formal mechanism employed is the GRIAL Technical Reports Series, with the goal of address these reports in a more systematic manner than the previous attempts [1, 14], and with the purpose of checking them periodically in order to update its contents.

## 2. Structure and composition of the GRIAL Research Group

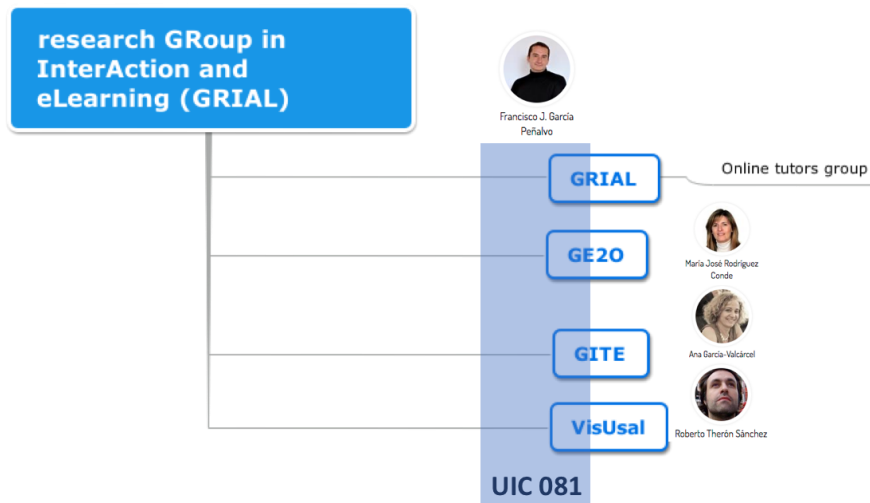
Given the history and evolution of the GRIAL Research Group, the group counts on a high number of researchers and partners (64 members, 29 men and 34 women)<sup>2</sup>. For this reason, the group has an organization based on subgroups so that, aiming to the same goal and working together in interdisciplinary projects, people can see its trajectory recognized finding their identity and context to also develop research activities both basic and applied to their own disciplinary field. This structure is alive and it will evolve according to the situation of the group's members.

Currently, as it can be appreciated in **Figure 1**, the GRIAL Group is composed by four main subgroups (GRIAL, GE20, GITE and VisUsal), which represent the different integrations of Recognized Research Group and Research Units in the GRIAL group. Within the GRIAL subgroup, a group of partners in online mentoring is maintained, more related to the development of teaching activities in eLearning format than in research tasks. Transversally and affecting the subgroups' members (not all of them) there is the Consolidated Research Unit UIC 081.

This organization aims to collaborate together while maintaining the particular identity of every subgroup. In fact, every subgroup has a director or responsible, the GE20 subgroup is headed by Dra. Rodríguez Conde, the GITE subgroup by Dra. García-Valcárcel and the VisUsal subgroup by Dr. Therón Sánchez. On the other hand, the direction of the whole Group, the GRIAL subgroup and the UIC 081 rests in Dr. García-Peñalvo.

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<sup>2</sup> For the purpose of this document the formal differences between researchers and partners of the research group are not taking into account, because it is a specific concept of the internal regulation and this document aims to spread the real work and contributions to the group.



**Figure 1.** GRIAL Group's organizational structure

The **GRIAL subgroup** is composed, fundamentally, by the persons who initially gave birth to the GRIAL Recognized Research Group in 2006. It includes research lines related to development and use of educational and learning technologies, focused from the Computer Engineering perspective (software engineering; software architecture; human-computer interaction; artificial intelligence; data mining; visual analytics; technology management; knowledge management, etc.) and from the Education perspective (eLearning, communication theory; quantitative and qualitative mixed methods, etc.).

The members of this subgroup are (see **Figure 2**):

1. **Director:** Dr. D. Francisco José García-Peñalvo (Professor – Accredited as Full Professor – Area of Computer Science and Artificial Intelligence– 3 six-year periods).
2. Dr. D. Joaquín García Carrasco (Full Professor– Area of Theory and History of Education – Retired – 5 six-year periods).
3. Dra. Dña. María Cruz Sánchez Gómez (Professor – Accredited as Full Professor – Research and Diagnosis Methods in Education – 3 six-year periods).
4. Dr. D. José Rafael García-Bermejo Giner (Professor – Area of Computer Languages and Systems).
5. Dr. D. José Antonio Merlo Vega (Professor – Area of Library Science and Documentation – 3 six-year periods).
6. D. Iván Álvarez Navia (Professor (non-PhD) – Area of Computer Languages and Systems).
7. Dra. Dña. Erla Mariela Morales Morgado (Associate Professor – Area of Didactic and School Organization).
8. Dra. Dña. Ana María Pinto Llorente (Assistant Professor – Area of Didactic and School Organization).
9. Dr. D. Antonio Miguel Seoane Pardo (Part Time Teacher – Research and Diagnosis Methods in Education).
10. Dña. Susana Álvarez Rosado (Part Time Teacher – Area of Computer Languages and Systems).
11. D. Sergio Bravo Martín (Part Time Teacher – Area of Computer Languages and Systems).



12. D. Juan Andrés Hernández Simón (Part Time Teacher - Area of Computer Languages and Systems).
13. Dña. Alicia García Holgado (Research Fellow - Area of Computer Science and Artificial Intelligence).
14. Dña. Lucía García Holgado (Research Personnel).
15. Dña. Valentina Zangrando (Research Personnel).
16. Dra. Dña. Tránsito Ferreras Fernández (Administration and Services Personnel - Library Services Coordinator).
17. Dra. Dña. Helena Martín Rodero (Administration and Services Personnel - Area of Biomedical Library Chief).
18. D. Alejandro Carnicero García (Designer).
19. D. Juan Cruz-Benito (PhD Student, IBM Research, USA).
20. D. Evaristo Ovide (PhD Student).
21. Dña. Andrea Vázquez Ingelmo (Master Student).
22. D. Iñaki Tajés Reiris (Undergraduate Student).
23. Dr. D. Cristóbal Nico Suárez Guerrero (Associate Professor - Area of Didactic and School Organization, University of Valencia, Spain).
24. Dr. D. Miguel Ángel Conde González (Assistant Professor - Area of Computer Architecture and Technology - University of León, Spain).
25. Dr. D. Ricardo Colomo Palacios (Full Professor- Computer Science Department - Østfold University College, Norway).
26. Dra. Dña. Hilda Angélica del Carpio Ramos (Professor - National University Pedro Ruiz Gallo de Lambayeque, Peru).
27. Dr. D. David Griffiths (Full Professor- University of Bolton, UK).
28. Dra. Dña. María Soledad Ramírez Montoya (Professor - Monterrey Tec, Mexico).

Within the GRIAL subgroup is located the group of partners in online tutoring, composed by the following members (see [Figure 3](#)):

1. Dra. Dña. Olga Díez Fernández (Secondary School Teacher - Santa Cruz de Tenerife Mercedes Pinto Distance Learning Centre).
2. D. Juan Jesús Baño Egea (Area of Foundation for Training in Health Research, Murcia's Health Service).
3. Dña. Ángeles Bosom Nieto (Documentalist, Telemadrid).
4. D. Eduardo Díaz San Millán (Freelance).
5. Dña. Elisa Fernández Recio (Medium and High Level Educational Cycle Teacher - INS Mare de Déu de la Mercè).
6. Dña. María José Hernández Tovar (English Teacher - EOI of Castelló).
7. D. Antonio José Martínez (ADIF).
8. D. José Antonio Mayoral Llorente (Land Army Captain).

## GRIAL subgroup members

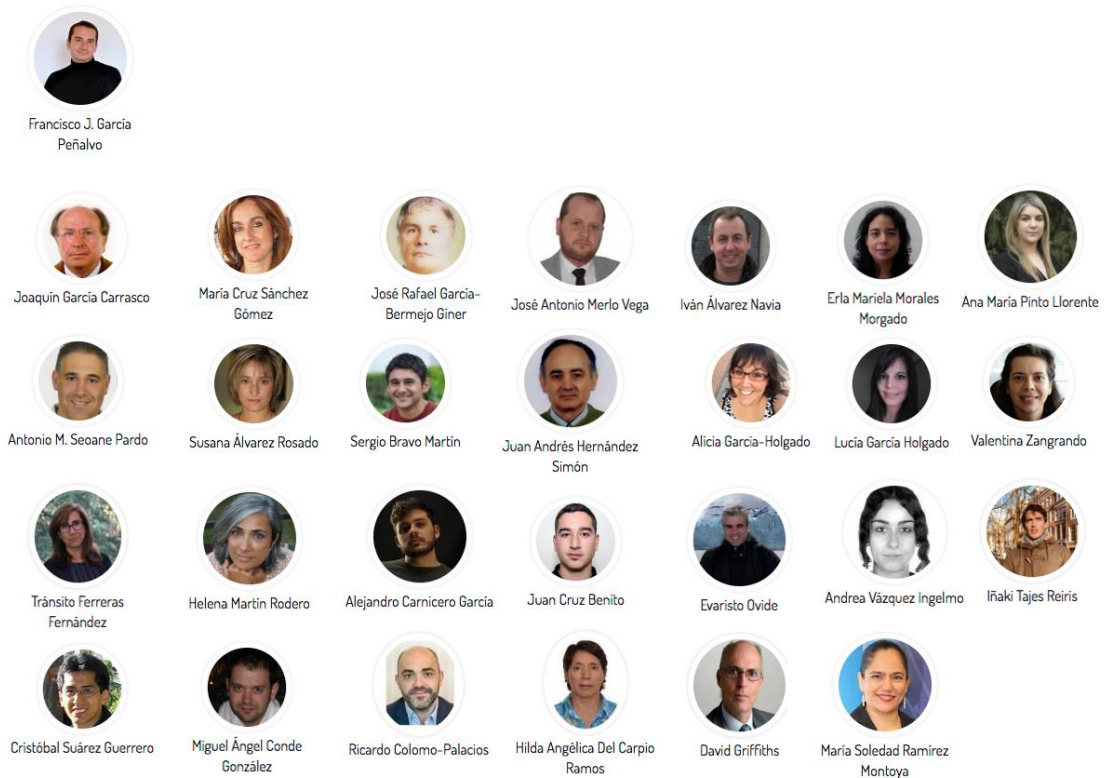


Figure 2. Members of the GRIAL subgroup

## GRIAL-TOL subgroup members

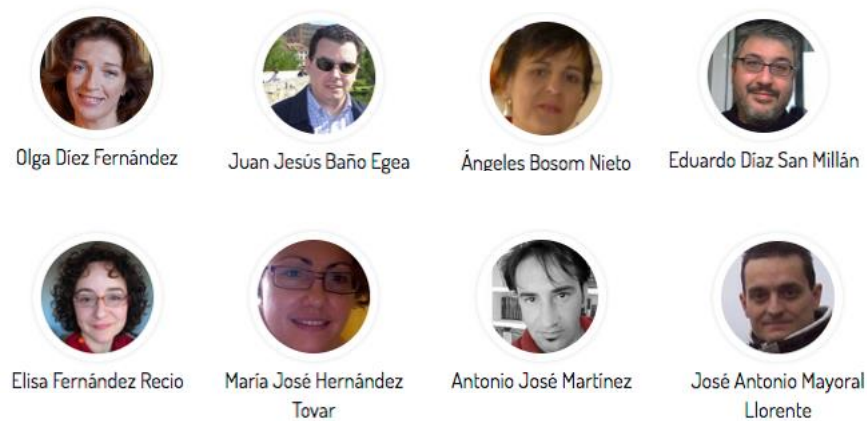


Figure 3. Members of the GRIAL-TOL subgroup

We cannot forget about our dear Dr. D. Antonio López Eire and our dear Dr. D. Iñigo Babot Gutiérrez, you will always be in our minds and hearts (in memoriam, see [Figure 4](#)).

## In memoriam



Iñigo Babot Gutiérrez †



Antonio López Eire †

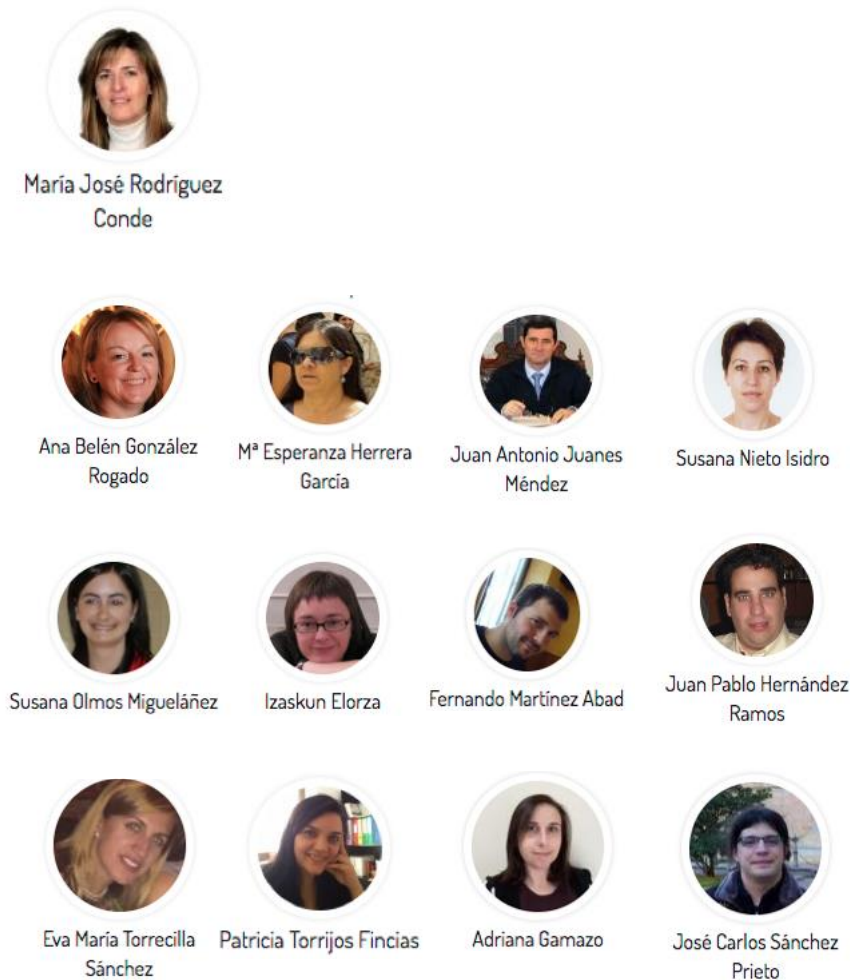
**Figure 4.** In memoriam of our GRIAL colleagues

The **GE20 subgroup** includes the most interested researchers in fields related to research methodology, evaluation and educational guidance, under an interdisciplinary perspective.

The members of this group are (see **Figure 5**):

1. **Director:** Dra. Dña. María José Rodríguez Conde (Full Professor – Research and Diagnosis Methods in Education – 3 six-year periods).
2. Dra. Dña. Ana Belén González Rogado (Professor – Area of Computer Languages and Systems – 1 six-year period).
3. Dra. Dña. María Esperanza Herrera García (Professor – Area of Research and Diagnosis Methods in Education).
4. Dr. D. Juan Antonio Juanes Méndez (Professor – Area of Human Anatomy and Embryology – 2 six-year periods).
5. Dra. Dña. María Carmen López Esteban (Professor – Area of Mathematic Didactics – 1 six-year period).
6. Dra. Dña. Susana Nieto Isidro (Professor – Area of Applied Mathematic).
7. Dra. Dña. Susana Olmos Migueláñez (Professor – Area of Research and Diagnosis Methods in Education – 2 six-year periods).
8. Dra. Dña. Izaskun Elorza Amorós (Associate Professor – Area of English Philology).
9. Dr. D. Fernando Martínez Abad (Assistant Professor – Accredited as Professor – Research and Diagnosis Methods in Education).
10. Dr. D. Juan Pablo Hernández Ramos (Assistant Professor – Research and Diagnosis Methods in Education).
11. Dra. Dña. Eva María Torrecilla Sánchez (Assistant Professor – Research and Diagnosis Methods in Education).
12. Dra. Dña. Patricia Torrijos Fincias (Assistant Professor – Area of Didactic and School Organization).
13. Dña. Adriana Gamazo García (Research Fellow – Area of Research and Diagnosis Methods in Education).
14. D. José Carlos Sánchez Prieto (Research Fellow – Area of Research and Diagnosis Methods in Education).

## GE20 subgroup members



**Figure 5.** Members of the GE20 subgroup

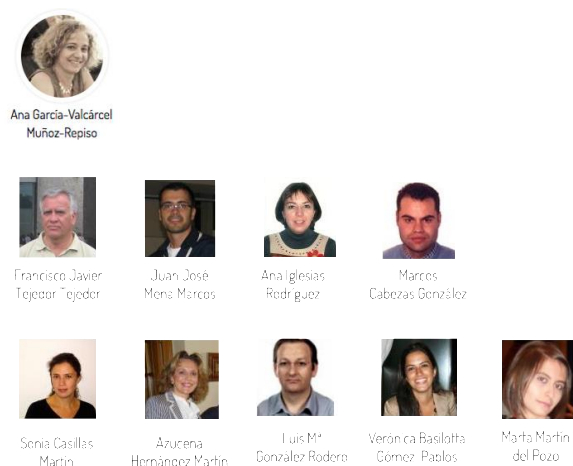
The **GITE subgroup** includes the researchers more related to the incorporation of the ICT in teaching-learning processes at different educational levels, teacher training and educational innovation.

The members of this subgroup are (see **Figure 6**):

1. **Director:** Dra. Dña. Ana García-Valcárcel Muñoz-Repiso (Full Professor – Area of Didactic and School Organization – 4 six-year periods).
2. Dr. D. Francisco Javier Tejedor Tejedor (Full Professor – Research and Diagnosis Methods in Education – Retired – 6 six-year periods).
3. Dr. D. Juan José Mena Marcos (Professor – Area of Didactic and School Organization).
4. Dra. Dña. Ana Iglesias Rodríguez (Professor – Area of Didactic and School Organization).
5. Dr. D. Marcos Cabezas González (Associate Professor – Area of Didactic and School Organization).
6. Dra. Dña. Sonia Casillas Martín (Associate Professor – Area of Didactic and School Organization).
7. Dra. Dña. Azucena Hernández Martín (Associate Professor – Area of Didactic and School Organization – 1 six-year period).

8. D. Luis María González Rodero (Lecturer – Area of Didactic and School Organization).
9. Dña. Verónica Basilotta Gómez-Pablos (Research Fellow – Area of Didactic and School Organization).
10. Dña. Marta Martín del Pozo (Research Fellow – Area of Didactic and School Organization).

#### GITE subgroup members



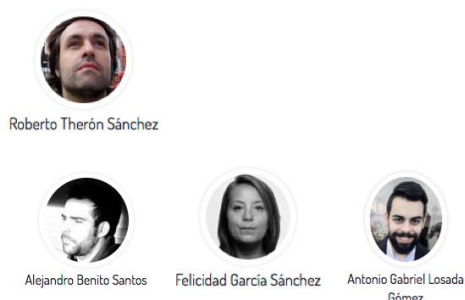
**Figure 6.** Members of the GITE subgroup

The **VisUsal subgroup** includes researchers from a wide variety of fields (Bioinformatics, Digital Humanities, Sport Analysis, Paleoclimatology, etc.) dedicated to the development of advanced tools that help users to understand complex datasets.

The members of this subgroup are (see **Figure 7**):

1. **Director:** Dr. D. Roberto Therón Sánchez (Professor – Area of Computer Science and Artificial Intelligence– 2 six-year periods).
2. D. Alejandro Benito Santos (Part time teacher – Area of Computer Science and Artificial Intelligence).
3. Dña. Felicidad García Sánchez (Research Fellow).
4. D. Antonio Gabriel Losada Gómez (PhD Student).

#### VisUsal subgroup members



**Figure 7.** Members of the VisUsal subgroup

## UIC 081 members

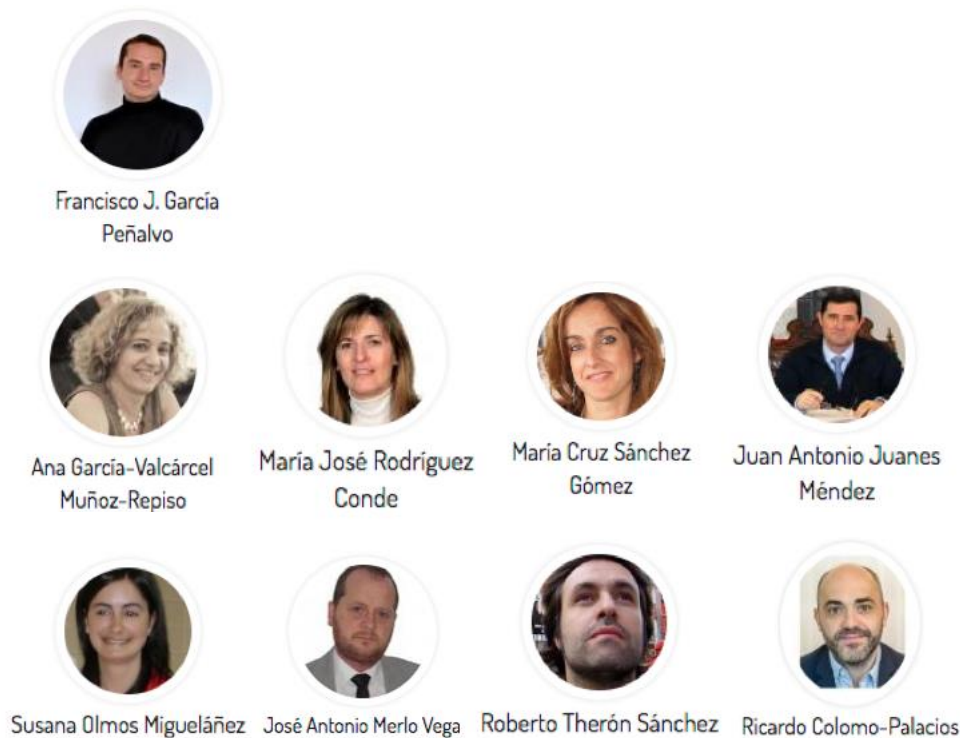


Figure 8. UIC 081 members

Finally, the **UIC 081** is composed by 9 members of the aforementioned subgroups (see **Figure 8**):

1. **Director:** Dr. D. Francisco José García-Peñalvo (Professor – Accredited as Full Professor – Area of Computer Science and Artificial Intelligence).
2. Dra. Dña. Ana García-Valcárcel Muñoz-Repiso (Full Professor – Area of Didactic and School Organization).
3. Dra. Dña. María José Rodríguez Conde (Full Professor – Research and Diagnosis Methods in Education).
4. Dra. Dña. María Cruz Sánchez Gómez (Professor – Accredited as Full Professor – Research and Diagnosis Methods in Education).
5. Dr. Juan Antonio Juanes Méndez (Professor – Area of Human Anatomy and Embryology).
6. Dr. D. José Antonio Merlo Vega (Professor – Area of Library Science and Documentation).
7. Dra. Dña. Susana Olmos Migueláñez (Professor – Area of Research and Diagnosis Methods in Education).
8. Dr. D. Roberto Therón Sánchez (Professor – Area of Computer Science and Artificial Intelligence).
9. Dr. D. Ricardo Colomo Palacios (Full Professor- Computer Science Department – *Østfold University College, Norway*).

In the **Figure 9** some quantitative data regarding each subgroup's composition, the UIC 081 and the whole group is presented.

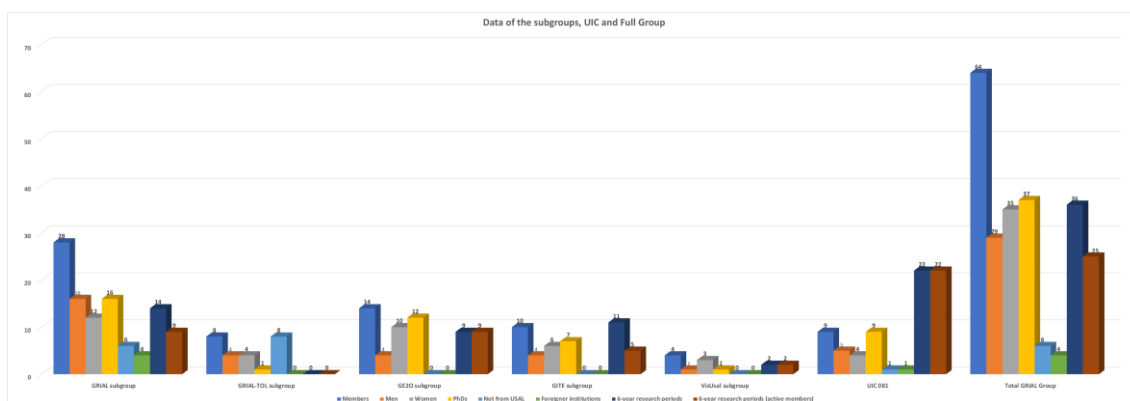


Figure 9. Quantitative data regarding each subgroup’s composition, the UIC 081 and the whole group

Figure 10 shows information about the professional categories of the GRIAL Group members, providing information of every subgroup, the UIC and the whole group.

As it has been manifested, the GRIAL Group is a multidisciplinary group that looks for a differentiator precisely in this quality for its interdisciplinary research activity, and in that way the Figure 11 shows the disciplinary composition of the subgroups and the whole group, although in this occasion the subgroup GRIAL-TOL has been omitted given its professional (and not research) orientation.

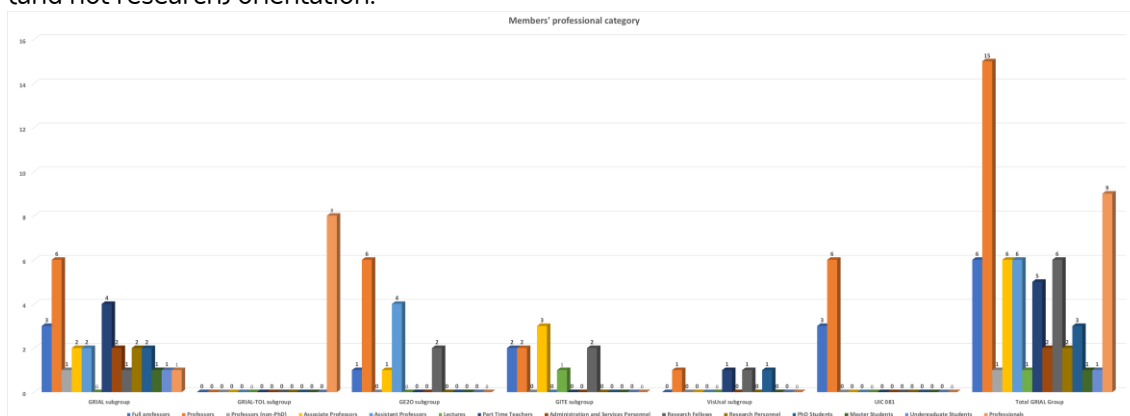


Figure 10. Data of the GRIAL members’ professional categories

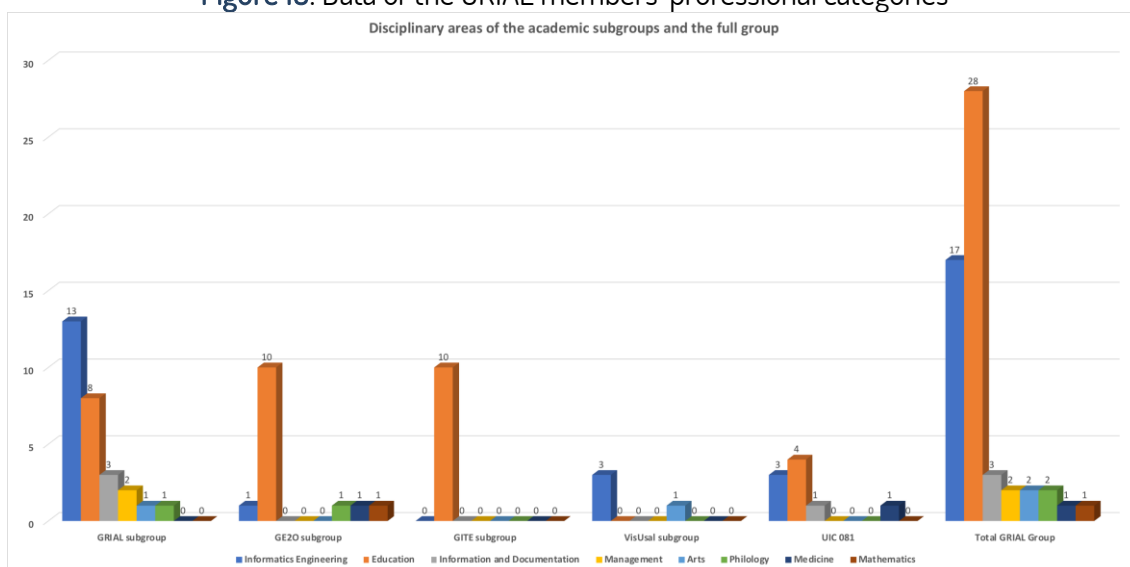


Figure 11. Data about the disciplinary fields of the GRIAL Group members

### 3. Research lines

The main research lines of the GRIAL Group are:

- Visual Analytics [[15-26](#)].
- Education quality and evaluation [[27-35](#)].
- Information sciences [[36-43](#)].
- Technological ecosystems [[44-57](#)].
- Knowledge and Technology strategic management [[58-72](#)].
- Digital Humanities [[73-76](#)].
- Web engineering and software architectures [[23](#), [77-92](#)].
- *eLearning methodologies* [[3-7](#), [93-97](#)].
- Social responsibility and inclusion [[98-110](#)].
- Interactive learning systems [[111-117](#)].
- Learning technologies [[18](#), [19](#), [48](#), [49](#), [53](#), [57](#), [118-145](#)].
- ICT and educational innovation [[146-155](#)].

### 4. Collaboration with other groups and networks

It is not pretended to include in this section the complete catalogue of partners and research groups with whom GRIAL collaborates and has relation. It is going to be reduced to a relation of the groups in which some members have their collaboration recognized and the national and international networks alive during this reference period.

Regarding the relation with other groups the following are highlighted:

1. Equipo de Investigación en Psicología, Género y Métodos de Investigación of the Pontifical University of Salamanca. Since December 2012 until now. Director: Dra. Dña. Carmen Delgado Álvarez. Collaborating GRIAL Member: Dra. Dña. María Cruz Sánchez Gómez.
2. El Centro de Atención Integral al Autismo (INFOAUTISMO). Director: Dr. D. Ricardo Canal Bedia. Collaborating GRIAL Member: Dra. Dña. María Cruz Sánchez Gómez.
3. Grupo de Investigación e Innovación en Educación. Monterrey Tec, Mexico. Director: Dra. Dña. María Soledad Ramírez Montoya. Since 2015 until now. Collaborating GRIAL Members: Dr. D. Francisco José García-Peñalvo and Dr. D. Juan José Mena Marcos. Thanks to this collaboration different research projects and joint publications [[156-167](#)] have been developed.
4. Grupo de Investigación de Psicociencias del IBSAL (Instituto de Investigación Biomédica de Salamanca). Director: Dr. D. Manuel Ángel Franco Martín. Since October 2017<sup>3</sup>. This group is organized in different subgroups, specifically coordinated by GRIAL Group members:

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<sup>3</sup> Although the approval of the group from IBSAL its been done in the last quarter of 2017, given the internal procedures of this institute, the joint activity between two entities goes back to several years.



- a. The Tecnología en Psicociencias subgroup is coordinated by Dr. D. Francisco José García-Peñalvo with Dña. Alicia García-Holgado also participating.
- b. The Metodología Cualitativa y Cuantitativa subgroup is coordinated by Dra. Dña. M<sup>a</sup> Cruz Sánchez Gómez with also Dra. Dña. Ana M<sup>a</sup> Pinto Llorente and Dr. D. Fernando Martínez Abad participating.

Thanks to this collaboration GRIAL has achieved participation in different research projects, obtaining results in two main fields, technological ecosystems [99, 100, 168-170] and qualitative research [104-106].

5. Collaboration with Grupo de Investigación e Innovación en Docencia con Tecnologías de la Información y la Comunicación (GIDTIC) of the University of Zaragoza, headed by Dra. Dña. María Luisa Sein-Echaluce Laclea, and with the Laboratorio de Innovación en Tecnologías de la Información (LITI) of the Technical University of Madrid, headed by Dr. D. Ángel Fidalgo Blanco, regulated by convention in July 23th, 2015 among the three universities (Technical University of Madrid, University of Salamanca and University of Zaragoza). Under this convention, joint activities are authorized coordinated by the directors of the LITI, GIDTIC and GRIAL groups, among which the following are highlighted:
  - a. Events organization (seminars and binannual conference) under the CINAIC brand (International Conference about Learning, Innovation and Competitiveness) [171-174].
  - b. Development of a technological platform for MOOC impartation (iMOOC) [145, 175].
  - c. Development of MOOC in the MiriadaX platform as well as in the iMOOC platform [176]:
    - i. Open source software and open knowledge (MiriadaX – 1st edition, April 2013).
    - ii. Applied educational innovation (MiriadaX – 1st edition, April 2014).
    - iii. Applied educational innovation (MiriadaX – 2nd edition, April 2015).
    - iv. Applied educational innovation (MiriadaX – 3rd edition, November 2015).
    - v. aMOOC Flip Teaching (iMOOC – 1st edition, November 2015).
    - vi. aMOOC Learning communities (iMOOC – 1st edition, November 2015).
    - vii. aMOOC Teamwork competence (iMOOC – 1st edition, November 2015).
    - viii. aMOOC Practical foundations of educational innovation (iMOOC – 1st edition, November 2015).
    - ix. Applied educational innovation (MiriadaX – 4th edition, January 2017).
    - x. First steps for a personalized learning in the classroom (MiriadaX – 1st edition, February 2017).
    - xi. Flip teaching (MiriadaX – 1st edition, April 2018).
    - xii. First steps for a personalized learning in the classroom (MiriadaX – 2nd edition, April 2018).
  - d. Project development and research contracts.
    - i. CDTI. Contrato de servicios para el desarrollo de un nuevo servicio de búsqueda de socios y mejoras de las funcionalidades del mapa de ayudas de la Red PI+d+i (from 2009 to 2013).

- ii. CDTI. Contrato para los servicios de soporte y mantenimiento del sistema de gestión de conocimiento y difusión de ayudas públicas en I+D+i que apoye las actividades de la Red PI+d+i (from 2014 to 2017).
- e. Educational innovation projects development.
  - i. Flip Teaching. Technical University of Madrid. 2014-2015 Course.
  - ii. Diseño y desarrollo de MOOC Universitario (transversal project that integrates 5 groups of Educational Innovation of the UPM). Technical University of Madrid. 2014-2015 Course.
  - iii. Los MOOCs en la UPM. Flip Teaching. 2016-2017 Course.
  - iv. Flip teaching para trabajo en equipo. 2016-2017 Course.
  - v. Aprendizaje adaptativo a través de la evaluación diagnóstica y formativa. Technical University of Madrid. 2016-2017 Course.
  - vi. ICA. Inteligencia Colectiva Activa a través de la metodología Flip Teaching. Technical University of Madrid. 2017-2018 Course.
  - vii. Curso masivo abierto en línea sobre Software Libre. University of Zaragoza (2014-2015 Course).
  - viii. Grupo de innovación en adaptatividad y enseñanza personalizada. Instructional Innovation Incentivation Programme in the University of Zaragoza (2014-2015). PIIDUZ\_14\_063.
  - ix. Grupo de Innovación sobre Aprendizaje Personalizado y Sistemas Adaptativos. Instructional Innovation Incentivation Programme in the University of Zaragoza (2015-2016). PIIDUZ\_15\_468.
  - x. Grupo de Innovación sobre Aprendizaje Personalizado y Sistemas Adaptativos. Instructional Innovation Incentivation Programme in the University of Zaragoza (2016-2017). PIIDUZ\_16\_232.
  - xi. Implantación de un sistema integral de gestión del conocimiento para los procesos de innovación docente de la Universidad de Salamanca. (2014-2015). ID2014/0312.
  - xii. Definición de un proceso de gestión de la innovación docente en la Universidad de Salamanca sobre la base de un sistema integral de gestión del conocimiento. (2015-2016). ID2015/0045.
- f. Realization of joint publications, for example [[126](#), [129](#), [143](#), [177-181](#)].

During the 2011-2017 period, GRIAL Group members have participated in the following national and international networks:

1. SNOLA – Red temática española de analítica de aprendizaje (ref. TIN2015-71669-REDT). Principal Investigator: Dr. D. Asier Perallos Ruiz. Duration: 1-12-2015 – 30-11-2017. GRIAL participants: Dra. Dña. M<sup>a</sup> José Rodríguez Conde, Dr. D. Francisco José García-Peñalvo, Dr. D. Miguel Ángel Conde González and D. Juan Cruz-Benito. More information: <https://goo.gl/Ff9S1u> [[182](#)].
2. Red Iberoamericana de Innovación e Investigación en Tecnologías y Usos en el Aprendizaje Electrónico (RED RITUAL), constituted as an Institutional Academic Network of the National Autonomous University of Mexico. Coordinator: Dr. D. José Antonio Jerónimo Montes. Responsible for the University of Salamanca node: Dr. D. Francisco José García-Peñalvo. Since 2014. More information: <https://goo.gl/8hGuvJ>.
3. Red de investigación e innovación educativa. Cambios sociales y retos para la educación en la era digital (REUNI+D) (ref. EDU2015-68718-REDT). Principal

- Investigator: Dra. Dña. Juana María Sáncho Gil. Since 2015. GRIAL participants: Dra. Dña. Ana García-Varcárcel Muñoz-Repiso [183].
4. Red Internacional de Investigación Openenergy. Directora: Dra. Dña. María Soledad Ramírez Montoya, Tecnológico de Monterrey, México. Since October 2016. GRIAL participants: Dr. D. Francisco José García-Peñalvo and Dr. D. Juan José Mena Marcos. More information: <https://goo.gl/JvjdHy>.
  5. Red Iberoamericana de Investigación sobre la Calidad de la Formación Doctoral en Ciencias Sociales. Coordinator: Dr. D. Emilio Ortiz. Red de Investigación AUIP. Since 2016. GRIAL participant: Dr. D. Francisco José García-Peñalvo. More information: <https://goo.gl/whccfD>.

## 5. Research projects and contracts

In this section is going to be collected those research projects and contracts in which the members of the group had a direction responsibility in the 2011-2017 period. More information available at: <https://grial.usal.es/projects>.

### Research projects

1. Servicios a empresas y ciudadanos mediante administración electrónica ofrecidos por las Universidades Públicas de Castilla y León (ref. TSI-050200-2009-252). Financed by: Ministerio de Industria, Turismo y Comercio. Principal Investigator: Dr. D. Evaristo Abril. Principal Investigator of the University of Salamanca Subproject: Dr. D. Francisco José García-Peñalvo. Duration: 2009-2011. Budget: 764.282€.
2. Layers4Moodle (ref. TSI-020302-2010-2). Financed by: Ministerio de Industria, Turismo y Comercio. Principal Investigator: D. Marcos Sergio Cuevas. Principal Investigator of the University of Salamanca Subproject: Dr. D. Francisco José García-Peñalvo. Duration: 2010-2012. Budget: 1.461.917€.
3. EF-TALCO: Evaluación de competencias clave y formación de profesorado de educación secundaria: TIC, ALFIN y convivencia escolar (ref. EDU2009-08753). Financed by: Ministerio de Ciencia e Innovación. Principal Investigator: Dra. Dña. María José Rodríguez Conde. Duration: 2010-2013. Budget: 117.370,01€.
4. oiPLE: Entorno abierto, integrado y personalizado para el aprendizaje. Hacia una nueva concepción de los procesos de aprendizaje basados en tecnología (ref. TIN2010-21695-C02). Financed by: Ministerio de Ciencia e Innovación. Principal Investigator: Francisco José García-Peñalvo. Duration: 2011-2014. Budget: 54.500€ [89, 184-188].
5. TALARIA (Teaching and E-Learning Advances in European Mobility Space) (ref. 2011-1-PL1-LE003-18641). Financed by: Unión Europea. Principal Investigator: Dr. D. Andrzej Niesler. Principal Investigator of the University of Salamanca Subproject: Dr. D. Francisco José García-Peñalvo. Duration: 2011. Budget: 33.892€.
6. Tagging, Recognition and Acknowledgment of Informal Learning Experiences (TRAILER) (ref. 519141-LLP-1-2011-1-ES-KA3-KA3MP). Financed by: Unión Europea. Principal Investigator: Francisco José García-Peñalvo. Duration: 2011-2013. Budget: 544.349€ [189, 190].
7. Factores protectores de las prácticas culturales andinas y consumo de alcohol y drogas en la población adolescente (ref. A3/041712/11). Financed by: Ministerio de

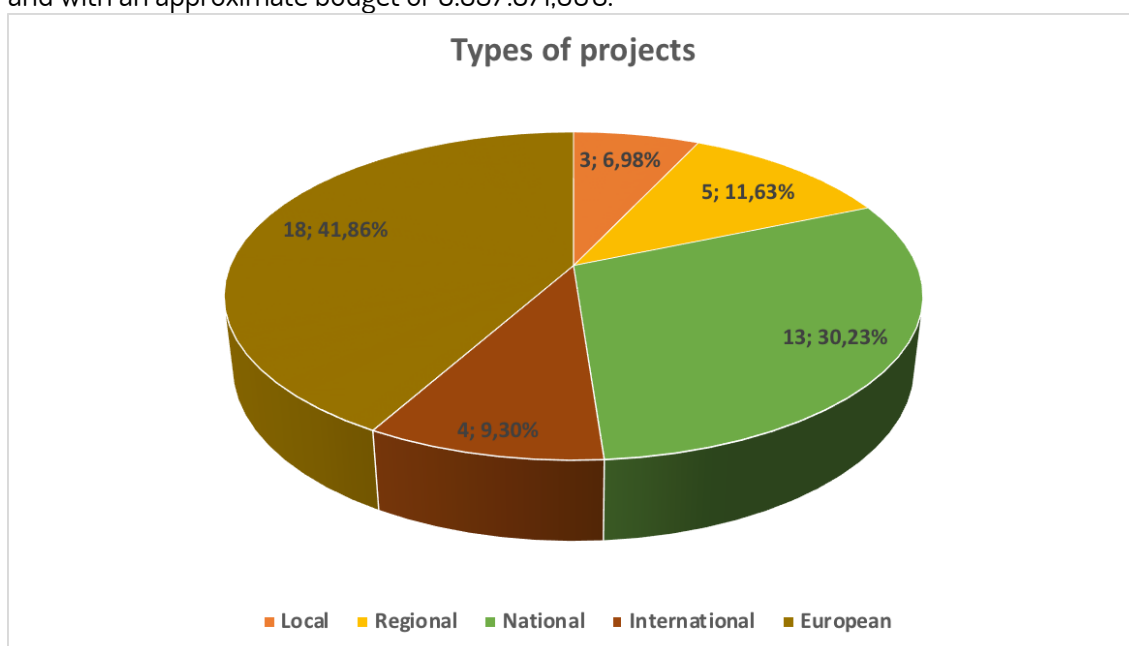
- Asuntos Exteriores y de Cooperación (AECID). Principal Investigator: Dra. Dña. María Cruz Sánchez Gómez. Duration: 2011-2013. Budget: 44.862€.
8. Diagnóstico de la incidencia y formas de violencia doméstica por razones de género en adolescentes Aymaras urbanas de la región de Arica y Parinacota, Chile (ref. A/033951/10). Financed by: Ministerio de Asuntos Exteriores y de Cooperación (AECID). Principal Investigator: Dra. Dña. María Cruz Sánchez Gómez. Duration: 2011-2012. Budget: 27.800€ [191].
  9. Mobile Personal Learning Environments (MPLE) (ref. SA294A12-2). Financed by: Junta de Castilla y León. Principal Investigator: Francisco José García-Peñalvo. Duration: 2012-2014. Budget: 27.500€ [138, 140, 192, 193].
  10. EHISTO (European HISTOry crossroads as pathways to intercultural and media education) (ref. 527752-LLP-1-2012-1-DE-COMENIUS-CMP). Financed by: Unión Europea. Principal Investigator: Dra. Dña. Susanne Popp. Principal Investigator of the University of Salamanca Subproject: Dr. D. Francisco José García-Peñalvo. Duration: 2012-2014. Budget: 385.635€ [194].
  11. Aprendizaje colaborativo a través de las TIC en el contexto de la Escuela 2.0 (ref. EDU2011-28071). Financed by: Ministerio de Ciencia e Innovación. Principal Investigator: Dra. Dña. Ana García-Valcárcel Muñoz-Repiso. Duration: 2012-2015. Budget: 54.692€.
  12. INTO (Intercultural Mentoring tools to support migrant integration at school) (ref. 540440-LLP-1-2013-1-IT-COMENIUS-CMP). Financed by: Unión Europea. Principal Investigator: Dr. D. Enrico Roberto Barbieri. Principal Investigator of the University of Salamanca Subproject: Dr. D. Francisco José García-Peñalvo. Duration: 2013-2015. Budget: 333.463€ [101, 102, 195-198].
  13. Virtual Alliances for Learning Society (VALS) (ref. 540054-LLP-1-2013-1-ES-ERASMUS-EKA). Financed by: Unión Europea. Principal Investigator: Francisco José García-Peñalvo. Duration: 2013-2016. Budget: 533.337€ [199-208].
  14. Desarrollo de un repositorio de aplicaciones móviles para mayores (ref. CTULEI3-3). Financed by: Cátedra Telefónica – Universidad de León. Principal Investigator: Dr. D. Miguel Ángel Conde González. Duration: 2013-2014. Budget: 2.000€ [209, 210].
  15. IERS (Intercultural Education through Religious Studies) (ref. 539803-LLP-1-2013-1-IT-COMENIUS-CMP). Financed by: Unión Europea. Principal Investigator: Dr. D. Massimo Raveri. Principal Investigator of the University of Salamanca Subproject: Dr. D. Francisco José García-Peñalvo. Duration: 2013-2015. Budget: 400.000€ [211].
  16. EFI-CINCO: Evaluación, formación e innovación sobre competencias clave en educación secundaria: TIC, competencia informacional y resolución de conflictos (ref. EDU2012-34000). Financed by: Ministerio de Economía y Competitividad. Principal Investigator: Dra. Dña. María José Rodríguez Conde. Duration: 2013-2016. Budget: 18.000€.
  17. Plan de formación en TICs para mayores desarrollado a través de MOOCs (ref. CTULEI4-4). Financed by: Cátedra Telefónica – Universidad de León. Principal Investigator: Dr. D. Miguel Ángel Conde González. Duration: 2014-2015. Budget: 1.500€.
  18. Proyecto Educativo Extracurricular "DocuTico: Documentando mi entorno" (ref. MEP-ProEduca-423-2014). Financed by: Unión Europea/Ministerio de Educación Pública de Costa Rica. Principal Investigator: Dra. Dña. María Cruz Sánchez Gómez. Duration: 2014-2015. Budget: 71.089€.

19. Fen, Matematik ve İngilizce Derslerinde Bilişim İletişim Teknolojileri Araçları Kullanımının Etkinleştirilmesi [Science, Mathematics and ICT tools use in the Teaching of English] (ref. 2014-1-TR01-KA101-004923). Financed by: Unión Europea. Principal Investigator: Dr. D. Imge Özalp. Principal Investigator of the University of Salamanca Subproject: Dr. D. Juan José Mena Marcos. Duration: 2014-2016. Budget: 27.500€.
20. MED-BALT Strategic Partnership in Adult Migrant Education: Perspectives from Mediterranean, Baltic Sea Regions (ref. 2014-1-LT01-KA204-000643). Financed by: Unión Europea. Principal Investigator: D. Vija Platačiūtė. Principal Investigator of the University of Salamanca Subproject: Dr. D. Francisco José García-Peñalvo. Duration: 2015-2016. Budget: 83.350€.
21. Red de investigación e innovación educativa. Cambios sociales y retos para la educación en la era digital (ref. EDU2015-68718-REDT). Financed by: Ministerio de Economía y Competitividad. Principal Investigator: Dra. Dña. Juana María Sáncho Gil. Investigadora Principal del Subproyecto de la Universidad de Salamanca: Dra. Dña. Ana García-Valcárcel Muñoz-Repiso. Duration: 2015-2017. Budget: 20.000€.
22. SNOLA – Red temática española de analítica de aprendizaje (ref. TIN2015-71669-REDT). Financed by: Ministerio de Economía y Competitividad. Principal Investigator: Dr. D. Asier Perallos Ruiz. Investigadora Principal del Subproyecto de la Universidad de Salamanca: Dra. Dña. María José Rodríguez Conde. Duration: 2015-2017. Budget: 35.000€ [182].
23. Valuing All Languages to Unlock Europe (VALUE) (ref. 2015-1-IT02-KA201-015407). Financed by: Unión Europea. Principal Investigator: Dr. D. Enrico Roberto Barbieri. Principal Investigator of the University of Salamanca Subproject: Dr. D. Francisco José García-Peñalvo. Duration: 2015-2017. Budget: 299.969€.
24. Elaboración de la propuesta europea “GYRE. Generative Youth Research for Europe” (ref. EUIN2015-62676). Financed by: Ministerio de Economía y Competitividad. Principal Investigator: Dr. D. Francisco José García-Peñalvo. Duration: 2015-2015. Budget: 18.700€.
25. TACCLE3 – Coding (ref. 2015-1-BE02-KA201-012307). Financed by: Unión Europea. Principal Investigator: D. Jens Vermeersch. Principal Investigator of the University of Salamanca Subproject: Dr. D. Francisco José García-Peñalvo. Duration: 2015-2017. Budget: 279.940€ [212-218].
26. Mentoring Conversations for Preservice Teacher Supervision: Methods to Capture Pedagogical Supervisory Knowledge. Financed by: Faculty Seed Grant. University of Wollongong (NSW, Australia). Principal Investigator: Dra. Dña. Wendy Nielsen. Principal Investigator of the University of Salamanca Subproject: Dr. D. Juan José Mena Marcos. Duration: 2015-2017. Budget: 10.000€ [219].
27. Teaching through with 21st century methodologies (ref. 2015-TR01-KA101-017238). Financed by: Unión Europea. Principal Investigator: Dña. Semra Gunes. Principal Investigator of the University of Salamanca Subproject: Dr. D. Juan José Mena Marcos. Duration: 2015-2017. Budget: 38.882€.
28. Evaluación de Impacto del Desarrollo de Competencias Básicas sobre el Rendimiento Académico en Educación Secundaria: Propuesta de Formación e Innovación Docente (EFI-4) (Ref. EDU2015-64524-P). Financed by: Ministerio de Economía y Competitividad. Principal Investigator: Dra. Dña. María José Rodríguez Conde. Duration: 2016-2018. Budget: 45.012€.

29. Evaluación de la competencia digital de los estudiantes de educación obligatoria y estudio de la incidencia de variables socio-familiares (ref. EDU2015-67975-C3-3-P). Financed by: Ministerio de Economía y Competitividad. Principal Investigator: Dra. Dña. Ana García-Valcárcel Muñoz-Repiso. Duration: 2016-2019. Budget: 26.400€.
30. Confidence in behaviour changes through serious games (ref. 732420). Financed by: Unión Europea (H2020). Principal Investigator: Dña. María Teresa Cobo. Investigadora Principal del Subproyecto de la Universidad de Salamanca: Dra. Dña. Ana García-Valcárcel Muñoz-Repiso. Duration: 2016-2018. Budget: 134.453,75€.
31. STEMS: Supporting Teachers And Immigrant Students At School (ref. 2016-1-IT02-KA201-024707). Financed by: Unión Europea. Principal Investigator: D. Yasin Keskin. Principal Investigator of the University of Salamanca Subproject: Dr. D. Francisco José García-Peñalvo. Duration: 2016-2019. Budget: 198.270€.
32. SORAPS: Study of Religions Against Prejudices and Stereotypes (ref. 2016-1-IT02-KA201-024707). Financed by: Unión Europea. Principal Investigator: Dr. D. Massimo Raveri. Principal Investigator of the University of Salamanca Subproject: Dr. D. Francisco José García-Peñalvo. Duration: 2016-2019. Budget: 357.872€.
33. E-EVALINTO: Evaluation environment for fostering intercultural mentoring tools and practices at school (ref. 2016-1-ES01-KA201-025145). Financed by: Unión Europea. Principal Investigator: Dr. D. Francisco José García-Peñalvo. Duration: 2016-2018. Budget: 121.994€.
34. WYRED: netWorked Youth Research for Empowerment in the Digital society (ref. 727066). Financed by: Unión Europea (H2020). Principal Investigator: Dr. D. Francisco José García-Peñalvo. Duration: 2016-2019. Budget: 993.662,50€ [[98](#), [220](#), [221](#)].
35. SocialNET. Red social privada para el seguimiento de la evolución diaria de los pacientes por parte de sus familiares. Financed by: Junta de Castilla y León. Principal Investigator: Dr. D. Francisco José García-Peñalvo. Duration: 2016-2016. Budget: 5.000€.
36. Toma de decisiones progresiva visual en humanidades digitales (PROgressive VIsual DEcision Making for Digital Humanities) (ref. PCIN-2017-064). Financed by: Ministerio de Economía y Competitividad. Principal Investigator: Dr. D. Roberto Therón Sánchez. Duration: 2017-2020. Budget: 826.139,79€.
37. TE-CUIDA, propuesta de un Ecosistema TEcnológico para apoyo a CUIDAdores asistenciales (ref. SA061P17). Financed by: Junta de Castilla y León. Principal Investigator: Dr. D. Francisco José García-Peñalvo. Duration: 2017-2019. Budget: 117.000€.
38. Plataforma de implementación de cursos on-line ECMSchool. Financed by: Junta de Castilla y León. Principal Investigator: Dr. D. Francisco José García-Peñalvo. Duration: 2017-2018. Budget: 8.000€.
39. HIPPOCAMPUS - Promoting Mental Health and Wellbeing among Young People through Yoga (ref. 2017-2-ES02-KA205-009942). Financed by: Unión Europea. Principal Investigator: Dr. D. Francisco José García-Peñalvo. Duration: 2017-2019. Budget: 192.914€.
40. Definición, implementación, despliegue y pruebas de experiencia de usuario de ecosistemas tecnológicos inteligentes en contextos educativos. Financed by: Universidad de Salamanca. Principal Investigator: Dr. D. Francisco José García-Peñalvo. Duration: 2017-2020. Budget: 61.424,61€.

41. DUEROLAND, sistema de ventas gestionado por personas con demencia o con alguna enfermedad mental. Financed by: Junta de Castilla y León. Principal Investigator: Dr. D. Francisco José García-Peñalvo. Duration: 2017-2017. Budget: 7.000€.
42. A Digital Ecosystem Framework for an Interoperable NEtwork-based Society (DEFINES) (ref. TIN2016-80172-R). Financed by: Ministerio de Economía y Competitividad. Principal Investigator: Dr. D. Francisco José García-Peñalvo. Duration: 2017-2020. Budget: 82.900€ [222-227].
43. Detección de buenas prácticas educativas en escuelas de alto valor añadido mediante técnicas de Big Data. Financed by: Fundación BBVA. Becas Leonardo para Investigadores y Creadores Culturales Fundación BBVA 2017. Principal Investigator: Dr. D. Fernando Martínez Abad. Duration: 2017-2018. Budget: 30.300€.

In total, in this period of time, the GRIAL Group has been directly involved in the management of 43 projects (3 local, 3 regional, 13 national, 4 international and 18 European, see [Figure 12](#)) and with an approximate budget of 8.897.871,66€.



**Figure 12.** Types of projects of the GRIAL Group (2011-2017)

In the [Figure 13](#) the GRIAL Group projects started every year (since 2009 until 2017) are presented.

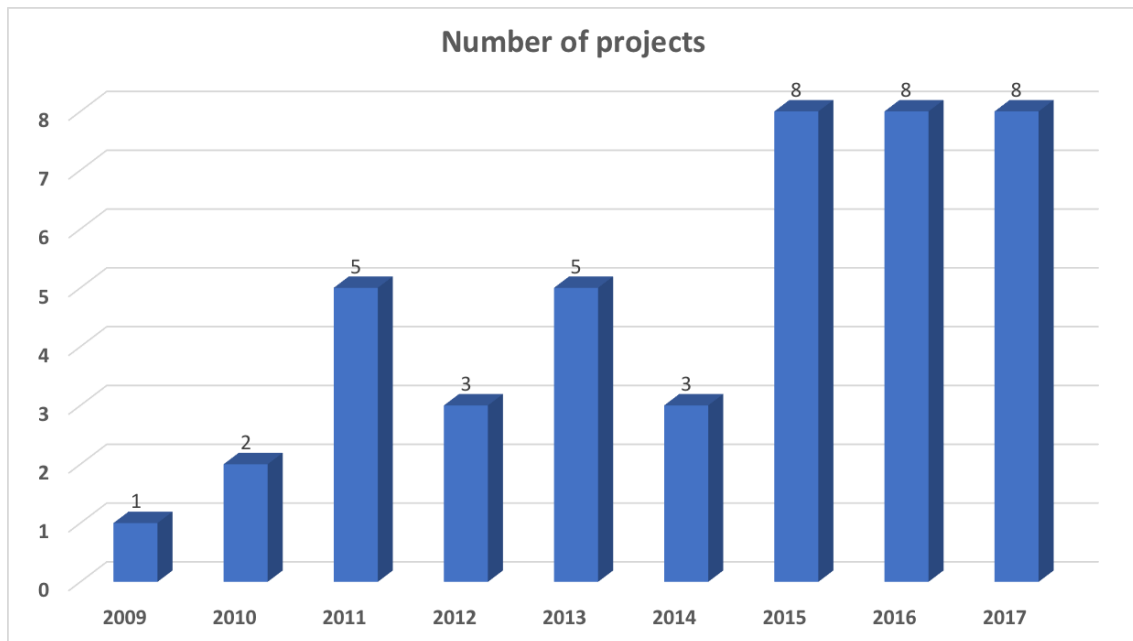


Figure 13. Started projects each year by the GRIAL Group (2009-2017)

The Figure 14 presents the number of projects and the budget in which by every principal investigator of the GRIAL Group has participated, while the Figure 15 shows how every principal investigator's achieved number of projects contribute in percentage to the total of projects.

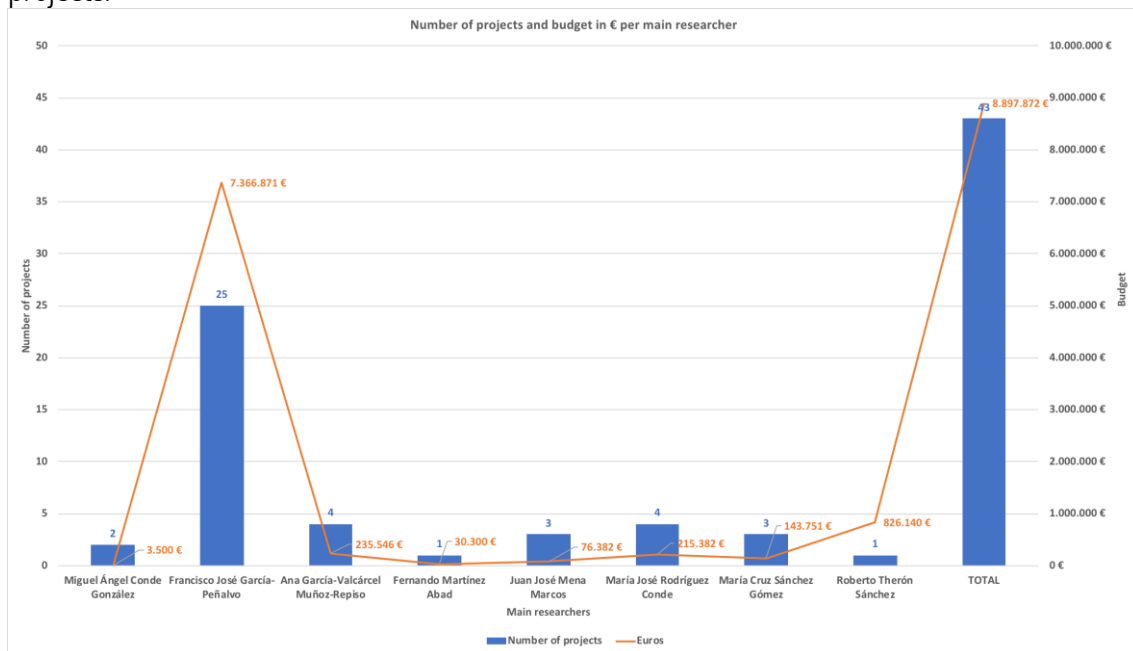


Figure 14. Number of projects and budget obtained by each principal investigator



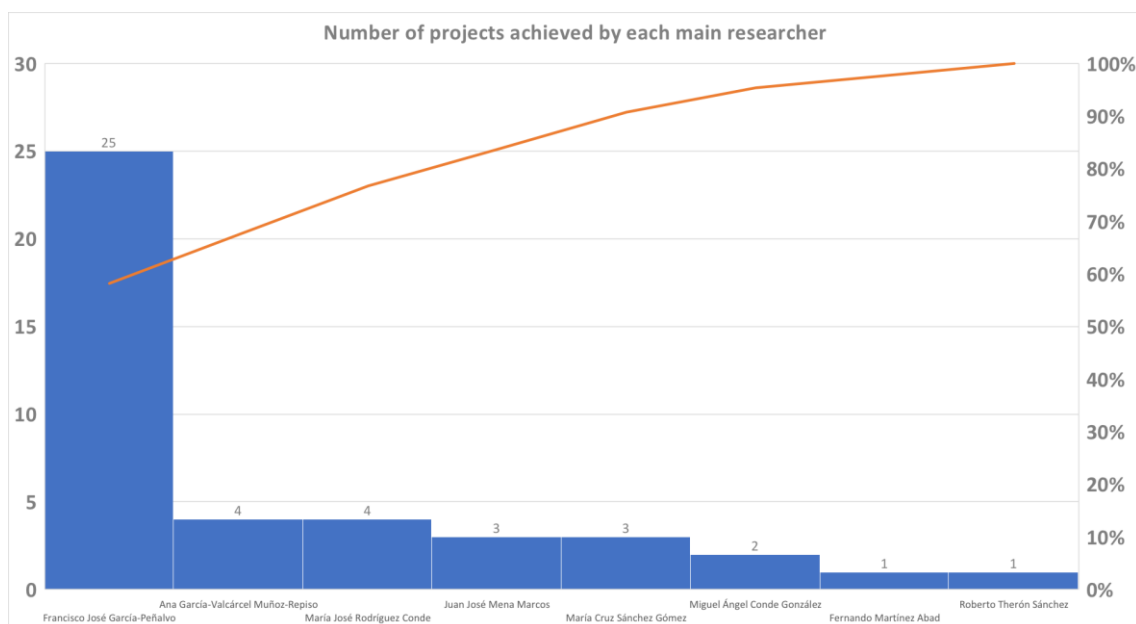


Figure 15. Number of projects obtained by each principal investigator and its percentage weight in the total

### Research Contracts

The Table 1 shows the research contracts lead by the GRIAL Group members which have been active during the reference period 2011-2017. In total, there have been 52 signed contracts under the Article 83 of the Organic Law of Universities [228], with an approximate total budget of 690.998,67€.

Table 1. Research contracts of the GRIAL Group in the 2011-2017 period

	Title	Funding Entity	Start Year	End Year	PI	Budget
1	Consultoría sobre nuevos servicios 2.0 de valor añadido para eLearning y los entornos personalizados de aprendizaje	Clay Formación Internacional, S.L.	2010	2011	Dr. D. Francisco José García-Peñalvo	3.423,18 €
2	Consultoría, desarrollo e implantación de una plataforma <i>mLearning</i> para un curso de tutores del Programa de Nivel Directivo de la ECLAP	Escuela Administración Pública Castilla y León (ECLAP)	2010	2011	Dr. D. Francisco José García-Peñalvo	17.877,00 €
3	Consultoría en la aplicación de la web semántica a Moodle para facilitar la definición de entornos abiertos de aprendizaje	Clay Formación Internacional, S.L.	2010	2011	Dr. D. Francisco José García-Peñalvo	6.844,00 €
4	Asesoría para el uso de los dispositivos móviles en la lecto-escritura	Fundación Germán Sánchez Ruy Pérez	2011	2011	Dr. D. Francisco José García-Peñalvo	1.888,00 €
5	Gestión, mantenimiento y actualización permanente de una infraestructura completa de formación <i>online</i> basada en soluciones de <i>software</i> libre	Gobierno de Navarra. Departamento de Salud. Servicio de Docencia y Desarrollo Sanitarios	2011	2012	Dr. D. Francisco José García-Peñalvo	10.000,50 €
6	Consultoría para la implantación de un Campus Virtual en la corporación Aguas de Barcelona	Aqua Development Network S. A.	2011	2011	Dr. D. Francisco José García-Peñalvo	16.620,30 €
7	Desarrollo de tres objetos de aprendizaje para su despliegue en entornos de eLearning	Gerencia Regional de Salud de Castilla y León	2011	2011	Dr. D. Francisco José García-Peñalvo	10.561,00 €
8	Evaluación de proyectos de teleformación para el Centro de Recuperación de personas con discapacidad física y/o sensorial (IMSERSO)	IMSERSO	2011	2011	Dra. Dña. María José Rodríguez Conde	2.832,00 €
9	Detección de necesidades formativas y construcción de oferta docente para empresarios y profesionales del sector agroalimentario y turístico de la provincia de Burgos. Propuesta de estudio y planteamiento de explotación	IBBM Consultores, S.C.P.	2011	2011	Dr. D. Francisco José García-Peñalvo	4.012,00 €
10	Gestión, mantenimiento y actualización permanente de una infraestructura completa de	Departamento de Salud - Servicio de Investigación,	2012	2013	Dr. D. Francisco José García-	7.670,00 €

	Title	Funding Entity	Start Year	End Year	PI	Budget
	formación <i>online</i> basada en soluciones de <i>software</i> libre	Innovación y Formación Sanitaria, del Gobierno de Navarra			Peñalvo	
11	Desarrollo de cuatro objetos de aprendizaje para su despliegue en entornos de eLearning	Gerencia Regional de Salud de Castilla y León	2012	2012	Dr. D. Francisco José García-Peñalvo	11.847,20 €
12	Consultoría para definir la red social profesional INAP	Instituto Nacional de Administraciones Públicas (INAP)	2012	2013	Dr. D. Francisco José García-Peñalvo	21.628,75 €
13	Gestión, mantenimiento y actualización permanente de una infraestructura completa de formación <i>online</i> basada en soluciones de <i>software</i> libre	Departamento de Salud - Servicio de Investigación, Innovación y Formación Sanitaria, del Gobierno de Navarra	2013	2014	Dr. D. Francisco José García-Peñalvo	7.865,00 €
14	Consultoría para la definición de la metodología de trabajo y del procedimiento de intercambio de documentos, desde la red social hasta el Banco de Conocimientos del INAP	Instituto Nacional de Administraciones Públicas (INAP)	2013	2013	Dr. D. Francisco José García-Peñalvo	21.447,25 €
15	Implantación de un repositorio de cursos compartidos entre distintas administraciones	Instituto Nacional de Administraciones Públicas (INAP)	2013	2013	Dr. D. Francisco José García-Peñalvo	5.000,00 €
16	Consultoría sobre la definición de un sistema colaborativo de gestión de eventos para la comunicación de usuarios	Instituto Nacional de Administraciones Públicas (INAP)	2013	2014	Dr. D. Francisco José García-Peñalvo	21.568,25 €
17	Desarrollo de cinco objetos de aprendizaje para su despliegue en entornos de eLearning	Gerencia Regional de Salud de Castilla y León	2013	2014	Dr. D. Francisco José García-Peñalvo	12.777,60 €
18	Diseño y evaluación de materiales didácticos para la exposición itinerante de Plastihistoria de Castilla y León	Fundación Educa	2013	2013	Dra. Dña. María José Rodríguez Conde	3.000,00 €
19	Evaluación externa del proyecto Alfa III (2011)-10: Desarrollo de competencias profesionales a través de la evaluación participativa y la simulación utilizando herramientas web	Universidad de Cádiz	2013	2015	Dra. Dña. María José Rodríguez Conde	8.700,00 €
20	Servicios de gestión, mantenimiento y actualización permanente de una infraestructura completa de formación online basada en la versión 2.5 de Moodle del Departamento de Salud-Servicio de Investigación, Innovación y Formación Sanitaria, del Gobierno de Navarra	Departamento de Salud - Servicio de Investigación, Innovación y Formación Sanitaria, del Gobierno de Navarra	2014	2015	Dr. D. Francisco José García-Peñalvo	6.352,50 €
21	Labores de mantenimiento y mejoras de la aplicación compartir	Instituto Nacional de Administraciones Públicas (INAP)	2014	2014	Dr. D. Francisco José García-Peñalvo	4.912,60 €
22	Estudio sobre la evolución de las soluciones tecnológicas para dar soporte a la gestión de la información	Instituto Nacional de Administraciones Públicas (INAP)	2014	2014	Dr. D. Francisco José García-Peñalvo	21.477,50 €
23	<i>ICT in Primary Education: Content Development Tools and Methodologies for Teachers</i>	Szkola Podstawowa NR1	2014	2014	Dr. D. Francisco José García-Peñalvo	700,00 €
24	Sistema de captación y almacenamiento de indicadores para el Observatorio de Empleabilidad y Empleo Universitarios	Universidad Politécnica de Madrid (Cátedra UNESCO de Gestión y Política Universitaria)	2014	2015	Dr. D. Francisco José García-Peñalvo	12.100,00 €
25	Análisis cuantitativo y cualitativo de las necesidades de formación continua de los profesionales de las industrias culturales y creadores de Castilla y León	Dirección General de Políticas Culturales de la Junta de Castilla y León	2014	2014	Dra. Dña. María Cruz Sánchez Gómez	10.000 €
26	Servicios para el mantenimiento y mejora del entorno social de aprendizaje del Instituto Nacional de Administración Pública	Alten Soluciones, Productos, Auditoría e Ingeniería, S.A.U.	2015	2016	Dr. D. Francisco José García-Peñalvo	38.720,00 €
27	Servicios de gestión, mantenimiento y actualización permanente de una infraestructura completa de formación online basada en la versión 2.5.9 de Moodle del Departamento de Salud-Servicio de Investigación, Innovación y Formación Sanitaria, del Gobierno de Navarra	Departamento de Salud - Servicio de Investigación, Innovación y Formación Sanitaria, del Gobierno de Navarra	2015	2016	Dr. D. Francisco José García-Peñalvo	4.537,50 €
28	Sistema de captación y almacenamiento de	Universidad Politécnica de	2015	2015	Dr. D. Francisco	12.100,00 €

	Title	Funding Entity	Start Year	End Year	PI	Budget
	indicadores para el Observatorio de Empleabilidad y Empleo Universitarios: Cuestionarios e informes	Madrid (Cátedra UNESCO de Gestión y Política Universitaria)			José García-Peñalvo	
29	Actualización a la versión 5.2.1 del aplicativo (HORDE) que soporta el servicio de correo web del Educamadrid y su adaptación al entorno de uso de la Consejería de Educación, Cultura y Deporte de la Comunidad de Madrid	Alten Soluciones, Productos, Auditoría e Ingeniería, S.A.U.	2015	2016	Dr. D. Francisco José García-Peñalvo	24.622,05 €
30	Desarrollo de la interfaz de consulta de la base de datos del Barómetro de Empleabilidad y Empleo de los universitarios en España	Universidad Politécnica de Madrid (Cátedra UNESCO de Gestión y Política Universitaria)	2015	2016	Dr. D. Francisco José García-Peñalvo	12.100,00 €
31	Diseño y Desarrollo de material educativo en el marco del proyecto "exploreAT! Exploring Austria's culture through the language glass"	Austrian Center for Digital Humanities, Austrian Academy of Sciences	2015	2019	Dr. D. Roberto Therón Sánchez	179.500,00 €
32	Evaluación técnica de proyectos	DNV-GL	2015	2018	Dr. D. Francisco José García-Peñalvo	1.800,00 €
33	Diseño y desarrollo del ecosistema web para la formación de la empresa Simdemed	Simdemed S. L.	2015	2015	Dr. D. Francisco José García-Peñalvo	3.025,00 €
34	Gestión de la visibilidad en entornos sociales de la formación impartida por Simdemed	Simdemed S. L.	2015	2016	Dr. D. Francisco José García-Peñalvo	968,00 €
35	Servicios de gestión, mantenimiento y actualización permanente de una infraestructura completa de formación online basada en la versión 3.0 de Moodle del Departamento de Salud-Servicio de Investigación, Innovación y Formación Sanitaria, del Gobierno de Navarra	Departamento de Salud - Servicio de Investigación, Innovación y Formación Sanitaria, del Gobierno de Navarra	2016	2017	Dr. D. Francisco José García-Peñalvo	4.537,50 €
36	Definición y desarrollo de un ecosistema tecnológico para la gestión del conocimiento corporativo	Alten Soluciones, Productos, Auditoría e Ingeniería, S.A.U.	2016	2017	Dr. D. Francisco José García-Peñalvo	20.437,19 €
37	Servicios para el mantenimiento y mejora del entorno social de gestión del conocimiento del Instituto Nacional de Administración Pública	Alten Soluciones, Productos, Auditoría e Ingeniería, S.A.U.	2016	2017	Dr. D. Francisco José García-Peñalvo	13.624,79 €
38	Elaboración de un informe/auditoría de cumplimiento de prescripciones técnicas de la plataforma ECREATUS, tomando como referencia el Pliego de prescripciones técnicas para el acceso o recursos educativos digitales complementarios a las programaciones curriculares de Educación Primaria y Educación Secundaria Obligatoria de Castilla y León	Junta de Castilla y León (DG de Política Educativa Escolar)	2016	2016	Dr. D. Francisco José García-Peñalvo	1.210,00 €
39	Desarrollo de un objeto de aprendizaje para su despliegue en entornos de eLearning	Junta de Castilla y León. Dirección Técnica de Farmacia de la Consejería de Sanidad	2016	2017	Dr. D. Francisco José García-Peñalvo	3.327,50 €
40	Evaluación de la aplicación de las TIC en los procesos de aprendizaje de lenguas extranjeras y evaluación del proceso de implantación del bilingüismo en el Sistema Educativo de Castilla y León	Junta de Castilla y León	2016	2017	Dra. Dña. María José Rodríguez Conde	15.000,00 €
41	Servicio de gestión y mantenimiento de la infraestructura de formación <i>on line</i> basada en la versión 3.2.1 de Moodle del departamento de Salud-Servicio de Investigación, innovación y formación sanitaria del Gobierno de Navarra	Departamento de Salud - Servicio de Investigación, Innovación y Formación Sanitaria, del Gobierno de Navarra	2017	2018	Dr. D. Francisco José García-Peñalvo	4.537,50 €
42	Diseño, implementación, lanzamiento y mantenimiento de la web del Observatorio de Empleabilidad y Empleo Universitarios (Cátedra UNESCO de Gestión y Política Universitaria) Universidad Politécnica de Madrid	Universidad Politécnica de Madrid (Cátedra UNESCO de Gestión y Política Universitaria)	2017	2018	Dr. D. Francisco José García-Peñalvo	21.175,00 €
43	Desarrollo del sitio web de la RED IBEROAMERICANA DE INVESTIGACIÓN SOBRE LA CALIDAD DE LA FORMACIÓN DOCTORAL EN CIENCIAS SOCIALES EN LAS UNIVERSIDADES	Asociación Universitaria Iberoamericana de Postgrado (AUIP)	2017	2017	Dr. D. Francisco José García-Peñalvo	1.500,00 €

	Title	Funding Entity	Start Year	End Year	PI	Budget
	(RIICFDCSU)					
44	Informe técnico para el <i>proyecto Expert Knowledge</i>	Ventus Consulting	2017	2017	Dr. D. Francisco José García-Peñalvo	1.210,00 €
45	Propuesta de contenidos por parte del Autor para la titulación de UNIR denominada Máster en <i>E-Learning y Redes Sociales</i>	Universidad Internacional de la Rioja	2017	2017	Dr. D. Francisco José García-Peñalvo	7.260,00 €
46	Desarrollo del proyecto "Barómetro de Empleabilidad de estudiantes de Másteres Universitarios" (Proyecto P1706490174, convenio específico entre la Obra Social la Caixa y la Universidad Politécnica de Madrid)	Universidad Politécnica de Madrid (Cátedra UNESCO de Gestión y Política Universitaria)	2017	2018	Dr. D. Francisco José García-Peñalvo	21.761,85 €
47	Evaluación técnica de proyectos	EQA IDI	2017	2018	Dr. D. Juan Antonio Juanes Méndez	1.400,00 €
48	Apoyo en tareas de investigación sobre los sistemas educativos europeos con Eurydice España-REDIE (CNIE, MECED) por encargo del Centro Nacional de Innovación e Investigación Educativa (CNIEE) del Ministerio de Educación Cultura y Deporte (MECD) en el año 2017	Centro Nacional de Innovación e Investigación Educativa (CNIEE) del Ministerio de Educación Cultura y Deporte (MECD)	2017	2018	Dra. Dña. Susana Olmos Migueláñez	9.659,12 €
49	Elaboración de contenidos docentes dentro del Master en Formación del Profesorado de Educación Secundaria PER 49	Universidad Internacional de la Rioja	2017	2018	Dra. Dña. Patricia Torrijos Fincias	1.563,02 €
50	Servicio, gestión, mantenimiento y actualización permanente de una infraestructura completa de formación online basada en la última versión de Moodle (3.3.x) adaptada a la imagen corporativa del Colegio de Ingenieros Técnicos de Obras Públicas e Ingenieros Civiles	Colegio de Ingenieros Técnicos de Obras Públicas e Ingenieros Civiles (CITOPIC)	2018	2018	Dr. D. Francisco José García-Peñalvo	4.041,40 €
51	Diseño y desarrollo de un software para el análisis del rendimiento del fútbol. Exp. 322/17	Universidad de Vigo	2018	2019	Dr. D. Roberto Therón Sánchez	25.739,12 €
52	Servicio de gestión y mantenimiento de la infraestructura de formación <i>on line</i> basada en la plataforma Open Source Moodle del Servicio de Planificación, Evaluación y Gestión del Conocimiento del Departamento de Salud del Gobierno de Navarra	Departamento de Salud - Servicio de Planificación, Evaluación y Gestión del Gobierno de Navarra	2018	2019	Dr. D. Francisco José García-Peñalvo	4.537,50 €

In the **Figure 16** the temporal distribution of the research contracts alive during the reference period can be seen. In the **Figure 17** is presented the number of research contracts and the budget in which by every principal investigator of the GRIAL Group has achieved, while in the **Figure 15** it can be appreciated how every principal investigator's achieved number of contracts contribute in percentage to the total of research contracts.

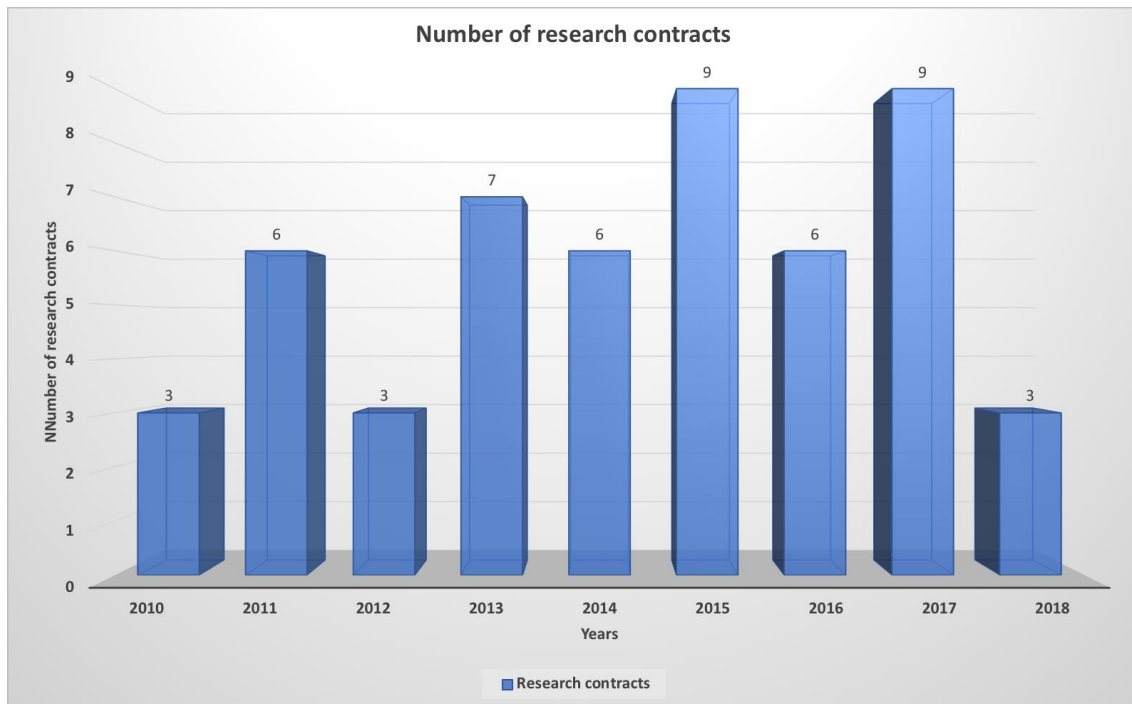


Figure 16. Number of started research contracts by year (2010-2018)

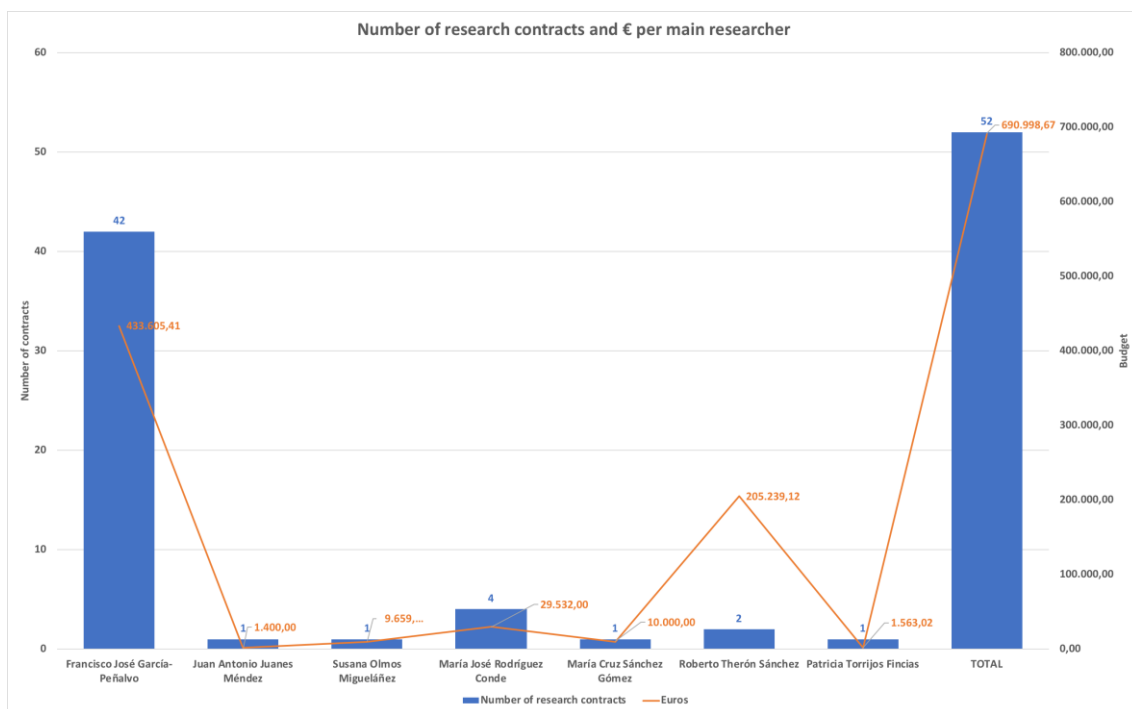
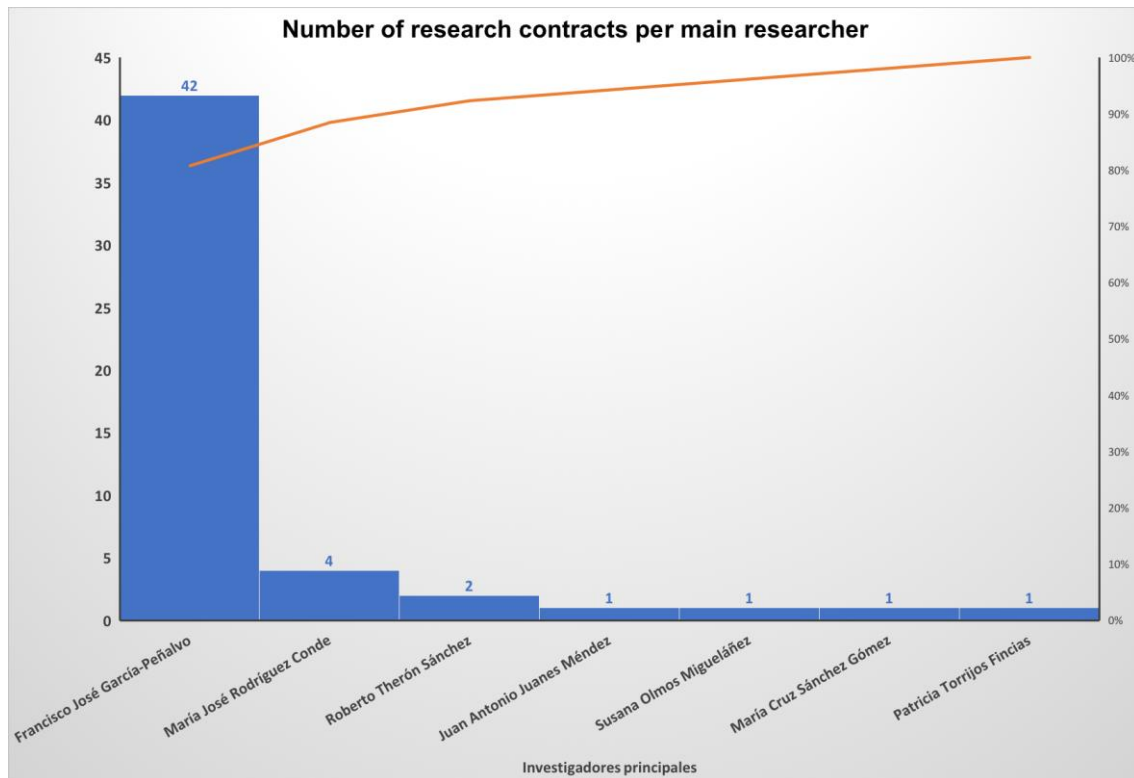


Figure 17. Number of research contracts and budget obtained by each principal investigator



**Figure 18.** Number of research contracts obtained by each principal investigator and its percentage weight in the total

## 6. Scientific production

The GRIAL Group is a multidisciplinary group with members that come, fundamentally, from the Engineering and Social Sciences fields. That is why the publications reflect the idiosyncrasy of both disciplines. In this section the achieved publications by the group in the 2011-2017 period are going to be presented, only taking into account the journals indexed on the *Journal Citation Report of Web of Science (WoS)*, on Scopus and on the *Emerging Sources Citation Index of WoS*.

### Indexed publications on the JCR of WoS

The indexed publications on the JCR of WoS by the GRIAL Group, between 2011 and 2017 (pending publications with online access and an associated DOI are going to be included) are going to be organized by quartiles, and within each quartile by year, being pending publications placed in 2018. In this reference period, the GRIAL Group has published 120 papers on 46 journals (see [Figure 19](#)) indexed on the JCR of WoS (36 Q1; 18 Q2; 31 Q3; 35 Q4 – see [Figure 20](#)).

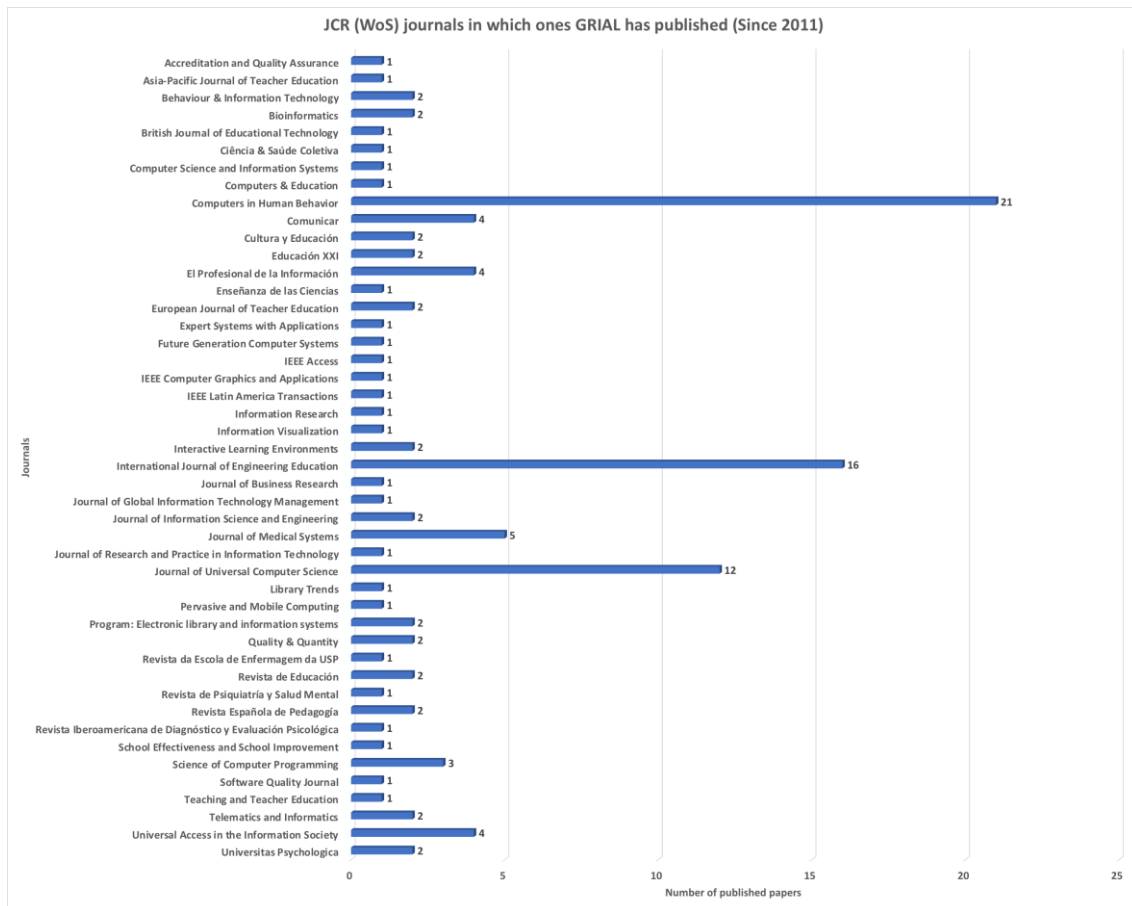


Figure 19. JCR journals in which the GRIAL Group has published (2011-2017)

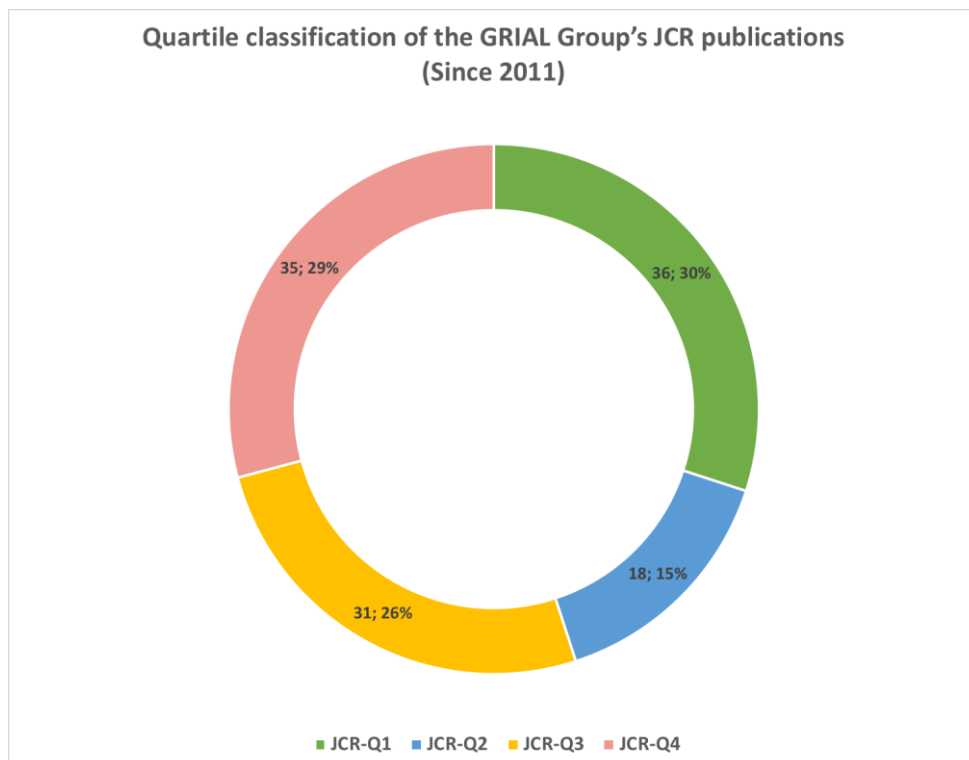


Figure 20. Quartile classification of the GRIAL Group's JCR publications (2011-2017)

**JCR Q1***Year 2012*

1. **García-Peñalvo, F. J., Colomo-Palacios, R.,** García, J., & **Therón, R.** (2012). Towards an ontology modeling tool. A validation in software engineering scenarios. *Expert Systems with Applications, 39*(13), 11468-11478. doi:10.1016/j.eswa.2012.04.009. ISSN: 09574174. (JCR SCI – OPERATIONS RESEARCH & MANAGEMENT SCIENCE – Q1 (13 de 79); ENGINEERING, ELECTRICAL & ELECTRONIC – Q1 (56 de 243); COMPUTER SCIENCE, ARTIFICIAL INTELLIGENCE – Q2 (31 de 115) – IF 1.854) [26].
2. **García-Valcárcel Muñoz-Repiso, A., & Tejedor Tejedor, F. J.** (2012). The Incorporation of ICT in Higher Education. The contribution of ROC curves in the graphic visualization of differences in the analysis of the variables. *British Journal of Educational Technology, 43*(6), 901-919. doi:10.1111/j.1467-8535.2011.01270.x. ISSN: 0007-1013. (JCR SSCI – EDUCATION & EDUCATIONAL RESEARCH – Q1 (37 de 219) – IF 1.313) [153].

*Year 2013*

1. **Colomo-Palacios, R.,** Casado-Lumbreras, C., Soto-Acosta, P., **García-Peñalvo, F. J.,** & Tovar-Caro, E. (2013). Competence gaps in software personnel: A multi-organizational study. *Computers in Human Behavior, 29*(2), 456-461. doi:10.1016/j.chb.2012.04.021. ISSN: 07475632. (JCR SSCI – PSYCHOLOGY, MULTIDISCIPLINARY – Q1 (24 de 129); PSYCHOLOGY, EXPERIMENTAL – Q2 (30 de 83) – IF 2.273) [229].
2. **González-Rogado, A. B., Rodríguez-Conde, M. J., Olmos-Migueláñez, S.,** Borham, M., & **García-Peñalvo, F. J.** (2013). Experimental evaluation of the impact of b-learning methodologies on engineering students in Spain. *Computers in Human Behavior, 29*(2), 370-377. doi:10.1016/j.chb.2012.02.003. ISSN: 07475632. (JCR SSCI – PSYCHOLOGY, MULTIDISCIPLINARY – Q1 (24 de 129); PSYCHOLOGY, EXPERIMENTAL – Q2 (30 de 83) – IF 2.273) [29].
3. González-Torres, A., **García-Peñalvo, F. J., & Therón, R.** (2013). Human-computer interaction in evolutionary visual software analytics. *Computers in Human Behavior, 29*(2), 486-495. doi:10.1016/j.chb.2012.01.013. ISSN: 07475632. (JCR SSCI – PSYCHOLOGY, MULTIDISCIPLINARY – Q1 (24 de 129); PSYCHOLOGY, EXPERIMENTAL – Q2 (30 de 83) – IF 2.273) [21].
4. Lytras, M. D., **García-Peñalvo, F. J.,** & Ordóñez de Pablos, P. (2013). Advanced human-computer interaction. *Computers in Human Behavior, 29*(2), 305-306. doi:10.1016/j.chb.2012.11.018. ISSN: 07475632. (JCR SSCI – PSYCHOLOGY, MULTIDISCIPLINARY – Q1 (24 de 129); PSYCHOLOGY, EXPERIMENTAL – Q2 (30 de 83) – IF 2.273) [230].

*Year 2014*

1. **Conde-González, M. Á., García-Peñalvo, F. J., Rodríguez-Conde, M. J.,** Alier, M., & **García-Holgado, A.** (2014). Perceived openness of Learning Management Systems by students and teachers in education and technology courses. *Computers in Human Behavior, 31*, 517-526. doi:10.1016/j.chb.2013.05.023. ISSN: 07475632. (JCR SSCI – PSYCHOLOGY, MULTIDISCIPLINARY – Q1 (20 de 129); PSYCHOLOGY, EXPERIMENTAL – Q2 (24 de 85) – IF 2.694) [132].
2. **Conde-González, M. Á., García-Peñalvo, F. J., Rodríguez-Conde, M. J.,** Alier, M., Casany, M. J., & Piguillem, J. (2014). An evolving Learning Management System for new educational environments using 2.0 tools. *Interactive Learning Environments, 22*(2),



- 188-204. doi:10.1080/10494820.2012.745433. ISSN: 1049-4820. (JCR SSCI – EDUCATION & EDUCATIONAL RESEARCH – Q1 (45 de 224) – IF 1.323) [141].
3. **García-Peñalvo, F. J.**, & Alier, M. (2014). Learning management system: evolving from silos to structures: Evolving from silos to structures. *Interactive Learning Environments*, 22(2), 143-145. doi:10.1080/10494820.2014.884790. ISSN: 1049-4820. (JCR SSCI – EDUCATION & EDUCATIONAL RESEARCH – Q1 (45 de 224) – IF 1.323) [142].
  4. **García-Peñalvo, F. J.**, & Vicent Safont, L. (2014). Human behaviors in computer-based education systems. *Computers in Human Behavior*, 31, 432-433. doi:10.1016/j.chb.2013.10.003. ISSN: 07475632. (JCR SSCI – PSYCHOLOGY, MULTIDISCIPLINARY – Q1 (20 de 129); PSYCHOLOGY, EXPERIMENTAL – Q2 (24 de 85) – IF 2.694) [231].
  5. **García-Peñalvo, F. J.**, Johnson, M., Ribeiro Alves, G., Minovic, M., & **Conde-González, M. Á.** (2014). Informal learning recognition through a cloud ecosystem. *Future Generation Computer Systems*, 32, 282-294. doi:10.1016/j.future.2013.08.004. ISSN: 0167739X. (JCR SCI – COMPUTER SCIENCE, THEORY & METHODS – Q1 (8 de 102) – IF 2.786) [232].
  6. **Hernández-Ramos, J. P.**, **Martínez-Abad, F.**, **García-Peñalvo, F. J.**, **Herrera García, M. E.**, & **Rodríguez-Conde, M. J.** (2014). Teachers' attitude regarding the use of ICT. A factor reliability and validity study. *Computers in Human Behavior*, 31, 509-516. doi:10.1016/j.chb.2013.04.039. ISSN: 07475632. (JCR SSCI – PSYCHOLOGY, MULTIDISCIPLINARY – Q1 (20 de 129); PSYCHOLOGY, EXPERIMENTAL – Q2 (24 de 85) – IF 2.694) [233].
  7. Santamaría, R., **Therón, R.**, & Quintales, L. (2014). BicOverlapper: Visual analysis for gene expression. *Bioinformatics*, 30(12), 1785-1786. doi:10.1093/bioinformatics/btu120. ISSN: 13674803. (JCR SCI – BIOCHEMICAL RESEARCH METHODS – Q1 (8 de 79); BIOTECHNOLOGY & APPLIED MICROBIOLOGY – Q1 (19 de 163); MATHEMATICAL & COMPUTATIONAL BIOLOGY – Q1 (3 de 57) – IF 4.981) [234].

#### Year 2015

1. Casado Muñoz, R., Lezcano Barbero, F., & **Rodríguez-Conde, M. J.** (2015). Envejecimiento activo y acceso a las tecnologías: Un estudio empírico evolutivo. *Comunicar*, XXIII(45), 37-46. doi:10.3916/C45-2015-04. ISSN: 11343478. (JCR SSCI – EDUCATION & EDUCATIONAL RESEARCH – Q1 (47 de 231); COMMUNICATION – Q1 (19 de 79) – IF 1.438) [235].
2. **Cruz-Benito, J.**, **Therón, R.**, **García-Peñalvo, F. J.**, & Pizarro Lucas, E. (2015). Discovering usage behaviors and engagement in an Educational Virtual World. *Computers in Human Behavior*, 47, 18-25. doi:10.1016/j.chb.2014.11.028. ISSN: 07475632. (JCR SSCI – PSYCHOLOGY, MULTIDISCIPLINARY – Q1 (21 de 129); PSYCHOLOGY, EXPERIMENTAL – Q1 (20 de 85) – IF 2.880) [236].
3. Fidalgo-Blanco, Á., Sein-Echaluce, M. L., **García-Peñalvo, F. J.**, & **Conde-González, M. Á.** (2015). Using Learning Analytics to improve teamwork assessment. *Computers in Human Behavior*, 47, 149-156. doi:10.1016/j.chb.2014.11.050. ISSN: 07475632. (JCR SSCI – PSYCHOLOGY, MULTIDISCIPLINARY – Q1 (21 de 129); PSYCHOLOGY, EXPERIMENTAL – Q1 (20 de 85) – IF 2.880) [237].
4. Gómez-Aguilar, D. A., Hernández-García, Á., **García-Peñalvo, F. J.**, & **Therón, R.** (2015). Tap into visual analysis of customization of grouping of activities in eLearning. *Computers in Human Behavior*, 47, 60-67. doi:10.1016/j.chb.2014.11.001. ISSN:

07475632. (JCR SSCI – PSYCHOLOGY, MULTIDISCIPLINARY – Q1 (21 de 129); PSYCHOLOGY, EXPERIMENTAL – Q1 (20 de 85) – IF 2.880) [19].

#### Year 2016

1. Galanis, N., Mayol, E., Alier, M., & **García-Peñalvo, F. J.** (2016). Supporting, evaluating and validating informal learning. A social approach. *Computers in Human Behavior*, 55A, 596-603. doi:10.1016/j.chb.2015.08.005. ISSN: 0747-5632. (JCR SSCI – PSYCHOLOGY, MULTIDISCIPLINARY – Q1 (15 de 128); PSYCHOLOGY, EXPERIMENTAL – Q1 (10 de 84) – IF 3.435) [238].
2. García-Pérez, C., Peláez, R., **Therón, R.**, & López-Pérez, J. L. (2016). JADOPPT: java based AutoDock preparing and processing tool. *Bioinformatics*, 2016, btw677. doi:10.1093/bioinformatics/btw677. ISSN: 1367-4803. (JCR SCI – BIOTECHNOLOGY & APPLIED MICROBIOLOGY – Q1 (11 de 16); MATHEMATICAL & COMPUTATIONAL BIOLOGY – Q1 (2 de 57); BIOCHEMICAL RESEARCH METHODS – Q1 (4 de 78) – IF 7.307) [239].
3. **Griffiths, D.**, & **García-Peñalvo, F. J.** (2016). Informal learning recognition and management. *Computers in Human Behavior*, 55A, 501-503. doi:10.1016/j.chb.2015.10.019. ISSN: 0747-5632. (JCR SSCI – PSYCHOLOGY, MULTIDISCIPLINARY – Q1 (15 de 128); PSYCHOLOGY, EXPERIMENTAL – Q1 (10 de 84) – IF 3.435) [240].
4. **Sánchez Prieto, J. C.**, **Olmos Migueláñez, S.**, & **García-Peñalvo, F. J.** (2016). Informal Tools in Formal Contexts: Development of a Model to Assess the Acceptance of Mobile Technologies among Teachers. *Computers in Human Behavior*, 55A, 519-528. doi:10.1016/j.chb.2015.07.002. ISSN: 0747-5632. (JCR SSCI – PSYCHOLOGY, MULTIDISCIPLINARY – Q1 (15 de 128); PSYCHOLOGY, EXPERIMENTAL – Q1 (10 de 84) – IF 3.435) [123].

#### Year 2017

1. Joo Nagata, J., **Martínez Abad, F.**, **García-Bermejo Giner, J.**, & **García Peñalvo, F. J.** (2017). Augmented reality and pedestrian navigation through its implementation in m-learning and e-learning: Evaluation of an educational program in Chile. *Computers & Education*, 111, 1-17. doi:10.1016/j.compedu.2017.04.003. ISSN: 3060-1315. (JCR SCI – COMPUTER SCIENCE, INTERDISCIPLINARY APPLICATIONS – Q1 (11 de 105) – IF 3.819; JCR SSCI – EDUCATION & EDUCATIONAL RESEARCH – Q1 (7 de 235) – IF 3.819) [241].
2. Briz-Ponce, L., Pereira, A., Carvalho, L., **Juanes-Méndez, J. A.**, & **García-Peñalvo, F. J.** (2017). Learning with mobile technologies – Students' behavior. *Computers in Human Behavior*, 72, 612-620. doi:10.1016/j.chb.2016.05.027. ISSN: 0747-5632. (JCR SSCI – PSYCHOLOGY, MULTIDISCIPLINARY – Q1 (15 de 128); PSYCHOLOGY, EXPERIMENTAL – Q1 (10 de 84) – IF 3.435) [71].
3. **Pinto-Llorente, A. M.**, **Sánchez-Gómez, M. C.**, **García-Peñalvo, F. J.**, & **Casillas Martín, S.** (2017). Students' perceptions and attitudes towards asynchronous technological tools in blended-learning training to improve grammatical competence in English as a second language. *Computers in Human Behavior*, 72, 632-643. doi:10.1016/j.chb.2016.05.071. ISSN: 0747-5632. (JCR SSCI – PSYCHOLOGY, MULTIDISCIPLINARY – Q1 (15 de 128); PSYCHOLOGY, EXPERIMENTAL – Q1 (10 de 84) – IF 3.435) [242].
4. **Sánchez-Prieto, J. C.**, **Olmos-Migueláñez, S.**, & **García-Peñalvo, F. J.** (2017). MLearning and pre-service teachers: An assessment of the behavioral intention using an expanded TAM model. *Computers in Human Behavior*, 72, 644-654.

- doi:10.1016/j.chb.2016.09.061. ISSN: 0747-5632. (JCR SSCI – PSYCHOLOGY, MULTIDISCIPLINARY – Q1 (15 de 128); PSYCHOLOGY, EXPERIMENTAL – Q1 (10 de 84) – IF 3.435) [243].
5. **Iglesias-Rodríguez, A.**, Riaza, B. G., & **Sánchez-Gómez, M. C.** (2017). Collaborative learning and mobile devices: An educational experience in Primary Education. *Computers in Human Behavior*, 72, 664-677. doi:10.1016/j.chb.2016.07.019. ISSN: 0747-5632. (JCR SSCI – PSYCHOLOGY, MULTIDISCIPLINARY – Q1 (15 de 128); PSYCHOLOGY, EXPERIMENTAL – Q1 (10 de 84) – IF 3.435) [244].
  6. **Basilotta Gómez-Pablos, V.**, **Martín del Pozo, M.**, & **García-Valcárcel Muñoz-Repiso, A.** (2017). Project-based learning (PBL) through the incorporation of digital technologies: An evaluation based on the experience of serving teachers. *Computers in Human Behavior*, 68, 501-512. doi:10.1016/j.chb.2016.11.056. ISSN: 0747-5632. (JCR SSCI – PSYCHOLOGY, MULTIDISCIPLINARY – Q1 (15 de 128); PSYCHOLOGY, EXPERIMENTAL – Q1 (10 de 84) – IF 3.435) [245].
  7. **Ramírez-Montoya, M.**, **Mena, J.** & Rodríguez, J. A. (2017). In-service teachers' self-perception on digital competence and OER use as determined by a xMOOC training course. *Computers in Human Behaviour*, 77, 356-364. doi:10.1016/j.chb.2017.09.010. JCR Q1 (15 de 129). ISSN: 0747-5632. (JCR SSCI – PSYCHOLOGY, MULTIDISCIPLINARY – Q1 (15 de 128); PSYCHOLOGY, EXPERIMENTAL – Q1 (10 de 84) – IF 3.435) [167].
  8. **Mena, J.**, Henissen, P. & Loughran, J. (2017). Developing pre-service teachers' professional knowledge of teaching: The influence of mentoring. *Teaching and Teacher Education*, 66, 47-59. doi:10.1016/j.tate.2017.03.024. ISSN: 0742-051X. (JCR SSCI – EDUCATION & EDUCATIONAL RESEARCH – Q1 (30 de 235) – IF 2.183) [246].

#### Year 2018

1. **Conde-González, M. Á.**, **Colomo-Palacios, R.**, **García-Peñalvo, F. J.**, & Larrueca, X. (2018). Teamwork assessment in the educational web of data: A learning analytics approach towards ISO 10018. *Telematics and Informatics, In Press* doi:10.1016/j.tele.2017.02.001. ISSN: 0736-5853. (JCR SSCI – INFORMATION SCIENCE & LIBRARY SCIENCE – Q1 (10 de 85) – IF 3.398) [247].
2. **Cruz-Benito, J.**, **Vázquez-Ingelmo, A.**, **Sánchez-Prieto, J. C.**, **Therón, R.**, **García-Peñalvo, F. J.**, & Martín-González, M. (2018). Enabling adaptability in web forms based on user characteristics detection through A/B testing and machine learning. *IEEE Access*, 6, 2251-2265. doi:10.1109/ACCESS.2017.2782678. ISSN: 2169-3536. (JCR SCI – COMPUTER SCIENCE, INFORMATION SYSTEMS – Q1 (27 de 146); ENGINEERING, ELECTRICAL & ELECTRONIC – Q1 (54 de 262); TELECOMMUNICATIONS – Q2 (23 de 89) – IF 3.244) [117].
3. **García-Peñalvo, F. J.**, Fidalgo-Blanco, Á., & Sein-Echaluce, M. L. (2018). An adaptive hybrid MOOC model: Disrupting the MOOC concept in higher education. *Telematics and Informatics, In Press* doi:10.1016/j.tele.2017.09.012. ISSN: 0736-5853. (JCR SSCI – INFORMATION SCIENCE & LIBRARY SCIENCE – Q1 (10 de 85) – IF 3.398) [178].
4. **Ramírez-Montoya, M. S.**, **García-Peñalvo, F. J.**, & McGreal, R. (2018). Shared Science and Knowledge. Open Access, Technology and Education. *Comunicar*, 26(54), 1-5. ISSN 1134-3478. (JCR SSCI – COMMUNICATION – Q1 (12 de 79); EDUCATION & EDUCATIONAL RESEARCH – Q1 (29 de 235) – IF 2.212) [165].
5. **Ramírez-Montoya, M. S.**, & **García-Peñalvo, F. J.** (2018). Co-creation and open innovation: Systematic literature review. *Comunicar*, 26(54), 9-18. doi:10.3916/C54-

- 2018-01. ISSN 1134-3478. (JCR SSCI – COMMUNICATION – Q1 (12 de 79); EDUCATION & EDUCATIONAL RESEARCH – Q1 (29 de 235) – IF 2.212) [164].
6. **García-Peñalvo, F. J.**, & Mendes, J. A. (2018). Exploring the computational thinking effects in pre-university education. *Computers in Human Behavior*, 80, 407-411. doi:10.1016/j.chb.2017.12.005. ISSN: 0747-5632. (JCR SSCI – PSYCHOLOGY, MULTIDISCIPLINARY – Q1 (15 de 128); PSYCHOLOGY, EXPERIMENTAL – Q1 (10 de 84) – IF 3.435).
  7. Fernández-Llamas, C., **Conde-González, M. Á.**, Rodríguez-Lera, F. J., Rodríguez-Sedano, F. J., & **García-Peñalvo, F. J.** (2018). May I teach you? Students' behavior when lectured by robotic vs. human teachers. *Computers in Human Behavior*, 80, 460-469. doi:10.1016/j.chb.2017.09.028. ISSN: 0747-5632. (JCR SSCI – PSYCHOLOGY, MULTIDISCIPLINARY – Q1 (15 de 128); PSYCHOLOGY, EXPERIMENTAL – Q1 (10 de 84) – IF 3.435) [248].

### JCR Q2

#### Year 2011

1. **García-Peñalvo, F. J.**, **Colomo-Palacios, R.**, Soto-Acosta, P., Martínez-Conesa, I., & Serradell-López, E. (2011). SemSEDoc: Use of semantic technologies in the use of document repositories of software development projects. *Information Research-an International Electronic Journal*, 16(4), paper 504. ISSN: 13681613. (JCR SSCI – INFORMATION SCIENCE & LIBRARY SCIENCE – Q2 (38 de 83) – IF 0.775) [77].

#### Year 2012

1. **Colomo-Palacios, R.**, Casado-Lumbreras, C., Soto-Acosta, P., Misra, S., & **García-Peñalvo, F. J.** (2012). Analyzing Human Resource Management Practices Within the GSD Context. *Journal of Global Information Technology Management*, 15(3), 30-54. doi:10.1080/1097198X.2012.10845617. ISSN: 1097198X. (JCR SSCI – INFORMATION SCIENCE & LIBRARY SCIENCE – Q2 (38 de 85) – IF 0.917) [249].
2. **Mena Marcos, J. J.**, García-Rodríguez, M. L., & Tillema, H. (2012). Student teacher reflective writing: what does it reveal? *European Journal of Teacher Education*, 36(2), 147-163. doi:10.1080/02619768.2012.713933. ISSN: 02619768. (JCR SSCI – EDUCATION & EDUCATIONAL RESEARCH – Q2 (93 de 219) – IF 0.769) [250].
3. Zapata-Sepúlveda, P., López-Sánchez, F., & **Sánchez-Gómez, M. C.** (2012). Content analysis research method with Nvivo-6 software in a PhD thesis: An approach to the long-term psychological effects on Chilean ex-prisoners survivors of experiences of torture and imprisonment. *Quality & Quantity*, 46(1), 379-390. doi:10.1007/s11135-011-9551-9. ISSN: 0033-5177. (JCR SSCI – SOCIAL SCIENCES, INTERDISCIPLINARY – Q2 (37 de 92); JCR SCI – STATISTICS & PROBABILITY – Q3 (69 de 117) – IF 0.728) [107].

#### Year 2014

1. **Colomo-Palacios, R.**, Casado-Lumbreras, C., Soto-Acosta, P., **García-Peñalvo, F. J.**, & Tovar-Caro, E. (2014). Project managers in global software development teams: A study of the effects on productivity and performance. *Software Quality Journal*, 22(1), 3-19. doi:10.1007/s11219-012-9191-x. ISSN: 09639314. (JCR SCI – COMPUTER SCIENCE, SOFTWARE ENGINEERING – Q2 (41 de 104) – IF 1.143) [88].
2. **García-Peñalvo, F. J.**, & **Conde-González, M. Á.** (2014). Using informal learning for business decision making and knowledge management. *Journal of Business Research*, 67(5), 686-691. doi:10.1016/j.jbusres.2013.11.028. ISSN: 01482963. (JCR SSCI – BUSINESS – Q2 (54 de 115) – IF 1.480) [251].

3. **García-Valcárcel Muñoz-Repiso, A., Basilotta, V., & López, C.** (2014). Las TIC en el aprendizaje colaborativo en el aula de Primaria y Secundaria. *Comunicar, XX(42)*, 65-74. doi:10.3916/C42-2014-06. ISSN: 11343478. (JCR SSCI – EDUCATION & EDUCATIONAL RESEARCH – Q2 (95 de 224); COMMUNICATION – Q2 (35 de 76) – IF 0.838) [149].

#### Year 2015

1. Fidalgo-Blanco, Á., Sein-Echaluce, M. L., & **García-Peñalvo, F. J.** (2015). Epistemological and ontological spirals: From individual experience in educational innovation to the organisational knowledge in the university sector. *Program: Electronic library and information systems, 49(3)*, 266-288. doi: 10.1108/PROG-06-2014-0033. ISSN: 0033-0337. (JCR SCI – COMPUTER SCIENCE, INFORMATION SYSTEMS – Q3 (85 de 143) – IF 1.000; JCR SSCI – INFORMATION SCIENCE & LIBRARY SCIENCE – Q2 (40 de 86) – IF 1.000) [79].

#### Year 2016

1. Briz-Ponce, L., **Juanes-Méndez, J. A., García-Peñalvo, F. J., & Pereira, A.** (2016). Effects of Mobile Learning in Medical Education: A Counterfactual Evaluation. *Journal of Medical Systems, 40(6)*, Paper 136. doi:10.1007/s10916-016-0487-4. ISSN: 0148-5598. (JCR SCI – HEALTH CARE SCIENCES & SERVICES – Q2 (28 de 90); MEDICAL INFORMATICS – Q2 (9 de 23) – IF 2.456) [252].
2. **Losada, A. G., Therón, R., & Benito, A.** (2016). BKViz: A Basketball Visual Analysis Tool. *IEEE Computer Graphics and Applications, 36(6)*, 58-68. doi:10.1109/MCG.2016.124. ISSN: 0272-1716. (JCR SCI – COMPUTER SCIENCE, SOFTWARE ENGINEERING – Q2 (29 de 106) – IF 1.987) [253].
3. **García-Peñalvo, F. J., Franco Martín, M., García-Holgado, A., Toribio Guzmán, J. M., Largo Antón, J., & Sánchez Gómez, M. C.** (2016). Psychiatric patients tracking through a private Social Network for relatives. *Journal of Medical Systems, 40(7)*, Paper 172. doi:10.1007/s10916-016-0530-5. ISSN: 0148-5598. (JCR SCI – HEALTH CARE SCIENCES & SERVICES – Q2 (28 de 90); MEDICAL INFORMATICS – Q2 (9 de 23) – IF 2.456) [99].

#### Year 2017

1. **Martínez-Abad, F., Bielba Calvo, M., & Herrera García, M. E.** (2017). Evaluación, formación e innovación en competencias informacionales para profesores y estudiantes de Educación Secundaria. *Revista de Educación, (376)*, 110-134. doi:10.4438/1988-592X-RE-2017-376-346. ISSN: 0034-8082. (JCR SSCI – EDUCATION & EDUCATIONAL RESEARCH – Q2 (108 de 235) – IF 1.185) [254].
2. **Martínez-Abad, F., & Chaparro Caso López, A. A.** (2017). Data-mining techniques in detecting factors linked to academic achievement. *School Effectiveness and School Improvement, 28(1)*, 39-55. doi:10.1080/09243453.2016.1235591. ISSN: 0924-3453. (JCR SSCI – EDUCATION & EDUCATIONAL RESEARCH – Q2 (68 de 235) – IF 1.491) [255].
3. Marqués-Sánchez, P., Alfonso-Cendón, J., Fernández-Martínez, M. E., Pinto-Carral, A., Liébana-Presa, C., **Conde-González, M. Á., & García-Peñalvo, F. J.** (2017). Co-operative Networks and their Influence on Engagement: A Study with Students of a Degree in Nursing. *Journal of Medical Systems, 41*, Paper 103. doi:10.1007/s10916-017-0747-y. ISSN 0148-5598. (JCR SCI – HEALTH CARE SCIENCES & SERVICES – Q2 (28 de 90); MEDICAL INFORMATICS – Q2 (9 de 23) – IF 2.456) [256].

4. **Colomo-Palacios, R., García-Peñalvo, F. J.,** Stantchev, V., & Misra, S. (2017). Towards a social and context-aware mobile recommendation system for tourism. *Pervasive and Mobile Computing*, 38, 505-515. doi:10.1016/j.pmcj.2016.03.001. ISSN: 1574-1192. (JCR SCI - COMPUTER SCIENCE, INFORMATION SYSTEMS - Q2 (53 de 146); TELECOMMUNICATIONS - Q2 (34 de 89) - IF 2.349) [257].
5. Toribio-Guzmán, J. M., **García-Holgado, A.,** Soto Pérez, F., **García-Peñalvo, F. J.,** & Franco Martín, M. (2017). Usability Evaluation of a Private Social Network on Mental Health for Relatives. *Journal of Medical Systems*, 41, Paper 137. doi:10.1007/s10916-017-0780-x. ISSN 0148-5598. (JCR SCI - HEALTH CARE SCIENCES & SERVICES - Q2 (28 de 90); MEDICAL INFORMATICS - Q2 (9 de 23) - IF 2.456) [100].

#### Year 2018

1. González Izard, S., **Juanes-Méndez, J. A., García-Peñalvo, F. J.,** Gonçalvez Estella, J. M., Sánchez Ledesma, M. J., & Ruisoto, P. (2018). Virtual Reality as an Educational and Training Tool for Medicine. *Journal of Medical Systems*, 42, 50. doi:10.1007/s10916-018-0900-2. ISSN 0148-5598. (JCR SCI - HEALTH CARE SCIENCES & SERVICES - Q2 (28 de 90); MEDICAL INFORMATICS - Q2 (9 de 23) - IF 2.456) [258].
2. **Pinto-Llorente, A. M., Casillas-Martín, S., Cabezas-González, M., & García-Peñalvo, F. J.** (2018). Building, coding and programming 3D models via a visual programming environment. *Quality & Quantity, In Press* doi:10.1007/s11135-017-0509-4. ISSN: 0033-5177. (JCR SCI - STATISTICS & PROBABILITY - Q2 (51 de 124) - IF 1.094; JCR SSCI INTERDISCIPLINARY - Q3 (42 de 96) - IF 1.094) [259].

#### JCR Q3

##### Year 2011

1. **García-Peñalvo, F. J., Bravo, S., Conde-González, M. Á.,** & Barbosa, H. (2011). SET, A CASE Tool to Guide the Creation of Domain and Use Case Models in an Introductory Software Engineering Course. *International Journal of Engineering Education (IJEE)*, 27(1), 31-40. ISSN:0949149X. (JCR SCI - ENGINEERING, MULTIDISCIPLINARY - Q3 (60 de 90); EDUCATION, SCIENTIFIC DISCIPLINES - Q4 (25 de 33) - IF 0.418) [260].

##### Year 2012

1. Alier Forment, M., Casany, M. J., Mayol, E., Piguillem, J., Galanis, N., **García-Peñalvo, F. J., & Conde-González, M. A.** (2012). Docs4Learning: Getting Google Docs to Work within the LMS with IMS BLTI. *Journal of Universal Computer Science*, 18(11), 1483-1500. doi:10.3217/jucs-018-11-1483. ISSN: 0948695X. (JCR SCI - COMPUTER SCIENCE, SOFTWARE ENGINEERING - Q3 (68 de 105); COMPUTER SCIENCE, THEORY & METHODS - Q4 (54 de 100) - IF 0.762) [119].
2. Alier, M., Mayol, E., Casañ, M. J., Piguillem, J., Merriman, J. W., **Conde-González, M. A., García-Peñalvo, F. J.,** Tebbens, W., & Severance, C. (2012). Clustering Projects for eLearning Interoperability. *Journal of Universal Computer Science*, 18(1), 106-122. doi:10.3217/jucs-018-01-0106. ISSN: 0948695X. (JCR SCI - COMPUTER SCIENCE, SOFTWARE ENGINEERING - Q3 (68 de 105); COMPUTER SCIENCE, THEORY & METHODS - Q4 (54 de 100) - IF 0.762) [261].
3. **Colomo-Palacios, R.,** Soto-Acosta, P., **García-Peñalvo, F. J.,** & García-Crespo, A. (2012). A study of the impact of global software development in packaged software release planning. *Journal of Universal Computer Science*, 18(19), 2646-2668. doi:10.3217/jucs-018-19-2646. ISSN: 0948695X. (JCR SCI - COMPUTER SCIENCE, SOFTWARE

ENGINEERING – Q3 (68 de 105); COMPUTER SCIENCE, THEORY & METHODS – Q4 (54 de 100) – IF 0.762) [262].

4. Delgado-Álvarez, M. C., **Sánchez Gómez, M. C.**, & Fernández-Dávila Jara, P. A. (2012). Atributos y estereotipos de género asociados al ciclo de la violencia contra la mujer. *Universitas Psychologica*, 11(3), 769-777. ISSN: 16579267. (JCR SSCI – PSYCHOLOGY, MULTIDISCIPLINARY – Q3 (94 de 126) – IF 0.544) [19].
5. **García-Peñalvo, F. J.**, Alier, M., & Lytras, M. D. (2012). Some reflections about service oriented architectures, cloud computing applications, services and interoperability. *Journal of Universal Computer Science*, 18(11), 1405-1409. ISSN: 0948695X. (JCR SCI – COMPUTER SCIENCE, SOFTWARE ENGINEERING – Q3 (68 de 105); COMPUTER SCIENCE, THEORY & METHODS – Q4 (54 de 100) – IF 0.762) [263].
6. **García-Peñalvo, F. J.**, **Colomo-Palacios, R.**, & Lytras, M. D. (2012). Outcomes of international research projects on technology applied to education. *Journal of Universal Computer Science*, 18(1), 1-4. ISSN: 0948695X. (JCR SCI – COMPUTER SCIENCE, SOFTWARE ENGINEERING – Q3 (68 de 105); COMPUTER SCIENCE, THEORY & METHODS – Q4 (54 de 100) – IF 0.762) [264].
7. **García-Peñalvo, F. J.**, **Colomo-Palacios, R.**, & Lytras, M. D. (2012). Informal learning in work environments: Training with the Social Web in the workplace. *Behaviour & Information Technology*, 31(8), 753-755. doi:10.1080/0144929X.2012.661548. ISSN:0144-929X. (JCR SCI – COMPUTER SCIENCE, CYBERNETICS – Q3 (15 de 21); JCR SSCI – ERGONOMICS – Q3 (10 de 16) – IF 0.856) [265].

#### Year 2013

1. **Merlo-Vega, J. A.**, & **Ferreras-Fernández, T.** (2013). Digital preservation and distribution of the education and the library journal by the University of Salamanca's Gredos Repository. *El Profesional de la Información*, 22(2), 143-148. doi:10.3145/epi.2013.mar.08. ISSN: 13866710. (JCR SSCI – INFORMATION SCIENCE & LIBRARY SCIENCE – Q3 (60 de 84) – IF 0.402) [266].

#### Year 2014

1. **Conde-González, M. Á.**, **García-Peñalvo, F. J.**, Alier, M., Mayol, E., & Fernández-Llamas, C. (2014). Implementation and design of a service-based framework to integrate personal and institutional learning environments. *Science of Computer Programming*, 88, 41-53. doi:10.1016/j.scico.2013.10.012. ISSN: 01676423. (JCR SCI – COMPUTER SCIENCE, SOFTWARE ENGINEERING – Q3 (72 de 104) – IF 0.715) [267].
2. **García-Peñalvo, F. J.**, Ordóñez de Pablos, P., García, J., & **Therón, R.** (2014). Using OWL-VisMod through a decision-making process for reusing OWL ontologies. *Behaviour & Information Technology*, 33(5), 426-442. doi:10.1080/0144929X.2012.709538. ISSN:0144-929X. (JCR SCI – COMPUTER SCIENCE, CYBERNETICS – Q3 (15 de 24); JCR SSCI – ERGONOMICS – Q3 (11 de 15) – IF 0.891) [25].
3. **González-Rogado, A. B.**, **Rodríguez-Conde, M. J.**, **Olmos-Migueláñez, S.**, Borham, M., & **García-Peñalvo, F. J.** (2014). Key factors for determining student satisfaction in engineering: A regression study. *International Journal of Engineering Education (IJEE)*, 30(3), 576-584. ISSN:0949149X. (JCR SCI – ENGINEERING, MULTIDISCIPLINARY – Q3 (62 de 85); EDUCATION, SCIENTIFIC DISCIPLINES – Q4 (29 de 37) – IF 0.651) [30].
4. Maderuelo, C., Martín-Suárez, A., Pérez-Blanco, J. S., Zazo, H., **Cruz-Benito, J.**, & Domínguez-Gil, A. (2014). Facility-based inspection training in a virtual 3D laboratory.

*Accreditation and Quality Assurance*, 19(5), 403–409. doi:10.1007/s00769-014-1065-4. ISSN: 0949-1775. (JCR SCI – CHEMISTRY, ANALYTICAL – Q4 (60 de 74); INSTRUMENTS & INSTRUMENTATION – Q3 (40 de 56) – IF 0.966) [268].

#### Year 2015

1. **Conde-González, M. Á., García-Peñalvo, F. J.,** Fernández-Llamas, C., & **García-Holgado, A.** (2015). The application of business process model notation to describe a methodology for the recognition, tagging and acknowledge of informal learning activities. *International Journal of Engineering Education (IJEE)*, 31(3), 884–892. ISSN:0949149X. (JCR SCI – ENGINEERING, MULTIDISCIPLINARY – Q3 (61 de 85); EDUCATION, SCIENTIFIC DISCIPLINES – Q4 (31 de 40) – IF 0.559) [269].
2. Fidalgo-Blanco, Á., Lerís, D., Sein-Echaluce, M. L., & **García-Peñalvo, F. J.** (2015). Monitoring indicators for CTMTC: Comprehensive training model of the teamwork competence in engineering domain. *International Journal of Engineering Education (IJEE)*, 31(3), 829–838. ISSN:0949149X. (JCR SCI – ENGINEERING, MULTIDISCIPLINARY – Q3 (61 de 85); EDUCATION, SCIENTIFIC DISCIPLINES – Q4 (31 de 40) – IF 0.559) [270].
3. **García-Peñalvo, F. J., & Colomo-Palacios, R.** (2015). Innovative teaching methods in engineering. *International Journal of Engineering Education (IJEE)*, 31(3), 689–693. ISSN:0949149X. (JCR SCI – ENGINEERING, MULTIDISCIPLINARY – Q3 (61 de 85); EDUCATION, SCIENTIFIC DISCIPLINES – Q4 (31 de 40) – IF 0.559) [271].
4. **González Rogado, A. B.,** Vivar Quintana, A. M., & **Elorza, I.** (2015). Mobile technology in academic laboratories in engineering. *International Journal of Engineering Education*, 31(3), 694–701. ISSN:0949149X. (JCR SCI – ENGINEERING, MULTIDISCIPLINARY – Q3 (61 de 85); EDUCATION, SCIENTIFIC DISCIPLINES – Q4 (31 de 40) – IF 0.559) [272].
5. **Martínez-Abad, F., Olmos-Migueláñez, S., & Rodríguez-Conde, M. J.** (2015). Evaluación de un programa de formación en competencias informacionales para el futuro profesorado de E.S.O. *Revista de Educación*, (370), 45–70. doi:10.4438/1988-592X-RE-2015-370-296. ISSN: 0034-8082. (JCR SSCI – EDUCATION & EDUCATIONAL RESEARCH – Q3 (124 de 231) – IF 0.845) [31].
6. **Therón, R., & Fontanillo, L.** (2015). Diachronic-information visualization in historical dictionaries. *Information Visualization*, 14(2), 111–136. doi:10.1177/1473871613495844. ISSN: 14738716. (JCR SCI – COMPUTER SCIENCE, SOFTWARE ENGINEERING – Q3 (78 de 106) [73].

#### Year 2016

1. **Ferreras-Fernández, T., García-Peñalvo, F. J., Merlo-Vega, J. A., & Martín-Rodero, H.** (2016). Providing open access to PhD theses: Visibility and citation benefits. *Program: Electronic library and information systems*, 50(4), 399–416. doi:10.1108/PROG-04-2016-0039. ISSN: 0033-0337. (JCR SCI – COMPUTER SCIENCE, INFORMATION SYSTEMS – Q4 (139 de 146) – IF 0.556; JCR SSCI – INFORMATION SCIENCE & LIBRARY SCIENCE – Q3 (59 de 85) – IF 0.556) [42].
2. **García-Holgado, A., & García-Peñalvo, F. J.** (2016). Architectural pattern to improve the definition and implementation of eLearning ecosystems. *Science of Computer Programming*, 129, 20–34. doi:10.1016/j.scico.2016.03.010. ISSN: 0167-6423. (JCR SCI – COMPUTER SCIENCE, SOFTWARE ENGINEERING – Q3 (71 de 106) – IF 1.064) [55].
3. González-Torres, A., **García-Peñalvo, F. J., Therón, R., & Colomo-Palacios, R.** (2016). Knowledge discovery in software teams by means of evolutionary visual software



- analytics. *Science of Computer Programming*, 121, 55-74. doi:10.1016/j.scico.2015.09.005. ISSN: 0167-6423. (JCR SCI - COMPUTER SCIENCE, SOFTWARE ENGINEERING - Q3 (71 de 106) - IF 1.064) [23].
4. **Mena, J.**, García, M. L., Clarke, A., & Barkatsas, A. (2016). An analysis of three different approaches to student teacher mentoring and their impact on knowledge generation in practicum settings. *European Journal of Teacher Education*, 39(1), 53-76. doi:10.1080/02619768.2015.1011269. ISSN: 0261-9768. (JCR SSCI - EDUCATION & EDUCATIONAL RESEARCH - Q3 (173 de 235) - IF 0.695) [273].
  5. **Torrecilla Sánchez, E. M., Olmos-Migueláñez, S., & Rodríguez-Conde, M. J.** (2016). Efectos de la metodología didáctica sobre el aprendizaje de competencias para la gestión de conflictos en educación secundaria, *Educación XXI*, 19(2), 293-315. doi:10.5944/educxx1.16468. ISSN: 1139-613X. (JCR-SSCI- EDUCATION & EDUCATIONAL RESEARCH - Q3 (121 de 235) - IF 1.094) [274].

#### Year 2017

1. **García-Valcárcel Muñoz-Repiso, A., & Tejedor Tejedor, F. J.** (2017). Percepción de los estudiantes sobre el valor de las TIC en sus estrategias de aprendizaje y su relación con el rendimiento. *Educación XXI*, 20(2), 137-159 doi:10.5944/educXXI.13447. ISSN: 1139-613X. (JCR Q3-EDUCATION & EDUCATIONAL RESEARCH, 121 de 235; IF 1.094) [275].
2. Nielsen, W., **Mena, J.**, Clarke, A., O'Shea, S., Hoban, H. & Collins, J. (2017). Australia's Supervising Teachers: Motivators and Challenges to Inform Professional Learning. *Asia-Pacific Journal of Teacher Education*, 46, 1-23. doi:10.1080/1359866X.2017.1304527. ISSN: 1359-866X. (JCR Q3-EDUCATION & EDUCATIONAL RESEARCH, 135 de 235; IF 0.964) [219].
3. Arroyo-Vázquez, N., & **Merlo-Vega, J. A.** (2017). Comparing the usage data of an app and a mobile website for an academic library. *El Profesional de la Información*, 26(6), 1119-1126. doi:10.3145/epi.2017.nov.11. ISSN: 1386-6710. (JCR SSCI - INFORMATION SCIENCE & LIBRARY SCIENCE - Q3 (45 de 85) - IF 1.063) [276].
4. Tena-Espinoza-de-los-Monteros, M.-A., & **Merlo-Vega, J. A.** (2017). Tecnología cívica para la participación ciudadana. El caso de Codeando México. *El Profesional de la Información*, 26(1), 114-124. doi:10.3145/epi.2017.ene.12. ISSN: 1386-6710. (JCR SSCI - INFORMATION SCIENCE & LIBRARY SCIENCE - Q3 (45 de 85) - IF 1.063) [277].

#### Year 2018

1. Fonseca Escudero, D., **Conde-González, M. Á., & García-Peñalvo, F. J.** (2018). Improving the information society skills: Is knowledge accessible for all? *Universal Access in the Information Society*, In Press doi:10.1007/s10209-017-0548-6. ISSN: 1615-5289. (JCR SCI - COMPUTER SCIENCE, CYBERNETICS - Q3 (15 de 22) - IF 1.219; JCR SSCI - ERGONOMICS - Q3 (10 de 16) - IF 1.219) [278].
2. Fidalgo-Blanco, Á., Sein-Echaluce, M. L., & **García-Peñalvo, F. J.** (2017). Ontological flip teaching: A flip teaching model based on knowledge management. *Universal Access in the Information Society*, In Press doi:10.1007/s10209-017-0556-6. ISSN: 1615-5289. (JCR SCI - COMPUTER SCIENCE, CYBERNETICS - Q3 (15 de 22) - IF 1.219; JCR SSCI - ERGONOMICS - Q3 (10 de 16) - IF 1.219) [279].
3. **García-Peñalvo, F. J.**, & Moreno, L. (2018). Special Issue on exploring new Natural User Experiences. *Universal Access in the Information Society*, In Press doi:10.1007/s10209-

017-0578-0. ISSN: 1615-5289. (JCR SCI – COMPUTER SCIENCE, CYBERNETICS – Q3 (15 de 22) – IF 1.219; JCR SSCI – ERGONOMICS – Q3 (10 de 16) – IF 1.219) [280].

### JCR Q4

#### Year 2011

1. **García-Peñalvo, F. J., Conde-González, M. Á.,** Alier, M., & Casany, M. J. (2011). Opening Learning Management Systems to Personal Learning Environments. *Journal of Universal Computer Science*, 17(9), 1222-1240. doi:10.3217/jucs-017-09-1222. ISSN: 0948695X. (JCR SCI – COMPUTER SCIENCE, SOFTWARE ENGINEERING – Q4 (85 de 104); COMPUTER SCIENCE, THEORY & METHODS – Q4 (84 de 99) – IF 0.398) [83].
2. García, J., **García-Peñalvo, F. J., Therón, R.,** & Ordóñez de Pablos, P. (2011). Usability evaluation of a visual modelling tool for OWL ontologies. *Journal of Universal Computer Science*, 17(9), 1299-1313. doi:10.3217/jucs-017-09-1299. ISSN: 0948695X. (JCR SCI – COMPUTER SCIENCE, SOFTWARE ENGINEERING – Q4 (85 de 104); COMPUTER SCIENCE, THEORY & METHODS – Q4 (84 de 99) – IF 0.398) [15].

#### Year 2012

1. Alier Forment, M., Galanis, N., Casany, M. J., Mayol, E., Poch, J. P., **García-Peñalvo, F. J.,** & **Conde-González, M. Á.** (2012). Didactical Patterns for the Usage of Wikis in Educational and Learning Activities. *International Journal of Engineering Education*, 28(6), 1347-1352. ISSN:0949149X. (JCR SCI – ENGINEERING, MULTIDISCIPLINARY – Q4 (79 de 90); EDUCATION, SCIENTIFIC DISCIPLINES – Q4 (31 de 34) – IF 0.290) [281].
2. Casany, M. J., Alier, M., Mayol, E., Piguillem, J., Galanis, N., **García-Peñalvo, F. J.,** & **Conde-González, M. Á.** (2012). Moodbile: A Framework to Integrate m-Learning Applications with the LMS. *Journal of Research and Practice in Information Technology (JRPIT)*, 44(2), 129-149. ISSN: 1443458X. (JCR SCI – COMPUTER SCIENCE, SOFTWARE ENGINEERING – Q4 (99 de 105); COMPUTER SCIENCE, INFORMATION SYSTEMS – Q4 (128 de 132) – IF 0.222) [121].
3. Sierra, M., & **López Esteban, M. C.** (2012). La descentralización del currículo de matemáticas en la educación obligatoria en España durante la década 1990-2000. *Enseñanza de las Ciencias*, 30(2), 275-296. doi:10.5565/rev/ec/v30n2.425. ISSN: 0212-4521. (JCR SSCI – EDUCATION & EDUCATIONAL RESEARCH – Q4 (192 de 219) – IF 0.238) [282].
4. **Tejedor Tejedor, F. J.,** & **García-Valcárcel Muñoz-Repiso, A.** (2012). Sociedad tecnológica e investigación educativa. *Revista Española de Pedagogía*, LXX(251), 3-26. ISSN: 0034-9461. (JCR SSCI – EDUCATION & EDUCATIONAL RESEARCH – Q4 (173 de 219) – IF 0.353) [155].
5. Zapata-Sepúlveda, P., Fernández-Dávila Jara, P. A., & **Sánchez-Gómez, M. C.** (2012). Violencia de género en mujeres con ascendencia étnica aymara en el extremo norte de Chile. *Revista de Psiquiatría y Salud Mental*, 5(3), 769-777. doi:10.1016/j.rpsm.2012.02.003. ISSN: 18889891. (JCR SSCI – PSYCHIATRY – Q4 (101 de 121) – IF 0.667) [283].

#### Year 2013

1. **Conde-González, M. Á., García-Peñalvo, F. J.,** Alier, M., & Piguillem, J. (2013). The implementation, deployment and evaluation of a Mobile Personal Learning Environment. *Journal of Universal Computer Science*, 19(7), 854-872. doi:10.3217/jucs-019-07-0854. ISSN: 0948695X. (JCR SCI – COMPUTER SCIENCE,

- SOFTWARE ENGINEERING – Q4 (99 de 105); COMPUTER SCIENCE, THEORY & METHODS – Q4 (89 de 102) – IF 0.401 [187].
2. **Conde-González, M. Á., García-Peñalvo, F. J.,** Alier, M., Casany, M. J., & Piguillem, J. (2013). Mobile devices applied to Computer Science subjects to consume institutional functionalities through a Personal Learning Environment. *International Journal of Engineering Education (IJEE)*, 29(3), 610-619. ISSN:0949149X. (JCR SCI – ENGINEERING, MULTIDISCIPLINARY – Q4 (74 de 89); EDUCATION, SCIENTIFIC DISCIPLINES – Q4 (34 de 36) – IF 0.360) [284].
  3. **García-Peñalvo, F. J., Colomo-Palacios, R.,** & Hsu, J. Y. J. (2013). Discovering knowledge through highly interactive information based systems foreword. *Journal of Information Science and Engineering*, 29(1). ISSN: 10162364. (JCR SCI – COMPUTER SCIENCE, INFORMATION SYSTEMS – Q4 (128 de 135) – IF 0.333) [116].
  4. **García-Peñalvo, F. J., Conde-González, M. Á., Zangrando, V., García-Holgado, A., Seoane-Pardo, A. M.,** Alier Forment, M., Galanis, N., Brouns, F., Vogten, H., **Griffiths, D.,** Mykowska, A., Ribeiro Alves, G., & Minovic, M. (2013). TRAILER project (Tagging, recognition, acknowledgment of informal learning experiences). A Methodology to make visible learners' informal learning activities to the institutions. *Journal of Universal Computer Science*, 19(11), 1661. doi:10.3217/jucs-019-11-1661. ISSN: 0948695X. (JCR SCI – COMPUTER SCIENCE, SOFTWARE ENGINEERING – Q4 (99 de 105); COMPUTER SCIENCE, THEORY & METHODS – Q4 (89 de 102) – IF 0.401) [189].
  5. **García-Peñalvo, F. J.,** Velázquez-Iturbide, J. Á., & Llamas-Nistal, M. (2013). International research projects on socio-semantic technologies applied to education. *Journal of Universal Computer Science*, 19(11), 1496-1499. ISSN: 0948695X. (JCR SCI – COMPUTER SCIENCE, SOFTWARE ENGINEERING – Q4 (99 de 105); COMPUTER SCIENCE, THEORY & METHODS – Q4 (89 de 102) – IF 0.401) [285].
  6. González-Torres, A., **García-Peñalvo, F. J.,** & **Therón, R.** (2013). How evolutionary visual software analytics supports knowledge discovery. *Journal of Information Science and Engineering*, 29(1), 17-34. ISSN: 10162364. (JCR SCI – COMPUTER SCIENCE, INFORMATION SYSTEMS – Q4 (128 de 135) – IF 0.333) [20].
  7. **Rodríguez-Conde, M. J., Martínez-Abad, F.,** & **Olmos-Migueláñez, S.** (2013). Assessment of information skills in secondary education: A causal model. *Cultura y Educación*, 25(3), 361-373. doi:10.1174/113564013807749687. ISSN: 11356405. (JCR SSCI – EDUCATION & EDUCATIONAL RESEARCH – Q4 (167 de 219) – IF 0.375) [27].

#### Year 2014

1. **Colomo-Palacios, R.,** López-Cuadrado, J. L., González-Carrasco, I., & **García-Peñalvo, F. J.** (2014). SABUMO-dTest: Design and Evaluation of an Intelligent collaborative distributed testing framework. *Computer Science and Information Systems (ComSIS)*, 1(1), 29-45. doi:10.2298/CSIS130129019C. ISSN: 18200214 (JCR SCI – COMPUTER SCIENCE, INFORMATION SYSTEMS – Q4 (122 de 139); COMPUTER SCIENCE, SOFTWARE ENGINEERING – Q4 (87 de 104) – IF 0.477) [286].
2. Gómez-Aguilar, D. A., **García-Peñalvo, F. J.,** & **Therón, R.** (2014). Analítica Visual en eLearning. *El Profesional de la Información*, 23(3), 236-245. doi:10.3145/epi.2014.may.03. ISSN: 1386-6710. (JCR SSCI – INFORMATION SCIENCE & LIBRARY SCIENCE – Q4 (65 de 85) – IF 0.356) [18].
3. Hervás, A., Buendía García, F., & **García-Peñalvo, F. J.** (2014). A method of assessing academic learning experiences in virtual learning environments. *IEEE Latin America*

- Transactions*, 12(2), 219-226. doi:10.1109/TLA.2014.6749541. ISSN: 15480992. (JCR SCI – COMPUTER SCIENCE, INFORMATION SYSTEMS – Q4 (131 de 139); ENGINEERING, ELECTRICAL & ELECTRONIC – Q4 (224 de 249) – IF 0.326) [287].
4. Martín García, A. V., & **Sánchez-Gómez, M. C.** (2014). Modelo predictivo de la intención de adopción de blended learning en profesores universitarios. *Universitas Psychologica*, 13(2), 601-614. doi:10.11144/Javeriana. ISSN: 16579267. (JCR SSCI – PSYCHOLOGY, MULTIDISCIPLINARY – Q4 (113 de 129) – IF 0.309) [288].
  5. Martín García, A. V., Hernández Serrano, M. J., & **Sánchez-Gómez, M. C.** (2014). Phases and profile of blended learning adopters in university contexts. The CHAID analysis. *Revista Española de Pedagogía*, 72(259), 457-476. ISSN: 00349461. (JCR SSCI – EDUCATION & EDUCATIONAL RESEARCH – Q4 (213 de 224) – IF 0.190) [289].
  6. Muñoz, J. L., **Sánchez-Gómez, M. C.**, Palacios Vicario, B., & Franco Martín, M. Á. (2014). Approach and treatment of suicidal behavior in the clinical practice of different groups of health professionals in Spain: Results of the project EUREGENAS. *Revista Escola Enfermagem USP*, 48(Esp2), 139-147. doi:10.1590/S0080-623420140000800021. ISSN: 0080-6234. (JCR SSCI – NURSING – Q4 (95 de 109) – IF 0.452) [290].

#### Year 2015

1. Fidalgo Blanco, Á., Sein-Echaluze Lacleta, M. L., & **García-Peñalvo, F. J.** (2015). Methodological Approach and Technological Framework to break the current limitations of MOOC model. *Journal of Universal Computer Science*, 2(5), 712-734. doi:10.3217/jucs-021-05-0712. ISSN: 0948695X. (JCR SCI – COMPUTER SCIENCE, SOFTWARE ENGINEERING – Q4 (89 de 106); COMPUTER SCIENCE, THEORY & METHODS – Q4 (90 de 105) – IF 0.546) [129].
2. **García-Peñalvo, F. J.**, & **Conde-González, M. Á.** (2015). The impact of a mobile Personal Learning Environment in different educational contexts. *Universal Access in the Information Society*, 14(3), 375-387. doi:10.1007/s10209-014-0366-z. ISSN: 1615-5289. (JCR SCI – COMPUTER SCIENCE, CYBERNETICS – Q4 (18 de 22) – IF 0.656; JCR SSCI – ERGONOMICS – Q4 (13 de 16) – IF 0.656) [137].
3. Hernández-Rizzardini, R., **García-Peñalvo, F. J.**, & Delgado Kloss, C. (2015). Massive Open Online Courses: Combining methodologies and architectures for a success learning. *Journal of Universal Computer Science*, 2(5), 636-637. ISSN: 0948695X. (JCR SCI – COMPUTER SCIENCE, SOFTWARE ENGINEERING – Q4 (89 de 106); COMPUTER SCIENCE, THEORY & METHODS – Q4 (90 de 105) – IF 0.546) [291].
4. **Merlo-Vega, J. A.**, & Chu, C. M. (2015). Out of necessity comes unbridled imagination for survival: Contributive justice in Spanish libraries during economic crisis. *Library Trends*, 64(2), 299-328. doi:10.1353/lib.2015.0051. ISSN: 0024-2594. (JCR SSCI – INFORMATION SCIENCE & LIBRARY SCIENCE – Q4 (75 de 86) – IF 0.208) [292].

#### Year 2016

1. Minović, M., **García-Peñalvo, F. J.**, & Kearney, N. A. (2016). Gamification in engineering education. *International Journal of Engineering Education (IJEE)*, 32(1B), 308-309. ISSN 0949-149X. (JCR SCI – ENGINEERING, MULTIDISCIPLINARY – Q4 (66 de 85); EDUCATION, SCIENTIFIC DISCIPLINES – Q4 (35 de 41) – IF 0.609) [293].
2. Sein-Echaluze, M. L., Fidalgo-Blanco, Á., & **García-Peñalvo, F. J.** (2016). Students' knowledge sharing to improve learning in engineering academic courses. *International Journal of Engineering Education (IJEE)*, 32(2B), 1024-1035. ISSN 0949-

- 149X. [JCR SCI – ENGINEERING, MULTIDISCIPLINARY – Q4 (66 de 85); EDUCATION, SCIENTIFIC DISCIPLINES – Q4 (35 de 41) – IF 0.609] [294].
3. Fernández, C., Esteban, G., **Conde-González, M. Á.**, & **García-Peñalvo, F. J.** (2016). Improving motivation in a haptic teaching/learning framework. *International Journal of Engineering Education (IJEE)*, 32(1B), 553-562. ISSN 0949-149X. [JCR SCI – ENGINEERING, MULTIDISCIPLINARY – Q4 (66 de 85); EDUCATION, SCIENTIFIC DISCIPLINES – Q4 (35 de 41) – IF 0.609] [295].
  4. Durán-Martínez, R., Beltrán-Llavador, F., & **Martínez-Abad, F.** (2016). A contrastive analysis between novice and expert teachers' perceptions of school bilingual programmes. *Cultura y Educación*, 28(4), 738-770. doi:10.1080/11356405.2016.1237339. ISSN: 1135-6405. [JCR SSCI – EDUCATION & EDUCATIONAL RESEARCH – Q4 (187 de 231) – IF 0.607] [296].
  5. **Hernández-Ramos, J. P.**, **Martínez-Abad, F.**, **Olmos-Migueláñez, S.**, & **Rodríguez-Conde, M. J.** (2016). Evaluación de competencias informacionales con el instrumento IL-HUMASS: Escalamiento multidimensional. *Revista Iberoamericana de Diagnóstico y Evaluación Psicológica*, 2(42), 39-48. ISSN: 2183-6051. [JCR SSCI – PSYCHOLOGY, CLINICAL – Q4 (121 de 121) – IF 0.146] [297].
  6. Martín Cilleros, M. V., & **Sánchez-Gómez, M. C.** (2016). Qualitative analysis of topics related to the quality of life of people with disabilities. *Ciência & Saúde Coletiva*, 2(8), 2365-2374. doi:10.1590/1413-81232015218.04182016. ISSN: 1413-8123. [JRC-SSCI-PUBLIC, ENVIRONMENTAL & OCCUPATIONAL HEALTH – Q4 (134 de 157) – IF 0.780] [298].

#### Year 2017

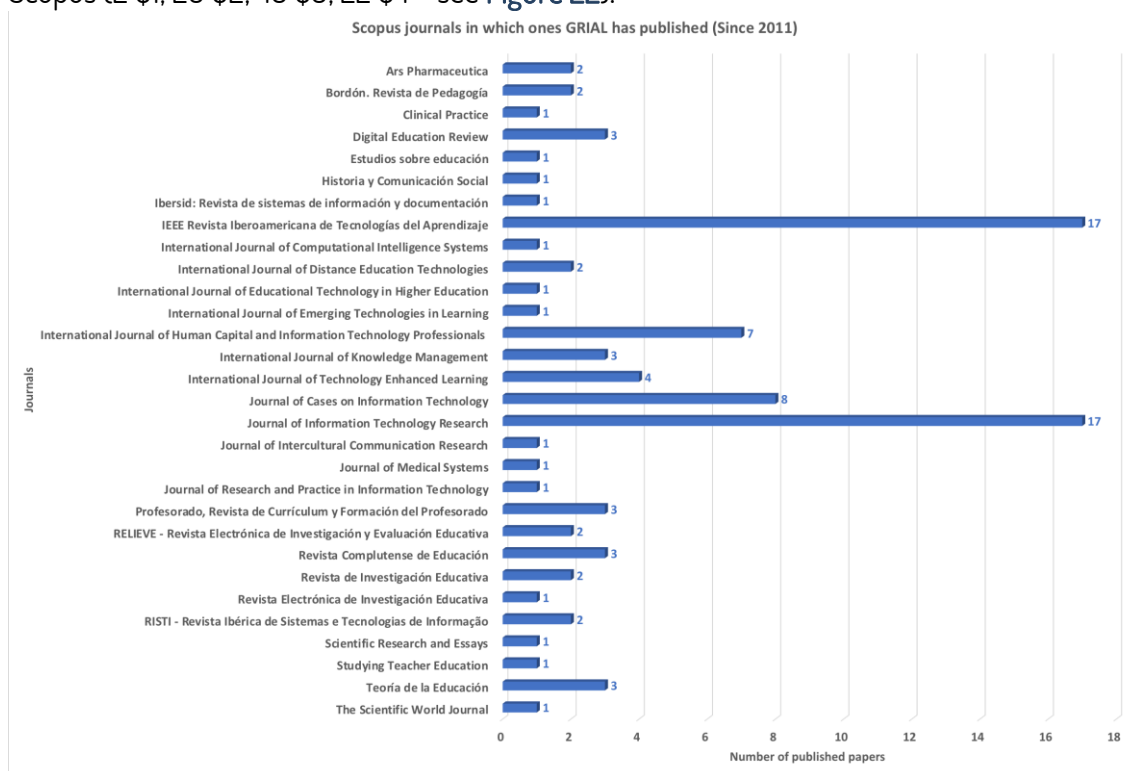
1. Joo Nagata, J., **García-Bermejo Giner, J.**, & **Martínez-Abad, F.** (2017). Augmented reality in pedestrian navigation applied in a context of mobile learning: Resources for enhanced comprehension of Science, Technology, Engineering and Mathematics. *International Journal of Engineering Education*, 33(2B), 768-780. ISSN: 0949-149X. [JCR SCI – ENGINEERING, MULTIDISCIPLINARY – Q4 (66 de 85); EDUCATION, SCIENTIFIC DISCIPLINES – Q4 (35 de 41) – IF 0.609] [299].
2. **García-Peñalvo, F. J.**, & Llamas Nistal, M. (2017). The engineering behind the technological-based educational innovation. *International Journal of Engineering Education (IJEE)*, 33(2B), 763-767. ISSN: 0949-149X. [JCR SCI – ENGINEERING, MULTIDISCIPLINARY – Q4 (66 de 85); EDUCATION, SCIENTIFIC DISCIPLINES – Q4 (35 de 41) – IF 0.609] [300].
3. Humanante-Ramos, P. R., **García-Peñalvo, F. J.**, & **Conde-González, M. Á.** (2017). Electronic devices and Web 2.0 tools: Usage trends in engineering students. *International Journal of Engineering Education (IJEE)*, 33(2B), 790-796. ISSN: 0949-149X. [JCR SCI – ENGINEERING, MULTIDISCIPLINARY – Q4 (66 de 85); EDUCATION, SCIENTIFIC DISCIPLINES – Q4 (35 de 41) – IF 0.609] [301].
4. Sein-Echaluce Lacleata, M. L., Fidalgo-Blanco, Á., Esteban-Escano, J., & **García-Peñalvo, F. J.** (2017). The learning improvement of engineering students using peer-created complementary resources. *International Journal of Engineering Education (IJEE)*, 33(2B), 927-937. [JCR SCI – ENGINEERING, MULTIDISCIPLINARY – Q4 (66 de 85); EDUCATION, SCIENTIFIC DISCIPLINES – Q4 (35 de 41) – IF 0.609] [302].

#### Year 2018

1. Sein-Echaluce, M. L., Fidalgo-Blanco, Á., Esteban-Escañó, J., **García-Peñalvo, F. J., Conde-González, M. Á.** (2018). Using learning analytics to detect authentic leadership characteristics at engineering degrees. *International Journal of Engineering Education (IJEE)*, In Press. ISSN 0949-149X. (JCR SCI – ENGINEERING, MULTIDISCIPLINARY – Q4 (66 de 85); EDUCATION, SCIENTIFIC DISCIPLINES – Q4 (35 de 41) – IF 0.609) [303].

### Indexed publications on Scopus (SCImago)

The indexed publications on Scopus (and not indexed on JCR) by the GRIAL Group, between 2011 and 2017 (pending publications with online access and an associated DOI are going to be included) are going to be organized by quartiles (according to the SJR index of SCImago), and within each quartile by year, being the pending publications placed in 2018. In this reference period, the GRIAL Group has published 94 papers on 30 journals (see **Figure 21**) indexed on Scopus (2 Q1; 20 Q2; 49 Q3; 22 Q4 – see **Figure 22**).



**Figure 21.** Scopus journals in which the GRIAL Group has published (2011-2017)

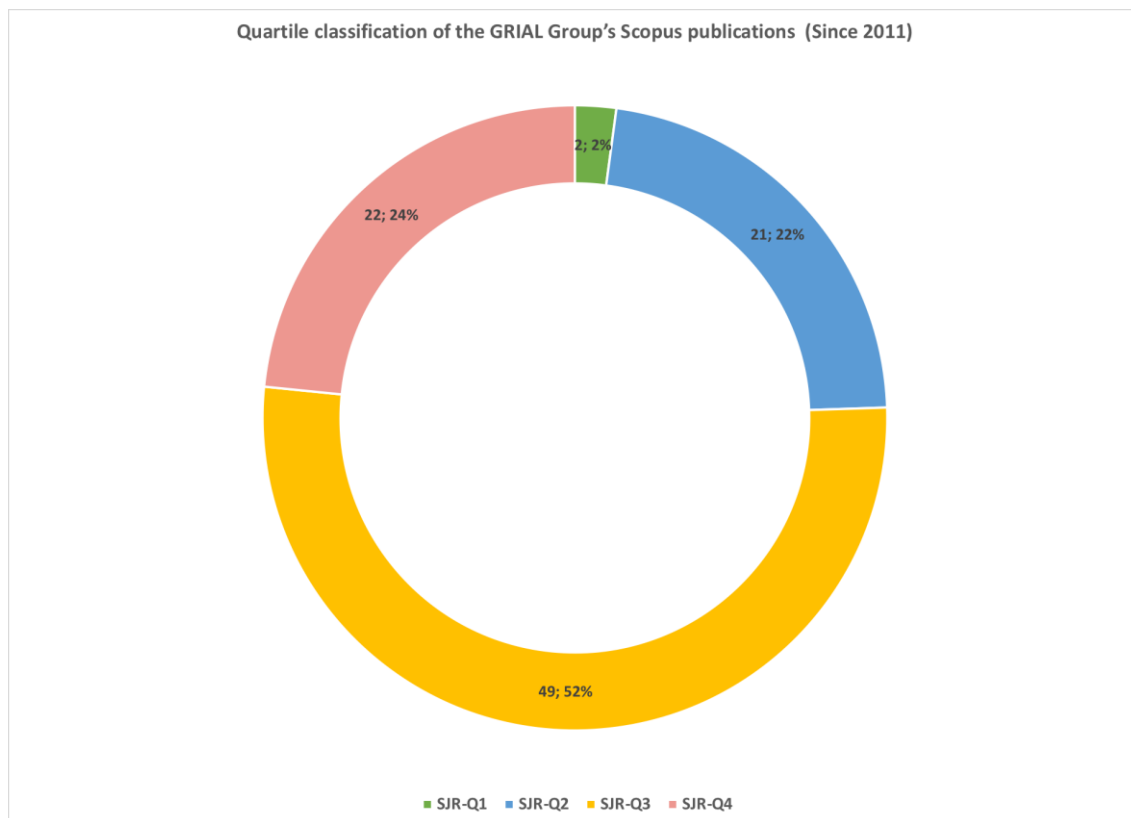


Figure 22. Organization by quartiles of the GRIAL Group's Scopus publications (2011-2017)

### Scopus Q1

Year 2012

1. González-Carrasco, I., **Colomo-Palacios, R.**, López-Cuadrado, J. L., & **García-Peñalvo, F. J.** (2012). SEffEst: Effort estimation in software projects using fuzzy logic and neural networks. *International Journal of Computational Intelligence Systems*, 5(4), 679-699. doi:10.1080/18756891.2012.718118. ISSN: 1875-6891. (SJR 0.502 - COMPUTERS SCIENCE (MISCELLANEOUS) - Q1; COMPUTATIONAL MATHEMATICS- Q2) [304].

Year 2016

1. Durán Martínez, R., Gutiérrez, G., Beltrán Llavador, F., & **Martínez-Abad, F.** (2016). The impact of an Erasmus placement in students' perception of their intercultural communicative competence. *Journal of Intercultural Communication Research*, 45(4), 338-354. doi:10.1080/17475759.2016.1186721. ISSN: 1747-5759. (SJR 0.355 - COMMUNICATION - Q2; CULTURAL STUDIES - Q1) [305].

### Scopus Q2

Year 2013

1. **García-Peñalvo, F. J.**, **Conde-González, M. Á.**, Johnson, M., & Alier, M. (2013). Knowledge co-creation process based on informal learning competences tagging and recognition. *International Journal of Human Capital and Information Technology Professionals (IJHCITP)*, 4(4), 18-30. doi:10.4018/ijhcritp.2013100102. ISSN: 1947-3478.

- (SJR 0.256 – COMPUTERS SCIENCE (MISCELLANEOUS) – Q2; MANAGEMENT OF TECHNOLOGY AND INNOVATION – Q3) [80].
2. **García-Peñalvo, F. J.**, Ortega-Cantero, M., & Rodríguez, P. (2013). Special Collection on Computers & Education. *Journal of Research and Practice in Information Technology (JRPIT)*, 45(3/4), 171-174. ISSN: 1443-458X. (SJR 0.331 – MANAGEMENT INFORMATION SYSTEMS – Q2; COMPUTER NETWORKS AND COMMUNICATIONS – Q2; E-LEARNING – Q2; HARDWARE AND ARCHITECTURE – Q3; INFORMATION SYSTEMS – Q3; SOFTWARE – Q3) [306].
  3. Pizarro Lucas, E., **Cruz-Benito, J.**, & Gil Gonzalo, O. (2013). USALSIM: learning, professional practices and employability in a 3D virtual world. *International Journal of Technology Enhanced Learning*, 5(3/4), 307-321. doi:10.1504/IJTEL.2013.059498. ISSN: 1753-5263. (SJR 0.354 – COMPUTER SCIENCE APPLICATIONS – Q3; EDUCATION – Q2; E-LEARNING – Q2) [307].
  4. López García, C., **Sánchez-Gómez, M. C.**, & Palacios Vicario, B. (2013). Estado actual de los proyectos colaborativos educativos en Twitter. *Historia y Comunicación Social*, 18(Esp. Dic.), 733-751. doi:10.5209/rev\_HICS.2013.v18.44362. ISSN: 1137-0734. (SJR 0.14 – COMMUNICATION – Q4; HISTORY – Q2; SOCIOLOGY AND POLITICAL SCIENCE – Q4) [308].

#### Year 2014

1. **García-Peñalvo, F. J.** (2014). Informal learning management experiences. *International Journal of Human Capital and Information Technology Professionals (IJHCITP)*, 5(3), iv-ix. ISSN: 1947-3478. (SJR 0.271 – COMPUTERS SCIENCE (MISCELLANEOUS) – Q2; MANAGEMENT OF TECHNOLOGY AND INNOVATION – Q3) [309].
2. **García-Peñalvo, F. J.**, **Cruz-Benito, J.**, Maderuelo, C., Pérez-Blanco, J. S., & Martín-Suárez, A. (2014). Usalpharma: A cloud-based architecture to support quality assurance training processes in health area using virtual worlds. *The Scientific World Journal*, 2014. doi:10.1155/2014/659364. ISSN: 1537-744X. (SJR 0.392 – BIOCHEMISTRY, GENETICS AND MOLECULAR BIOLOGY (MISCELLANEOUS) – Q2; ENVIRONMENTAL SCIENCE (MISCELLANEOUS) – Q2; MEDICINE (MISCELLANEOUS) – Q2) [310].
3. Viegas, C., Marques, M., Alves, G., Mykowska, A., Galanis, N., Alier, M., Brouns, F., Janssen, J., **García-Peñalvo, F. J.**, **García-Holgado, A.**, **Zangrando, V.**, & **Conde-González, M. Á.** (2014). TRAILER – a Tool for Managing Informal Learning. *International Journal of Human Capital and Information Technology Professionals (IJHCITP)*, 5(3), 1-17. doi:10.4018/ijhcitp.2014070101. ISSN: 1947-3478. (SJR 0.271 – COMPUTERS SCIENCE (MISCELLANEOUS) – Q2; MANAGEMENT OF TECHNOLOGY AND INNOVATION – Q3) [311].

#### Year 2015

1. **García-Peñalvo, F. J.** (2015). Engineering contributions to a Knowledge Society multicultural perspective. *IEEE Revista Iberoamericana de Tecnologías del Aprendizaje (IEEE RITA)*, 10(1), 17-18. doi:10.1109/RITA.2015.2391371. ISSN: 1932-8540. (SJR 0.262 – ENGINEERING (MISCELLANEOUS) – Q2; EDUCATION – Q3; E-LEARNING – Q3) [312].
2. Humanante-Ramos, P. R., **García-Peñalvo, F. J.**, & **Conde-González, M. Á.** (2015). Personal Learning Environments and online classrooms: An experience with university students. *IEEE Revista Iberoamericana de Tecnologías del Aprendizaje*



- (*IEEE RITA*), 10(1), 26-32. doi:10.1109/RITA.2015.2391411. ISSN: 1932-8540. (SJR 0.262 – ENGINEERING (MISCELLANEOUS) – Q2; EDUCATION – Q3; E-LEARNING – Q3) [139].
3. **Conde-González, M. Á., García-Peñalvo, F. J.,** Gómez-Aguilar, D. A., & **Therón, R.** (2015). Exploring software engineering subjects by using visual learning analytics techniques. *IEEE Revista Iberoamericana de Tecnologías del Aprendizaje (IEEE RITA)*, 10(4), 242-252. doi:10.1109/RITA.2015.2486378. ISSN: 1932-8540. (SJR 0.262 – ENGINEERING (MISCELLANEOUS) – Q2; EDUCATION – Q3; E-LEARNING – Q3) [313].
  4. Briz Ponce, L., & **García-Peñalvo, F. J.** (2015). An empirical assessment of a technology acceptance model for apps in medical education. *Journal of Medical Systems*, 39(11), Paper 176. doi:10.1007/s10916-015-0352-x. ISSN: 0148-5598. (SJR 0.705 – INFORMATION SYSTEMS – Q2; HEALTH INFORMATION MANAGEMENT – Q2; HEALTH INFORMATICS – Q2; MEDICINE (MISCELLANEOUS) – Q2) [65].

#### Year 2016

1. **Casillas Martín, S., Cabezas, M.,** & Martín, J. (2016). Knowledge management: Experiences of collaborative work using ICT with students. *Digital Education Review*, 30, 184-206. ISSN: 2013-9144. (SJR 0.356 – COMPUTER SCIENCE APPLICATIONS – Q3; EDUCATION – Q2) [314].
2. Fidalgo-Blanco, Á., Sein-Echaluze, M. L., & **García-Peñalvo, F. J.** (2016). From massive access to cooperation: Lessons learned and proven results of a hybrid xMOOC/cMOOC pedagogical approach to MOOCs. *International Journal of Educational Technology in Higher Education (ETHE)*, 13, 24. doi:10.1186/s41239-016-0024-z. ISSN: 2365-9440. (SJR 0.425 – EDUCATION – Q2; COMPUTER SCIENCE APPLICATIONS – Q2; E-LEARNING – Q2) [143].
3. Pérez Escoda, A., & **Rodríguez-Conde, M. J.** (2016). Evaluación de las competencias digitales autopercebidas del profesorado de Educación Primaria en Castilla y León. *Revista de Investigación Educativa*, 34(2), 399-415. doi:10.6018/rie.34.2.215121. ISSN: 0212-4068. (SJR 0.593 – EDUCATION – Q2) [315].
4. **Torrecilla Sánchez, E. M., Olmos-Migueláñez, S., Rodríguez-Conde, M. J.,** & **Martínez-Abad, F.** (2016). Eficacia de un programa de formación de profesorado de Educación Secundaria sobre resolución de conflictos, con apoyo tecnológico. *Digital Education Review*, 29, 193-226. ISSN: 2013-9144. (SJR 0.356 – COMPUTER SCIENCE APPLICATIONS – Q3; EDUCATION – Q2) [316].

#### Year 2017

1. **Nieto Isidro, S., Martínez-Abad, F.,** & **Rodríguez-Conde, M. J.** (2017). La influencia de la elección de materias en la Prueba de Acceso a la Universidad en los conocimientos matemáticos de los estudiantes de Ingeniería. *Revista Complutense de Educación*, 28(1), 125-144. doi:10.5209/rev\_RCED.2017.v28.n1.48977. ISSN: 1130-2496. (SJR 0.361 – EDUCATION – Q2) [317].
2. **Sánchez-Gómez, M. C., Pinto-Llorente, A. M.,** & **García-Peñalvo, F. J.** (2017). The Impact of wikis and discussion boards on learning English as a second language. A mixed methods research. *Digital Education Review*, 32, 35-59. ISSN 2013-9144. (SJR 0.356 – COMPUTER SCIENCE APPLICATIONS – Q3; EDUCATION – Q2) [318].
3. **Torrecilla Sánchez, E. M., Rodríguez-Conde, M. J., Olmos-Migueláñez, S.,** & **Torrijos Fincias, P.** (2017). Determinantes de la satisfacción de los profesores de secundaria, como indicador de calidad de un programa formativo en resolución de conflictos. *Revista Complutense de Educación*, 28(2), 517-535.

doi:10.5209/rev\_RCED.2017.v28.n2.49572. ISSN: 1130-2496. (SJR 0.361 – EDUCATION – Q2) [319].

4. **Mena, J.** & Russell, T. (2017). Collaboration, Multiple methods, trustworthiness: Issues arising from the 2014 Conference on Self Study of Teacher Education Practices. *Studying Teacher Education, 13*(1), 105-122. doi:10.1080/17425964.2017.1287694. ISSN: 1742-5972. (SJR 0.339 – EDUCATION – Q2) [320].
5. **García-Valcárcel Muñoz-Repiso, A., & Basilotta Gómez-Pablos, V.** (2017). Aprendizaje Basado en Proyectos (ABP): Evaluación desde la perspectiva de alumnos de Educación Primaria. *Revista Investigación Educativa, 35*(1), 113-131. doi:10.6018/rie.35.1.246811. ISSN: 0212-4068. (SJR 0.593 – EDUCATION – Q2) [321].

#### Year 2018

1. **García-Valcárcel Muñoz-Repiso, A., & Tejedor Tejedor, F. J.** (2018). Valoración del trabajo colaborativo en los procesos de enseñanza-aprendizaje en entornos escolares con alto nivel TIC. *Estudios sobre Educación, 34*, 155-175. doi:10.15581/004.34.155-175. ISSN: 1578-7001. (SJR 0.345 – EDUCATION – Q2) [322].

#### Scopus Q3

##### Year 2011

1. **Morales-Morgado, E. M., García-Peñalvo, F. J., Muñoz, C., Conde-González, M. Á., & Díaz San Millán, E.** (2011). Promoting quality during learning-object management through experts and users. *International Journal of Technology Enhanced Learning, 3*(2), 190-203. doi:10.1504/IJTEL.2011.039402. ISSN: 1753-5255. (SJR 0.226 – COMPUTER SCIENCE APPLICATIONS – Q3; EDUCATION Q3; E-LEARNING – Q3) [323].
2. **Conde-González, M. Á., Gómez, D. A., Pozo, A., & García-Peñalvo, F. J.** (2011). Web services layer for Moodle 2.0: A new area of possibilities in web based learning. *International Journal of Technology Enhanced Learning, 3*(3), 308-321. doi:10.1504/IJTEL.2011.040227. ISSN: 1753-5255. (SJR 0.226 – COMPUTER SCIENCE APPLICATIONS – Q3; EDUCATION Q3; E-LEARNING – Q3) [324].
3. **García-Peñalvo, F. J., Zangrando, V., Seoane-Pardo, A. M., García-Holgado, A., & Ovide, E.** (2011). Learning European history and geography in a multicultural and ICT perspective. *International Journal of Technology Enhanced Learning, 3*(4), 343-354. doi:10.1504/IJTEL.2011.041278. ISSN: 1753-5255. (SJR 0.226 – COMPUTER SCIENCE APPLICATIONS – Q3; EDUCATION Q3; E-LEARNING – Q3) [325].
4. **García-Peñalvo, F. J., García, J., & Therón, R.** (2011). Analysis of the OWL ontologies: A survey. *Scientific Research and Essays, 6*(20), 4318-4329. doi:10.5897/SRE11.1036. ISSN: 1992-2248. (SJR 0.187 – AGRICULTURAL AND BIOLOGICAL SCIENCES (MISCELLANEOUS) – Q3; BIOCHEMISTRY, GENETICS AND MOLECULAR BIOLOGY (MISCELLANEOUS) – Q3; ENGINEERING (MISCELLANEOUS) – Q3; MEDICINE (MISCELLANEOUS) – Q3; PHYSICS AND ASTRONOMY (MISCELLANEOUS) – Q4) [82].

##### Year 2012

1. **García-Valcárcel, A., Hernández Martín, A., & Recamán, A.** (2012). La metodología del aprendizaje colaborativo a través de las TIC: Una aproximación a las opiniones de profesores y alumnos. *Revista Complutense de Educación, 23*(1), 161-188. ISSN: 1130-2496. (SJR 0.189 – EDUCATION – Q3) [326].

2. **Iglesias Rodríguez, A.**, & Beltrán LLavador, F. (2012). Prácticum sin fronteras: Estudio de un caso de acción y reflexión intercultural y pedagógica. *Teoría de la Educación*, 24(1), 105-131. doi:10.14201. ISSN: 1130-3743. (SJR 0.187 – EDUCATION – Q3) [327].

Year 2014

1. **Conde-González, M. Á.**, & **García-Peñalvo, F. J.** (2014). Mobile Personal Learning applied to a software engineering subject. *IEEE Revista Iberoamericana de Tecnologías del Aprendizaje (IEEE RITA)*, 9(3), 114-121. doi:10.1109/RITA.2014.2340051. ISSN: 1932-8540. (SJR 0.155 – ENGINEERING (MISCELLANEOUS) – Q3; EDUCATION – Q4; E-LEARNING – Q4) [328].
2. Dodero, J. M., **García-Peñalvo, F. J.**, González, C., Moreno-Ger, P., Redondo, M. Á., Sarasa, A., & Sierra, J. L. (2014). Development of e-learning solutions: Different approaches, a common mission. *IEEE Revista Iberoamericana de Tecnologías del Aprendizaje (IEEE RITA)*, 9(2), 72-80. doi:10.1109/RITA.2014.2317532. ISSN: 1932-8540. (SJR 0.155 – ENGINEERING (MISCELLANEOUS) – Q3; EDUCATION – Q4; E-LEARNING – Q4) [329].
3. Fidalgo-Blanco, Á., Sein-Echaluce, M. L., & **García-Peñalvo, F. J.** (2014). Knowledge spirals in higher education teaching innovation. *International Journal of Knowledge Management*, 10(4), 16-37. doi:10.4018/ijkm.2014100102. ISSN: 1548-0666. (SJR 0.249 – COMPUTER SCIENCE APPLICATIONS – Q3; MANAGEMENT INFORMATION SYSTEMS – Q3; MANAGEMENT OF TECHNOLOGY AND INNOVATION – Q3) [78].
4. **García-Peñalvo, F. J.** (2014). Managing the knowledge society construction. *International Journal of Knowledge Management*, 10(4), iv-vii. ISSN: 1548-0666. (SJR 0.249 – COMPUTER SCIENCE APPLICATIONS – Q3; MANAGEMENT INFORMATION SYSTEMS – Q3; MANAGEMENT OF TECHNOLOGY AND INNOVATION – Q3) [330].
5. **García-Peñalvo, F. J.**, Sarasa Cabezuelo, A., & Sierra González, J. L. (2014). Innovating in the engineering processes: Engineering as a means of innovation. *IEEE Revista Iberoamericana de Tecnologías del Aprendizaje (IEEE RITA)*, 9(4), 131-132. doi:10.1109/RITA.2014.2363004. ISSN: 1932-8540. (SJR 0.155 – ENGINEERING (MISCELLANEOUS) – Q3; EDUCATION – Q4; E-LEARNING – Q4) [331].
6. **García-Peñalvo, F. J.**, Sarasa-Cabezuelo, A., & Sierra-Rodríguez, J. L. (2014). Educational software: Case studies and development. *IEEE Revista Iberoamericana de Tecnologías del Aprendizaje (IEEE RITA)*, 9(2), 41-42. doi:10.1109/RITA.2014.2317521. ISSN: 1932-8540. (SJR 0.155 – ENGINEERING (MISCELLANEOUS) – Q3; EDUCATION – Q4; E-LEARNING – Q4) [332].
7. **Martínez-Abad, F.**, **Rodríguez-Conde, M. J.**, & **García-Peñalvo, F. J.** (2014). Evaluación del impacto del término “MOOC” vs “eLearning” en la literatura científica y de divulgación. *Profesorado, Revista de Currículum y Formación del Profesorado*, 18(1), 185-201. ISSN: 1138-414X. (SJR 0.191 – EDUCATION – Q3) [333].
8. **Morales-Morgado, E. M.**, Campos Ortuño, R. A., Yang, L. L., & **Ferreras-Fernández, T.** (2014). Adaptation of descriptive metadata for managing educational resources in the GREDOS repository. *International Journal of Knowledge Management*, 10(4), 50-72. doi:10.4018/ijkm.2014100104. ISSN: 1548-0666. (SJR 0.249 – COMPUTER SCIENCE APPLICATIONS – Q3; MANAGEMENT INFORMATION SYSTEMS – Q3; MANAGEMENT OF TECHNOLOGY AND INNOVATION – Q3) [334].
9. **Olmos-Migueláñez, S.**, **Martínez-Abad, F.**, **Torrecilla Sánchez, E. M.**, & **Mena-Marcos, J. J.** (2014). Análisis psicométrico de una escala de percepción sobre la utilidad de

Moodle en la universidad. *RELIEVE - Revista Electrónica de Investigación y Evaluación Educativa*, 20(2), art. 1. doi:10.7203/relieve.20.2.4221. ISSN: 1134-4032. (SJR 0.246 – EDUCATION – Q3) [335].

10. **Torrecilla Sánchez, E. M., Martínez-Abad, F., Olmos-Migueláñez, S., & Rodríguez-Conde, M. J.** (2014). Formación en competencias básicas para el futuro profesorado de educación secundaria: competencias informacionales y de resolución de conflictos. *Profesorado, Revista de Currículum y Formación del Profesorado*, 18(2), 189–208. ISSN: 1138-414X. (SJR 0.191 – EDUCATION – Q3) [336].
11. Vivar Quintana, A. M., **González-Rogado, A. B.**, Gavilán, A. B. R., Martín, I. R., Esteban, M. A. R., Zorrilla, T. A., & Martínez Izard, J. F. (2014). Application of new assessment tools in engineering studies: The rubric. *IEEE Revista Iberoamericana de Tecnologías del Aprendizaje (IEEE RITA)*, 9(4), 139–143. doi:10.1109/RITA.2014.2363008. ISSN: 19328540 (SJR 0.155 – ENGINEERING (MISCELLANEOUS) – Q3; EDUCATION – Q4; E-LEARNING – Q4) [337].

#### Year 2015

1. **García-Peñalvo, F. J., & Ramírez Montoya, M. S.** (2015). Educational innovation with a multicultural perspective. *Journal of Cases on Information Technology*, 17(1), iv–vi. ISSN: 1548-7717. (SJR 0.225 – COMPUTER SCIENCE APPLICATIONS – Q3; INFORMATION SYSTEMS – Q3; INFORMATION SYSTEMS AND MANAGEMENT – Q3; STRATEGY AND MANAGEMENT – Q3) [338].
2. Orozco Rodríguez, C., **Morales-Morgado, E. M.**, & Gonçalves da Silva Cordeiro Moita, F. (2015). Learning objects and geometric representation for teaching "Definition and applications of geometric vector". *Journal of Cases on Information Technology*, 17(1), 13–30. doi:10.4018/JCIT.2015010102. ISSN 1548-7717. (SJR 0.225 – COMPUTER SCIENCE APPLICATIONS – Q3; INFORMATION SYSTEMS – Q3; INFORMATION SYSTEMS AND MANAGEMENT – Q3; STRATEGY AND MANAGEMENT – Q3) [339].
3. **Pinto-Llorente, A. M., Sánchez-Gómez, M. C., & García-Peñalvo, F. J.** (2015). To be or not to be successful? That does not only depend on technology, but also on human factors. *Journal of Cases on Information Technology*, 17(1), 51–71. doi:10.4018/JCIT.2015010104. ISSN 1548-7717. (SJR 0.225 – COMPUTER SCIENCE APPLICATIONS – Q3; INFORMATION SYSTEMS – Q3; INFORMATION SYSTEMS AND MANAGEMENT – Q3; STRATEGY AND MANAGEMENT – Q3) [340].

#### Year 2016

1. **Pinto-Llorente, A. M., Sánchez-Gómez, M. C., & García-Peñalvo, F. J.** (2016). Assessing the effectiveness of interactive and collaborative resources to improve reading and writing in English. *International Journal of Human Capital and Information Technology Professionals (IJHCITP)*, 7(1), 66–85. doi:10.4018/IJHCITP.2016010105. ISSN: 1947-3486 (SJR 0.224 – COMPUTERS SCIENCE (MISCELLANEOUS) – Q3; MANAGEMENT OF TECHNOLOGY AND INNOVATION – Q3) [341].
2. García-Riaza, B., & **Iglesias-Rodríguez, A.** (2016). Students' Perception of the integration of mobile devices as learning tools in pre-primary and primary teacher training degrees at the University of Salamanca. *International Journal of Human Capital and Information Technology Professionals (IJHCITP)*, 7(2), 19–35. doi:10.4018/IJHCITP.2016040102. ISSN: 1947-3486 (SJR 0.224 – COMPUTERS SCIENCE (MISCELLANEOUS) – Q3; MANAGEMENT OF TECHNOLOGY AND INNOVATION – Q3) [342].

3. **Cruz-Benito, J.**, Maderuelo, C., **García-Peñalvo, F. J.**, **Therón, R.**, Pérez-Blanco, J. S., Zazo Gómez, H., & Martín-Suárez, A. (2016). Usalpharma: A software architecture to support learning in virtual worlds. *IEEE Revista Iberoamericana de Tecnologías del Aprendizaje*, *11*(3), 194-204. doi:10.1109/RITA.2016.2589719. ISSN: 1932-8540. (SJR 0.206 – ENGINEERING (MISCELLANEOUS) – Q3; EDUCATION – Q3; E-LEARNING – Q3) [343].
4. **García-Peñalvo, F. J.** (2016). Technological ecosystems. *IEEE Revista Iberoamericana de Tecnologías del Aprendizaje*, *11*(1), 31-32. doi:10.1109/RITA.2016.2518458. ISSN: 1932-8540. (SJR 0.206 – ENGINEERING (MISCELLANEOUS) – Q3; EDUCATION – Q3; E-LEARNING – Q3) [344].
5. **García-Peñalvo, F. J.**, **Cruz-Benito, J.**, **Griffiths, D.**, & Achilleos, A. P. (2016). Virtual placements management process supported by technology: Proposal and firsts results of the Semester of Code. *IEEE Revista Iberoamericana de Tecnologías del Aprendizaje (IEEE RITA)*, *11*(1), 47-54. doi:10.1109/RITA.2016.2518461. ISSN: 1932-8540. (SJR 0.206 – ENGINEERING (MISCELLANEOUS) – Q3; EDUCATION – Q3; E-LEARNING – Q3) [206].
6. Humante-Ramos, P. R., **García-Peñalvo, F. J.**, & **Conde-González, M. Á.** (2016). PLEs in mobile contexts: New ways to personalize learning. *IEEE Revista Iberoamericana de Tecnologías del Aprendizaje*, *11*(4), 220-226. doi:10.1109/RITA.2016.2619121. ISSN: 1932-8540. (SJR 0.206 – ENGINEERING (MISCELLANEOUS) – Q3; EDUCATION – Q3; E-LEARNING – Q3) [345].
7. Joo Nagata, J., **García-Bermejo Giner, J.**, & **Martínez-Abad, F.** (2016). Virtual heritage of the territory: Design and implementation of educational resources in augmented reality and mobile pedestrian navigation. *IEEE Revista Iberoamericana de Tecnologías del Aprendizaje (IEEE RITA)*, *11*(1), 41-46. doi:10.1109/RITA.2016.2518460. ISSN: 1932-8540. (SJR 0.206 – ENGINEERING (MISCELLANEOUS) – Q3; EDUCATION – Q3; E-LEARNING – Q3) [346].
8. **Cabezas, M.**, **Casillas, S.**, & **Hernández, A.** (2016). A case study on computer supported collaborative learning in Spanish schools. *Journal of Information Technology Research*, *9*(2), 89-102. doi:10.4018/JITR.2016040105. ISSN: 1938-7857. (SJR 0.172 – COMPUTER SCIENCE (MISCELLANEOUS) – Q3) [347].
9. **García-Peñalvo, F. J.** (2016). Digital humanities data processing. *Journal of Information Technology Research*, *9*(1), v-viii. ISSN: 1938-7857. (SJR 0.172 – COMPUTER SCIENCE (MISCELLANEOUS) – Q3) [348].
10. **García-Peñalvo, F. J.** (2016). Mobile information technologies. *Journal of Information Technology Research*, *9*(2), v-ix. ISSN: 1938-7857. (SJR 0.172 – COMPUTER SCIENCE (MISCELLANEOUS) – Q3) [349].
11. **García-Peñalvo, F. J.** (2016). What computational thinking is. *Journal of Information Technology Research*, *9*(3), v-viii. ISSN: 1938-7857. (SJR 0.172 – COMPUTER SCIENCE (MISCELLANEOUS) – Q3) [350].
12. **García-Peñalvo, F. J.** (2016). The WYRED project: A technological platform for a generative research and dialogue about youth perspectives and interests in digital society. *Journal of Information Technology Research*, *9*(4), vi-x. ISSN: 1938-7857. (SJR 0.172 – COMPUTER SCIENCE (MISCELLANEOUS) – Q3) [98].
13. **García-Valcárcel Muñoz-Repiso, A.**, & **Mena Marcos, J. J.** (2016). Information technology as a way to support collaborative learning: What in-service teachers think,

- know and do. *Journal of Information Technology Research*, 9(1), 1-17. doi:10.4018/JITR.2016010101. ISSN: 1938-7857. (SJR 0.172 – COMPUTER SCIENCE (MISCELLANEOUS) – Q3) [150].
14. **García-Valcárcel Muñoz-Repiso, A., Basilotta, V., & Mulas, I.** (2016). Fomentando la ciudadanía digital mediante un proyecto de aprendizaje colaborativo entre escuelas rurales y urbanas para aprender inglés. *Profesorado, revista de currículum y formación del profesorado*, 20(3), 549-581. ISSN: 1138-414X. (SJR 0.196 – EDUCATION – Q3) [351].
  15. **Martínez-Abad, F., Torrijos-Fincias, P., & Rodríguez-Conde, M. J.** (2016). The eAssessment of key competences and their relationship with academic performance. *Journal of Information Technology Research (JITR)*, 9(4), 16-27. doi:10.4018/JITR.2016100102. ISSN: 1938-7857. (SJR 0.172 – COMPUTER SCIENCE (MISCELLANEOUS) – Q3) [352].
  16. Sotos, M., **López Esteban, M. C.**, & Sánchez A. B. (2016). La perspectiva biográfica. El proceso de construcción del saber pedagógico. *Teoría de la Educación*. 28(2), 249-265. doi:10.14201/teoredu282249265. ISSN: 1130-3743. (SJR 0.228 – EDUCATION – Q3) [353].

#### Year 2017

1. **Martínez-Abad, F.**, Lizasoain Hernández, L., Castro Morera, M., & Joaristi Olariaga, L. M. (2017). Selección de escuelas de alta y baja eficacia en Baja California (México). *Revista Electrónica de Investigación Educativa*, 19(2), 38-53. ISSN: 1607-4041. (SJR 0.208 – EDUCATION – Q3) [354].
2. Alves, J., Lima, N., Alves, G., & **García-Peñalvo, F. J.** (2017). Adjusting higher education competences to companies professional needs: A case study in an engineering master's degree. *International Journal of Human Capital and Information Technology Professionals (IJHCITP)*, 8(1), 66-78. doi:10.4018/IJHCITP.2017010105. ISSN: 1947-3478. (SJR 0.224 – COMPUTERS SCIENCE (MISCELLANEOUS) – Q3; MANAGEMENT OF TECHNOLOGY AND INNOVATION – Q3) [355].
3. **García-Peñalvo, F. J.** (2017). Multidisciplinary and interdisciplinary approaches in information technology research. *Journal of Information Technology Research*, 10(1), vi-viii. ISSN: 1938-7857. (SJR 0.172 – COMPUTER SCIENCE (MISCELLANEOUS) – Q3) [196].
4. **Cruz-Benito, J.**, Borrás Gené, O., **García-Peñalvo, F. J.**, Fidalgo-Blanco, Á., & **Therón, R.** (2017). Learning communities in social networks and their relationship with the MOOCs. *IEEE Revista Iberoamericana de Tecnologías del Aprendizaje*, 12(1), 24-36. doi:10.1109/RITA.2017.2655218. ISSN 1932-8540. (SJR 0.206 – ENGINEERING (MISCELLANEOUS) – Q3; EDUCATION – Q3; E-LEARNING – Q3) [356].
5. **Nieto Isidro, S.** & Ramos, H. (2017) Use of a symbolic computation program to reinforce the spatial abilities of engineering students. *IEEE Revista Iberoamericana de Tecnologías del Aprendizaje*, 12(1), 37-44. doi:10.1109/RITA.2017.2658978. ISSN: 1932-8540. (SJR 0.206 – ENGINEERING (MISCELLANEOUS) – Q3; EDUCATION – Q3; E-ELEARNING – Q3) [357].
6. **García-Peñalvo, F. J.** (2017). Publishing in open access. *Journal of Information Technology Research*, 10(3), vi-viii. ISSN: 1938-7857. (SJR 0.172 – COMPUTER SCIENCE (MISCELLANEOUS) – Q3) [358].

7. Martín-Cilleros, M. V., Sánchez-Prada, A., Delgado-Álvarez, M. C., & **Sánchez-Gómez, M. C.** (2017). Valoración de un diseño educativo tecnológico para prevenir el abandono escolar. *RISTI - Revista Ibérica de Sistemas e Tecnologías de Informação*, (23), 61-77. doi:10.17013/risti.23.61-77. ISSN: 1646-9895. (SJR 0.220 - COMPUTER SCIENCE (MISCELLANEOUS) - Q3) [359].
8. Muñoz-Sánchez, J. L., **Sánchez-Gómez, M. C.**, Martín-Cilleros, M. V., Blanco-Dorado, C., & Franco-Martín, M. Á. (2017) Suicide prevention according to different health professionals: quantification analysis in a qualitative study. *Clinical Practice*, 14(5), 278-289. ISSN: 2044-9038. (SJR 0.137 - MEDICINE (MISCELLANEOUS) - Q3; PHARMACOLOGY (MEDICAL) - Q4) [104].
9. Orozco, C., & **Morales-Morgado, E. M.** (2017). Geometric representations built with GeoGebra for improving the visualization and reasoning cognitive process. *Journal of Information Technology Research*, 10(1), 39-58. doi:10.4018/JITR.2017010104. ISSN: 1938-7857. (SJR 0.172 - COMPUTER SCIENCE (MISCELLANEOUS) - Q3) [360].

#### Year 2018

1. González-Pérez, L. I., **Ramírez-Montoya, M. S.**, & **García-Peñalvo, F. J.** (2018). User experience in institutional repositories: A systematic literature review. *International Journal of Human Capital and Information Technology Professionals (IJHCITP)*, 9(1), 70-86. doi:10.4018/IJHCITP.2018010105. ISSN: 1947-3478. (SJR 0.224 - COMPUTERS SCIENCE (MISCELLANEOUS) - Q3; MANAGEMENT OF TECHNOLOGY AND INNOVATION - Q3) [160].
2. **García-Peñalvo, F. J.** (2018). Technological ecosystems for enhancing the interoperability and data flows. *Journal of Information Technology Research*, 11(1), vi-x. ISSN: 1938-7857. (SJR 0.172 - COMPUTER SCIENCE (MISCELLANEOUS) - Q3) [361].
3. **García-Peñalvo, F. J.** (2018). Computational thinking. *IEEE Revista Iberoamericana de Tecnologías del Aprendizaje (IEEE RITA)*, 13(1) doi:10.1109/RITA.2018.2809939. ISSN 1932-8540. (SJR 0.206 - ENGINEERING (MISCELLANEOUS) - Q3; EDUCATION - Q3; E-LEARNING - Q3) [362].
4. Rojas, A., & **García-Peñalvo, F. J.** (2018). Learning scenarios for the subject Methodology of Programming from evaluating the Computational Thinking of new students. *IEEE Revista Iberoamericana de Tecnologías del Aprendizaje (IEEE RITA)*, 13(1) doi:10.1109/RITA.2018.2809941. ISSN 1932-8540. (SJR 0.206 - ENGINEERING (MISCELLANEOUS) - Q3; EDUCATION - Q3; E-LEARNING - Q3) [363].

#### Scopus Q4

##### Year 2012

1. Barbosa León, H., **García-Peñalvo, F. J.**, **Rodríguez-Conde, M. J.**, **Morales-Morgado, E. M.**, & Ordóñez de Pablos, P. (2012). Adaptive assessments using open specifications. *International Journal of Distance Education Technologies*, 10(4), 56-71. doi:10.4018/jdet.2012100105. ISSN: 1539-3100. (SJR 0.168 -COMPUTER NETWORKS AND COMMUNICATIONS - Q4; COMPUTER SCIENCE APPLICATIONS - Q4; EDUCATION - Q4 - E-LEARNING - Q4) [34].
2. Muñoz, C., **García-Peñalvo, F. J.**, **Morales-Morgado, E. M.**, **Conde-González, M. Á.**, & **Seoane-Pardo, A. M.** (2012). Improving learning object quality: Moodle HEODAR implementation. *International Journal of Distance Education Technologies*, 10(4), 1-16. doi:10.4018/jdet.2012100101. ISSN: 1539-3100. (SJR 0.168 -COMPUTER NETWORKS

AND COMMUNICATIONS – Q4; COMPUTER SCIENCE APPLICATIONS – Q4; EDUCATION – Q4 – E-LEARNING – Q4) [135].

Year 2014

1. **García-Peñalvo, F. J.** (2014). Educational Innovation Successful Cases – Part I. *Journal of Cases on Information Technology*, 16(3), 1-3. doi:10.4018/jcit.2014070101. (SJR 0.115 – COMPUTER SCIENCE APPLICATIONS – Q4; INFORMATION SYSTEMS – Q4; INFORMATION SYSTEMS AND MANAGEMENT – Q4; STRATEGY AND MANAGEMENT – Q4) [364].
2. **García-Peñalvo, F. J.** (2014). Educational Innovation Successful Cases – Part 2. *Journal of Cases on Information Technology*, 16(4), iv-vii. (SJR 0.115 – COMPUTER SCIENCE APPLICATIONS – Q4; INFORMATION SYSTEMS – Q4; INFORMATION SYSTEMS AND MANAGEMENT – Q4; STRATEGY AND MANAGEMENT – Q4) [365].
3. **García-Peñalvo, F. J., Conde-González, M. Á.,** Alier, M., & **Colomo-Palacios, R.** (2014). A case study for measuring Informal Learning in PLEs. *International Journal of Emerging Technologies in Learning (IJET)*, 9(7), 47-55. doi:10.3991/ijet.v9i7.3734. ISSN: 1863-0383. (SJR 0.128 – EDUCATION – Q4; ENGINEERING (MISCELLANEOUS) – Q4; E-LEARNING – Q4) [366].
4. **Iglesias Rodríguez, A., Sánchez-Gómez, M. C.,** & Pedrero Muñoz, C. (2014). Case study on collaborative work experiences with web 2.0 in spanish Primary Schools with the Highest Institutional Accreditation Level. *Journal of Cases on Information Technology (JCIT)*, 16(3), 33-50. doi:10.4018/JCIT.2014070104. ISSN: 1548-7717. (SJR 0.115 – COMPUTER SCIENCE APPLICATIONS – Q4; INFORMATION SYSTEMS – Q4; INFORMATION SYSTEMS AND MANAGEMENT – Q4; STRATEGY AND MANAGEMENT – Q4) [367].
5. **Nieto Isidro, S.,** & Ramos, H. (2014). Improving mathematical competencies of students accessing to Higher Education from Vocational Training Modules. *Journal of Cases on Information Technologies*, 16(3), 56-69. doi:10.4018/jcit.2014070105. ISSN: 1548-7717. (SJR 0.115 – COMPUTER SCIENCE APPLICATIONS – Q4; INFORMATION SYSTEMS – Q4; INFORMATION SYSTEMS AND MANAGEMENT – Q4; STRATEGY AND MANAGEMENT – Q4) [368].
6. Jiménez, M. F., **Rodríguez-Conde, M. J., Olmos-Miguelañez, S.,** Varela, G., Lozano, F. S., García, F. J., & **Martínez-Abad, F.** (2014). Impact of the objective evaluation of clinical and surgical basic skills (CSBS) on medicine students (Spain): An experimental design. *Journal of Information Technology Research*, 7(2), 52-62. doi:10.4018/jitr.2014040105. ISSN: 1938-7857. (SJR 0.119 – COMPUTER SCIENCE (MISCELLANEOUS) – Q4) [369].
7. Martín-Suárez, A., **Cruz-Benito, J.,** Pérez-Blanco, J. S., Millán, M. D. C. G., Castañeda, A. Z., Gómez, H. Z., & Martín, C. M. (2014). Scientific knowledge transfer training through a virtual world. *Journal of Information Technology Research (JITR)*, 7(2), 24-35. doi:10.4018/jitr.2014040103. ISSN: 1938-7857. (SJR 0.119 – COMPUTER SCIENCE (MISCELLANEOUS) – Q4) [370].
8. Pérez-Blanco, J. S., Sánchez Martín, A. J., **Cruz-Benito, J.,** Morchón García, R., Valles Martín, E., González López, F., Martín Suárez, A., González Miguel, J., & Muro Álvarez, A. (2014). Construcción de una plataforma online para la difusión de resultados científicos (pFARMA) de la Facultad de Farmacia de Salamanca. *Ars Pharmaceutica*, 55(suppl2), 45-46. ISSN: 0004-2927. (SJR 0.116 – HISTORY AND PHILOSOPHY OF SCIENCE – Q4; PHARMACEUTICAL SCIENCE – Q4) [371].



9. Pérez-Blanco, J. S., **Cruz-Benito, J.**, Zazo Gómez, H., González López, F., Morchón García, R., Fernández Ábalos, J. M., Martín Suárez, A., Valles Martín, E., Sánchez Martín, A. J., García Sánchez, F., Rivas González, R., Menéndez Gutiérrez, E., Morales Martín, A. I., & Muro Álvarez, A. (2014). Educafarma 2.0 Programa de formación continuada de profesores y alumnos de la Facultad de Farmacia de Salamanca con recursos propios. *Ars Pharmaceutica*, 55(suppl2), 39-40. ISSN: 0004-2927. (SJR 0.116 - HISTORY AND PHILOSOPHY OF SCIENCE - Q4; PHARMACEUTICAL SCIENCE - Q4) [372].
10. **Sánchez-Gómez, M. C.**, Palacios Vicario, B., López García, C., & Sánchez García, A. (2014). Percepciones de los empresarios de Pymes rurales sobre la integración de las TIC. *RISTI - Revista Iberica de Sistemas e Tecnologias de Informacao*, E2, 71-84. ISSN: 1646-9895. (SJR 0.119 - COMPUTER SCIENCE (MISCELLANEOUS) - Q4) [373].

#### Year 2015

1. **García-Peñalvo, F. J.** (2015). Information technology research. *Journal of Information Technology Research*, 8(1), iv-v. ISSN: 1938-7857. (SJR 0.124 - COMPUTER SCIENCE (MISCELLANEOUS) - Q4) [374].
2. **García-Peñalvo, F. J.** (2015). Issue on Visual Analytics. *Journal of Information Technology Research*, 8(2), iv-vi. ISSN: 1938-7857. (SJR 0.124 - COMPUTER SCIENCE (MISCELLANEOUS) - Q4) [17].
3. **García-Peñalvo, F. J.** (2015). Entrepreneurial and problem solving skills in software engineers. *Journal of Information Technology Research*, 8(3), iv-vi. ISSN: 1938-7857. (SJR 0.124 - COMPUTER SCIENCE (MISCELLANEOUS) - Q4) [207].
4. **García-Peñalvo, F. J.** (2015). Massive Open Online Courses as data sources for making decisions in learning processes. *Journal of Information Technology Research*, 8(4), iv-vii. ISSN: 1938-7857. (SJR 0.124 - COMPUTER SCIENCE (MISCELLANEOUS) - Q4) [130].
5. González Sánchez, M., **Olmos-Migueláñez, S.**, & Serrate González, S. (2015). Pensamiento y acción socioeducativa en contextos de enseñanza secundaria. Un estudio descriptivo-correlacional. *Teoría de la Educación*, 27(2), 91-114. doi:10.14201/teoredu201527291114. ISSN: 1130-3743. (SJR 0.168 - EDUCATION - Q4) [375].

#### Year 2016

1. **García-Peñalvo, F. J.**, & **Ramírez Montoya, M. S.** (2016). Technology cases for improving the university Third Mission. *Journal of Cases on Information Technology*, 18(4), v-viii. ISSN: 1548-7717. (SJR 0.116 - COMPUTER SCIENCE APPLICATIONS - Q4; INFORMATION SYSTEMS - Q4; INFORMATION SYSTEMS AND MANAGEMENT - Q4; STRATEGY AND MANAGEMENT - Q4) [376].
2. **García-Valcárcel Muñoz-Repiso, A.**, & **Martín del Pozo, M.** (2016). ¿Se sienten preparados los graduados en maestro de primaria para afrontar la profesión docente? *Bordón. Revista de Pedagogía*, 68(2), 69-84. doi:10.13042/Bordon.2016.68205. ISSN: 0210-5934. (SJR 0.119 - DEVELOPMENTAL AND EDUCATIONAL PSYCHOLOGY - Q4; EDUCATION - Q4) [377].

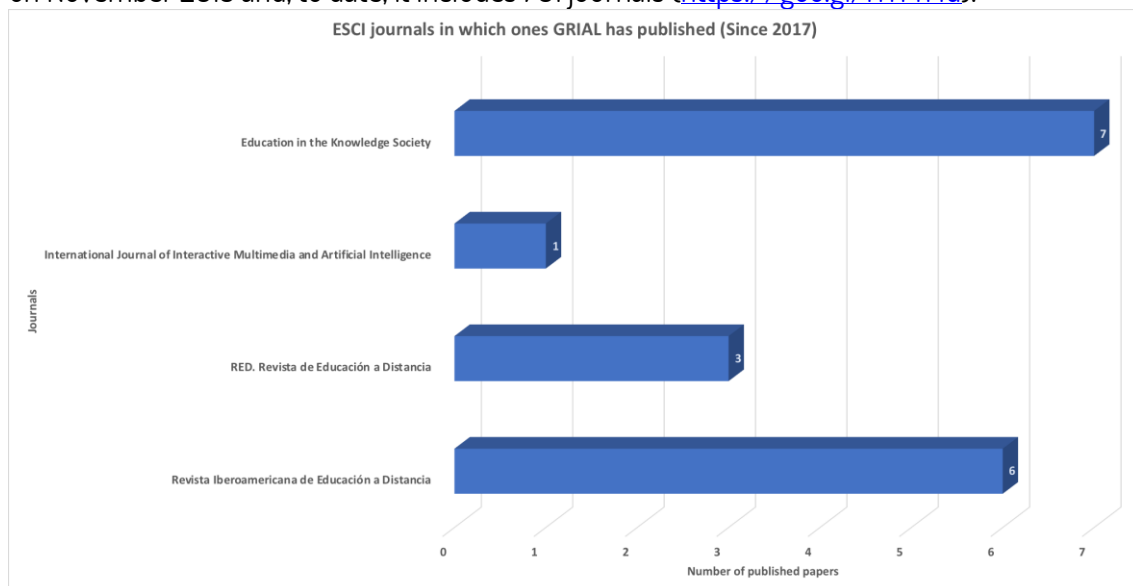
#### Year 2017

1. Bielba Calvo, M., **Martínez-Abad, F.**, & **Rodríguez-Conde, M. J.** (2017). Validación psicométrica de un instrumento de evaluación de competencias informacionales en la educación secundaria. *Bordón. Revista de pedagogía*, 69(1), 27-43. doi:10.13042/Bordon.2016.48593. ISSN: 0210-5934. (SJR 0.119 - DEVELOPMENTAL AND EDUCATIONAL PSYCHOLOGY - Q4; EDUCATION - Q4) [378].

2. **Martínez-Abad, F., & Rodríguez-Conde, M. J.** (2017). Comportamiento de las correlaciones producto-momento y tetracórica-policórica en escalas ordinales: Un estudio de simulación. *Revista Electrónica de Investigación y Evaluación Educativa*, 23(2). doi:10.7203/relieve.23.2.9476. ISSN: 1134-4032. (SJR 0.142 – EDUCATION – Q4) [379].
3. Tena-Espinoza-de-los-Monteros, M. A., **García-Holgado, A., Merlo-Vega, J. A., & García-Peñalvo, F. J.** (2017). Diseño de un plan de visibilidad científica e identidad digital para los investigadores de la Universidad de Guadalajara (México). *Ibersid: Revista de sistemas de información y documentación*, 11(1), 83-92. ISSN 1888-0967. (SJR 0.123 – COMMUNICATION – Q4; COMPUTER NETWORKS AND COMMUNICATIONS – Q4; INFORMATION SYSTEMS – Q4; LIBRARY AND INFORMATION SCIENCES – Q4) [380].

### Included publications on the ESCI of WoS

The ESCI (*Emerging Sources Citation Index*) index is included in WoS. This index was released on November 2015 and, to date, it includes 791 journals (<https://goo.gl/HTFn4d>).



**Figure 23.** ESCI journals in which the GRIAL Group has published (since 2017)

The GRIAL Group's publications included in the WoS ESCI between 2017 and the current date are going to be organized by year (in this index there are not impact indices nor quartile organization). In this reference period, the GRIAL Group has published 17 papers in 4 journals (see **Figure 23**) included in the WoS ESCI.

#### Year 2017

1. **Ramírez-Montoya, M. S., & García-Peñalvo, F. J.** (2017). La integración efectiva del dispositivo móvil en la educación y en el aprendizaje. *Revista Iberoamericana de Educación a Distancia*, 20(2), 29-47. doi:10.5944/ried.20.2.18884. ISSN:1138-2783. (ESCI) [166].
2. Humanante-Ramos, P., **García-Peñalvo, F. J., & Conde-González, M. Á.** (2017). Entornos personales de aprendizaje móvil: Una revisión sistemática de la literatura. *RIED. Revista Iberoamericana de Educación a Distancia*, 20(2), 73-92. doi:10.5944/ried.20.2.17692. ISSN:1138-2783. (ESCI) [192].

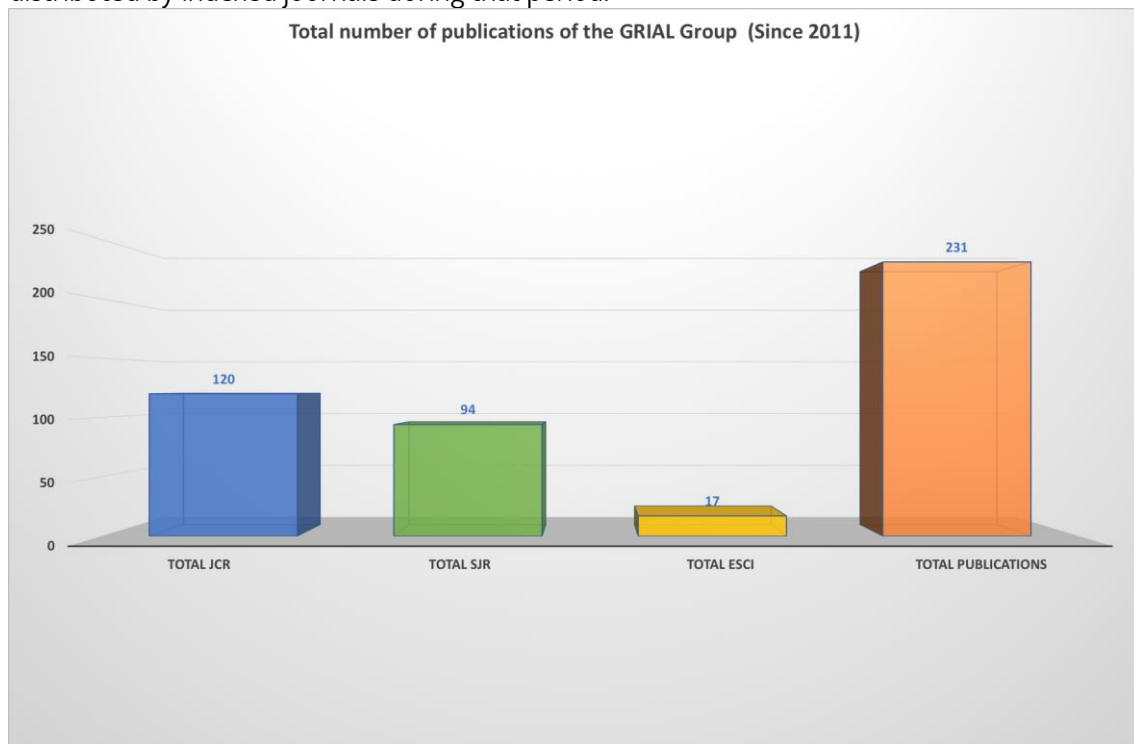
3. Joo-Nagata, J., **Martínez-Abad, F.**, & **García-Bermejo Giner, J.** (2017). Realidad aumentada y navegación peatonal móvil con contenidos patrimoniales: Percepción del aprendizaje. *RIED. Revista Iberoamericana de Educación a Distancia*, 20(2), 93-118. doi:10.5944/ried.20.2.17602. ISSN:1138-2783. (ESCI) [381].
4. Agila-Palacios, M. V., **Ramírez-Montoya, M. S.**, **García-Valcárcel Muñoz-Repiso, A.**, & Samaniego-Franco, J. (2017). Uso de la tableta digital en entornos universitarios de aprendizaje a distancia. *RIED. Revista Iberoamericana de Educación a Distancia*, 20(2), 255-271. doi:10.5944/ried.20.2.17712. ISSN:1138-2783. (ESCI) [382].
5. **Sánchez-Prieto, J. C.**, **Olmos-Migueláñez, S.**, & **García-Peñalvo, F. J.** (2017). Motivación e innovación: Aceptación de tecnologías móviles en los maestros en formación. *Revista Iberoamericana de Educación a Distancia*, 20(2), 273-292. doi:10.5944/ried.20.2.17700. ISSN:1138-2783. (ESCI) [383].
6. **García-Peñalvo, F. J.** (2017). Mitos y realidades del acceso abierto. *Education in the Knowledge Society*, 18(1), 7-20. doi:10.14201/eks2017181720. ISSN 2444-8729. (ESCI) [384].
7. Lima, N. M., Viegas, M. C., & **García-Peñalvo, F. J.** (2017). Learning from complementary ways of developing experimental competences. *Education in the Knowledge Society*, 18(1), 63-74. doi:10.14201/eks20171816374. ISSN 2444-8729. (ESCI) [385].
8. Llorens Largo, F., **García-Peñalvo, F. J.**, Molero Prieto, X., & Vendrell Vidal, E. (2017). La enseñanza de la informática, la programación y el pensamiento computacional en los estudios preuniversitarios. *Education in the Knowledge Society*, 18(2), 7-17. doi:10.14201/eks2017182717. ISSN 2444-8729. (ESCI) [386].
9. **García-Peñalvo, F. J.** (2017). WYRED Project. *Education in the Knowledge Society*, 18(3), 7-14. doi:10.14201/eks2017183714. ISSN 2444-8729. (ESCI) [220].
10. **García-Peñalvo, F. J.** (2017). The future of institutional repositories. *Education in the Knowledge Society*, 18(4), 7-19. doi:10.14201/eks2017184719. ISSN 2444-8729. (ESCI) [387].
11. **García-Peñalvo, F. J.**, & **Ramírez-Montoya, M. S.** (2017). Aprendizaje, Innovación y Competitividad: La Sociedad del Aprendizaje. *RED. Revista de Educación a Distancia*, 52, Artículo 1. doi:10.6018/red/52/1. ISSN 1578-7680. (ESCI) [388].
12. **Pinto-Llorente, A. M.**, **Sánchez-Gómez, M. C.**, **García-Peñalvo, F. J.**, & **Cabezas, M.** (2017). La modalidad semipresencial y la pronunciación de la lengua inglesa: Resultados de un modelo apoyado con TIC. *RED. Revista de Educación a Distancia*, 52, Artículo 4. doi:10.6018/red/52/4. ISSN 1578-7680. (ESCI) [389].
13. **Sánchez-Prieto, J. C.**, **Olmos-Migueláñez, S.**, & **García-Peñalvo, F. J.** (2017). ¿Utilizarán los futuros docentes las tecnologías móviles? Validación de una propuesta de modelo TAM extendido. *RED. Revista de Educación a Distancia*, 52, Artículo 5. doi:10.6018/red/52/5. ISSN 1578-7680. (ESCI) [72].

#### Year 2018

1. **García-Peñalvo, F. J.**, **Cruz-Benito, J.**, Martín-González, M., **Vázquez-Ingelmo, A.**, **Sánchez-Prieto, J. C.**, & **Therón, R.** (2018). Proposing a machine learning approach to analyze and predict employment and its factors. *International Journal of Interactive Multimedia and Artificial Intelligence*, In Press. doi:10.9781/ijimai.2018.02.002. ISSN: 1989-1660. (ESCI) [390].
2. **García-Valcárcel Muñoz-Repiso, A.**, **González Rodero, L. M.**, **Basilotta Gómez-Pablos, V.**, & **Martín del Pozo, M.** (2018). REUNI+D: una red universitaria para la construcción

- colaborativa de conocimiento. *RIED. Revista Iberoamericana de Educación a Distancia*, 21(2) doi:10.5944/ried.21.2.20605. ISSN:1138-2783. (ESCI) [183].
3. **García-Peñalvo, F. J.** (2018). The transversal competences of graduates of university master's degrees. *Education in the Knowledge Society*, 19(1), 7-19. doi:10.14201/eks2018191719. ISSN 2444-8729. (ESCI) [391].
  4. Michavila, F., Martínez, J. M., Martín-González, M., **García-Peñalvo, F. J.**, & **Cruz Benito, J.** (2018). Empleabilidad de los titulados universitarios en España. Proyecto OEEU. *Education in the Knowledge Society*, 19(1), 21-39. doi:10.14201/eks20181912139. ISSN 2444-8729. (ESCI) [392].

Once the scientific production on indexed journals in the 2011-2017 period explained, the **Figure 24** presents how the total achieved publications by the GRIAL Group, 231, are distributed by indexed journals during that period.



**Figure 24.** Total number of publications of the GRIAL Group (2011-2017)

In the **Figure 25** the summary of the GRIAL Group's scientific production is presented by researcher and publication category. Finally, the **Figure 26** presents the total publications achieved by the GRIAL Group members, organized by database.

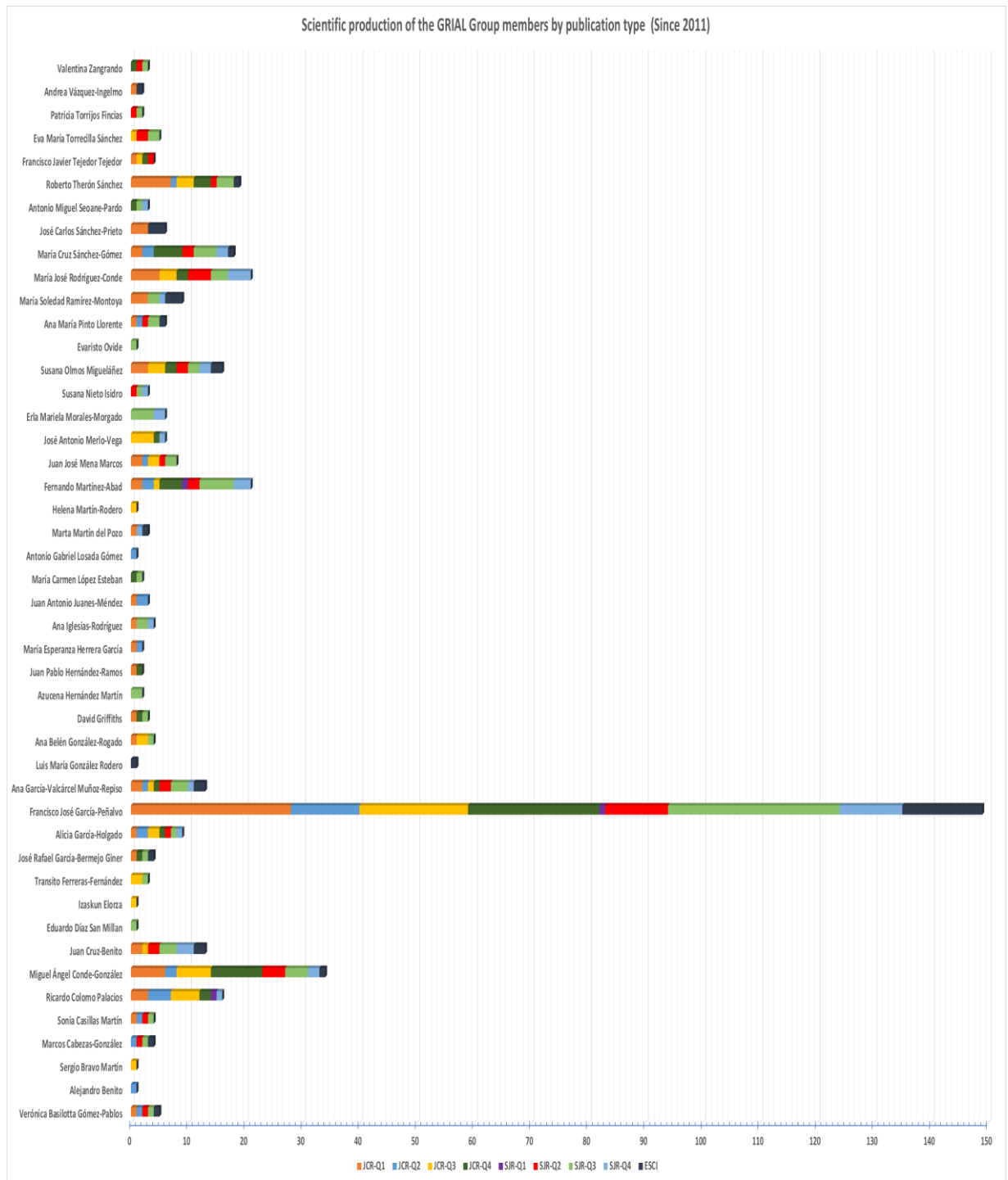


Figure 25. Scientific production of the GRIAL Group members by publication type (2011-2017)

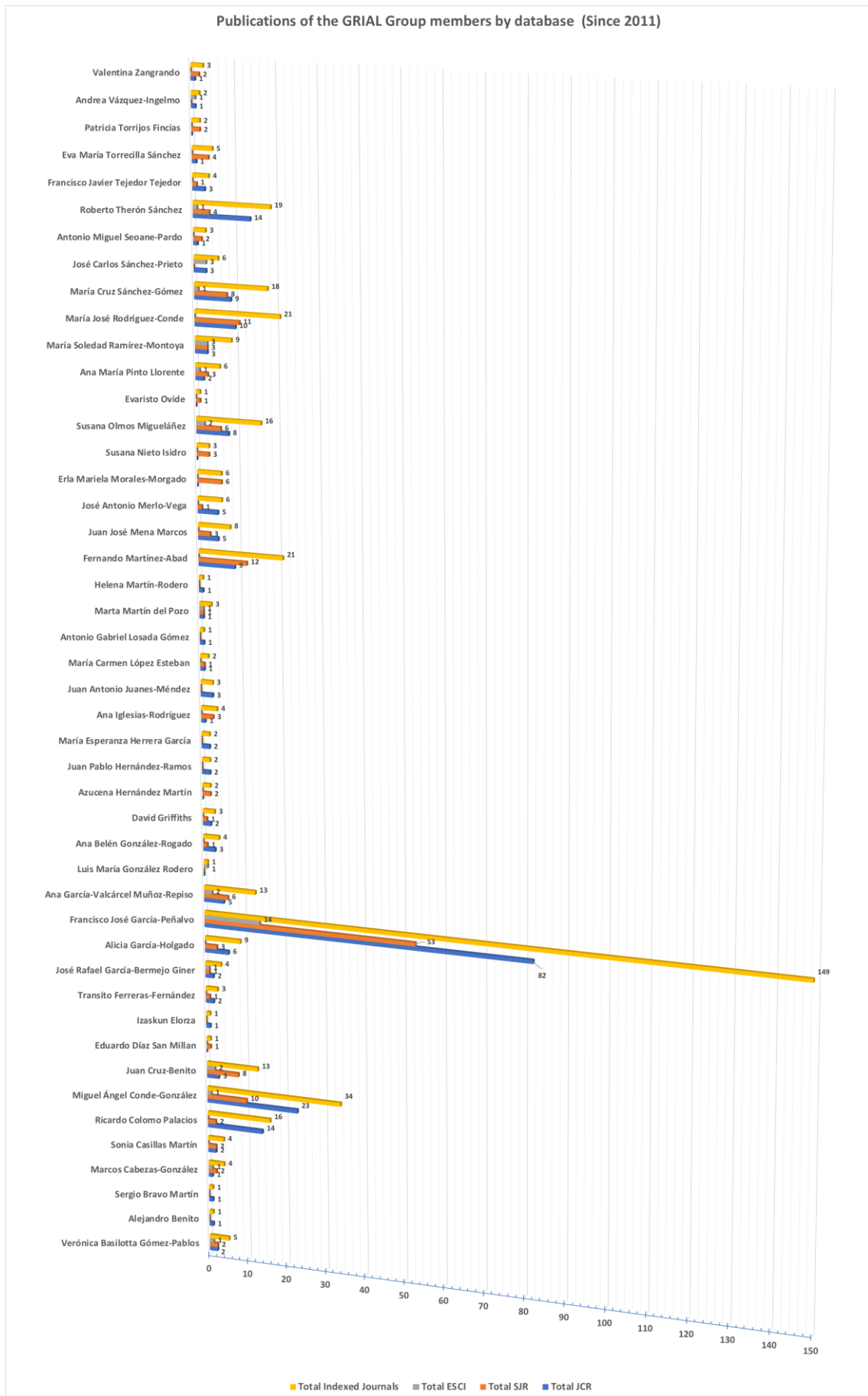


Figure 26. Publications of the GRIAL Group members by database (2011–2017)

## 7. Scientific conferences organized by the GRIAL Group

The GRIAL Group has high activity regarding scientific conferences organization. Since 2011 the following are highlighted:

1. XIV Simposio Internacional en Informática Educativa 2012 (SIIE 2012). Andorra la Vella, Andorra, October 29<sup>th</sup>-31<sup>th</sup>, 2012 [393, 394].
2. II Congreso Internacional sobre Aprendizaje, Innovación y Competitividad (CINAIC 2013). Madrid, Spain, November 6<sup>th</sup>-8<sup>th</sup>, 2013 [171].
3. III Congreso Internacional sobre Aprendizaje, Innovación y Competitividad (CINAIC 2015). Madrid, Spain, October 14<sup>th</sup>-16<sup>th</sup>, 2015 [172].
4. XVIII Simposio Internacional de Informática Educativa (SIIE 2016). Salamanca, Spain, September 13<sup>th</sup>-16<sup>th</sup>, 2016 [395, 396].
5. XVII Conferencia Internacional sobre la Interacción Persona-Ordenador (Interacción 2016). Salamanca, Spain, September 13<sup>th</sup>-16<sup>th</sup>, 2016 [397, 398].
6. XVIII Congreso Internacional de Investigación Educativa. Interdisciplinarietà y transferencia (AIDIPE 2017). Salamanca, Spain, June 28<sup>th</sup>-30<sup>th</sup>, 2017 [399, 400].
7. 18<sup>th</sup> Biennial ISATT Conference: "Teaching search and research" (ISATT 2017). Salamanca, Spain, July 3<sup>rd</sup>-7<sup>th</sup>, 2017 [401].
8. 6<sup>o</sup> Congreso Ibero-Americano en Investigación Cualitativa (CIAIQ 2017) and 2<sup>nd</sup> International Symposium on Qualitative Research (ISQR 2017). Salamanca, Spain, July 12<sup>th</sup>-14<sup>th</sup>, 2017 [402-404].
9. IV Congreso Internacional sobre Aprendizaje, Innovación y Competitividad (CINAIC 2017). Zaragoza, Spain, October 4<sup>th</sup>-6<sup>th</sup>, 2017 [173].

A special mention is required for the *Technological Ecosystems for Enhancing Multiculturality* (TEEM – <https://teemconference.eu>) International Conference, because it is an event formed within the GRIAL Group and it completely reflects the multidisciplinary and interdisciplinary character of the group. The two first edition were carried out in Salamanca (Spain) in 2013 [405, 406] and 2014 [407]. As of 2015, the conference begins to be organized in Salamanca in even years and out of Salamanca in odd years. That is why, the third edition in 2015 was celebrated in Porto (Portugal) [408], the fourth edition in 2016 in Salamanca (Spain) [409] and the fifth edition in 2017 in Cadiz (Spain) [410]. The sixth edition will be celebrated again in Salamanca in October 2018, concurring with the VIII centenary of the University of Salamanca.

## 8. Corporate image of the GRIAL Group

The GRIAL Group has developed a corporate image available at <https://grial.usal.es/grial-branding>.

The main logotype of the group is showed in the **Figure 27**, existing an "one ink" version, a rectangular version and a prestige version, as it can be seen in the identity manual of the GRIAL Group [411], which can be downloaded directly from [412]. Moreover, the official group's typography is based on the Dosis font.



Figure 27. Main version of the GRIAL logotype. Source: [412]

In the Figure 28 it is presented a summary of the GRIAL identity proper use.

## CORRECTO USO DE LA IDENTIDAD GRIAL

Todas estas versiones tienen su alternativa en BLANCO para cuando su uso sea necesario.

PASOS para seleccionar la versión adecuada:

1. Determina la versión que necesitas (PRINCIPAL, UNA TINTA, RECTANGULAR, PRESTIGIO)
2. En el caso de que sea la versión RECTANGULAR, selecciona el IDIOMA; sino, selecciona el color de la identidad: BLANCO o NEGRO
3. Determina el tamaño que necesitas (BOLD, REGULAR, LIGHT)
4. Selecciona el formato que necesites

### VERSIONES

<p style="font-size: small; text-align: center;">Versión PRINCIPAL</p> <p style="font-size: x-small; text-align: center;">Se usará siempre, excepto que no que pueda por temas técnicos.</p>	<p style="font-size: small; text-align: center;">Versión UNA TINTA</p> <p style="font-size: x-small; text-align: center;">Para blanco y negro</p>	<p style="font-size: small; text-align: center;">Versiones RECTANGULARES</p> <div style="display: flex; justify-content: space-around;"> <div style="text-align: center;"> <p style="font-size: x-small;">Research Group Interaction and Elearning University of Salamanca</p> </div> <div style="text-align: center;"> <p style="font-size: x-small;">Research Group Interaction and Elearning University of Salamanca</p> </div> </div> <p style="font-size: x-small; text-align: center;">Cuando la identidad tenga que ir acompañada de texto</p>	<p style="font-size: small; text-align: center;">Versión de PRESTIGIO</p> <p style="font-size: x-small; text-align: center;">Esta versión es exclusiva para grandes formatos o para motivos especiales.</p>
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### TAMAÑOS

<p style="font-size: x-small; margin: 0;"><b>BOLD</b></p> <p style="font-size: x-small; margin: 0;">0,5cm</p>	<p style="font-size: x-small; margin: 0;">REGULAR</p> <p style="font-size: x-small; margin: 0;">2cm</p>	<p style="font-size: x-small; margin: 0;">REGULAR</p> <p style="font-size: x-small; margin: 0;">6cm</p>	<p style="font-size: x-small; margin: 0;">LIGHT</p> <p style="font-size: x-small; margin: 0;">3cm</p>	<p style="font-size: x-small; margin: 0;">LIGHT</p> <p style="font-size: x-small; margin: 0;">12,5cm</p>
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Figure 28. Recommendations for the GRIAL identity proper use. Source: <https://goo.gl/TRSy4A>

## 9. References

- [1] F. J. García-Peñalvo, M. J. Rodríguez-Conde, A. M. Seoane-Pardo, M. Á. Conde-González, V. Zangrando y A. García-Holgado, "GRIAL (GRupo de investigación en InterAcción y eLearning), USAL," *IE Comunicaciones. Revista Iberoamericana de Informática Educativa*, no. 15, pp. 85-94, 2012.
- [2] F. J. García-Peñalvo, "Espirales de conocimiento, espirales de reconocimiento, espirales de amistad," *Education in the Knowledge Society (EKS)*, vol. 16, no. 1, pp. 5-12, 2015. doi: 10.14201/eks2015161512.
- [3] F. J. García-Peñalvo, "Estado actual de los sistemas E-Learning," *Education in the Knowledge Society*, vol. 6, no. 2, 2005.
- [4] F. J. García-Peñalvo Ed. "Advances in E-Learning: Experiences and Methodologies." Hershey, PA, USA: Information Science Reference (formerly Idea Group Reference), 2008.
- [5] A. M. Seoane Pardo y F. J. García-Peñalvo, "Pedagogical Patterns and Online Teaching," in *Online Tutor 2.0: Methodologies and Case Studies for Successful Learning*, F. J. García-Peñalvo y A. M. Seoane Pardo, Eds. no. Advances in Educational Technologies and Instructional Design (AETID) Book Series, pp. 298-316, Hershey, PA: IGI Global, 2014. doi: 10.4018/978-1-4666-5832-5.ch015.



- [6] A. M. Seoane-Pardo, "Formalización de un modelo de formación online basado en el factor humano y la presencia docente mediante un lenguaje de patrón," PhD, Programa de Doctorado en Formación en la Sociedad del Conocimiento, Universidad de Salamanca, Salamanca, Spain, 2014. Available from: <https://goo.gl/sNrkHu>.
- [7] F. J. García-Peñalvo y A. M. Seoane-Pardo, "Una revisión actualizada del concepto de eLearning. Décimo Aniversario," *Education in the Knowledge Society*, vol. 16, no. 1, pp. 119-144, 2015. doi: 10.14201/eks2015161119144.
- [8] B. Gros y F. J. García-Peñalvo, "Future trends in the design strategies and technological affordances of e-learning," in *Learning, Design, and Technology. An International Compendium of Theory, Research, Practice, and Policy*, M. Spector, B. B. Lockee y M. D. Childress, Eds. pp. 1-23, Switzerland: Springer International Publishing, 2016. doi: 10.1007/978-3-319-17727-4\_67-1.
- [9] F. J. García-Peñalvo, "Antonio López y la búsqueda del GRIAL," in *Liber Amicorum. En memoria de Antonio López Eire* pp. 71-74, Badajoz, España: Luso-Española de Ediciones, 2009.
- [10] Junta de Castilla y León. (2006). *Orden EDU/1623/2006, de 10 de octubre, por la que se regulan los requisitos y el procedimiento para obtener la condición de Grupo de Investigación de Excelencia de Castilla y León, y se crea el correspondiente registro*. Consejería de Educación. BOCYL, no. 204, de 23 de octubre de 2006, sección II. Disposiciones generales, pp. 19821-19824. Valladolid, España: Boletín Oficial de Castilla y León. Available from: <https://goo.gl/hzzBFu>.
- [11] Junta de Castilla y León. (2008). *ORDEN EDU/1441/2008, de 30 de julio, por la que se resuelve la convocatoria pública de ayudas destinadas a financiar programas de actividad investigadora y gastos de equipamiento científico-tecnológico, a realizar por los grupos de investigación de excelencia de Castilla y León*. Consejería de Educación. BOCYL, no. 152, de 7 de agosto de 2008, sección IV. Otras disposiciones y acuerdos, pp. 16481-16487. Valladolid, España: Boletín Oficial de Castilla y León. Available from: <https://goo.gl/zUaEG9>.
- [12] Junta de Castilla y León. (2014). *Orden EDU/1006/2014, de 21 de noviembre, por la que se regula el reconocimiento de Unidad de Investigación Consolidada de Castilla y León*. Consejería de Educación. BOCYL, no. 231, de 1 de diciembre de 2014, sección I. Comunidad de Castilla y León, subsección A. Disposiciones generales, pp. 80926-80933. Valladolid, España: Boletín Oficial de Castilla y León. Available from: <https://goo.gl/VrIsNJ>.
- [13] Universidad de Salamanca. (2017). *Reglamento de Institutos Universitarios de investigación, Centros propios, Grupos de investigación y Unidades de Excelencia*. Vicerrectorado de Investigación y Transferencia, Consejo de Gobierno. Salamanca, España: Universidad de Salamanca. Available from: <https://goo.gl/Cdh3JZ>.
- [14] F. J. García-Peñalvo. (2016). *Presentation of the GRIAL research group and its main research lines and projects on March 2016*. Available from: <https://goo.gl/dSZYv7>.
- [15] J. García, F. J. García-Peñalvo, R. Therón y P. Ordóñez de Pablos, "Usability Evaluation of a Visual Modelling Tool for OWL Ontologies," *Journal of Universal Computer Science*, vol. 17, no. 9, pp. 1299-1313, 2011. doi:10.3217/jucs-017-09-1299.
- [16] J. García, A. G. Torres, D. A. G. Aguilar, R. Theron y F. J. G. Penalvo, "A Visual Analytics Tool for Software Project Structure and Relationships among Classes," in *Smart Graphics, Proceedings*, vol. 5531, A. Butz, B. Fisher, M. Christie, A. Kruger, P. Olivier y R. Theron, Eds. Lecture Notes in Computer Science, pp. 203-212, 2009.
- [17] F. J. García-Peñalvo, "Issue on visual analytics," *Journal of Information Technology Research*, vol. 8, no. 2, pp. iv-vi, 2015.
- [18] D. A. Gómez-Aguilar, F. J. García-Peñalvo y R. Therón, "Analítica Visual en eLearning," *El Profesional de la Información*, vol. 23, no. 3, pp. 236-245, 2014. doi: 10.3145/epi.2014.may.03.
- [19] D. A. Gómez-Aguilar, Á. Hernández-García, F. J. García-Peñalvo y R. Therón, "Tap into visual analysis of customization of grouping of activities in eLearning," *Computers in Human Behavior*, vol. 47, pp. 60-67, 2015. doi: 10.1016/j.chb.2014.11.001.
- [20] A. González-Torres, F. J. García-Peñalvo y R. Therón, "How evolutionary visual software analytics supports knowledge discovery," *Journal of Information Science and Engineering*, vol. 29, no. 1, pp. 17-34, 2013.
- [21] A. González-Torres, F. J. García-Peñalvo y R. Therón, "Human-computer interaction in evolutionary visual software analytics," *Computers in Human Behavior*, vol. 29, no. 2, pp. 486-495, Mar 2013. doi: 10.1016/j.chb.2012.01.013.

- [22] A. González-Torres, F. J. García-Peñalvo y R. Therón, "A Framework for the Evolutionary Visual Software Analytics Process," in *Information Systems, E-learning, and Knowledge Management Research. 4th World Summit on the Knowledge Society, WSKS 2011, Mykonos, Greece, September 21-23, 2011. Revised Selected Papers (Mykonos, Greece, 21-23 September 2011)*, M. D. Lytras, D. Ruan, R. Tennyson, P. Ordoñez de Pablos, F. J. García-Peñalvo y L. Rusu, Eds. Communications in Computer and Information Science, no. 278, pp. 439-447, Berlin: Springer Verlag, 2013. doi: 10.1007/978-3-642-35879-1\_53.
- [23] A. González-Torres, F. J. García-Peñalvo, R. Therón-Sánchez y R. Colomo-Palacios, "Knowledge discovery in software teams by means of evolutionary visual software analytics," *Science of Computer Programming*, vol. 121, pp. 55-74, 2016. doi: 10.1016/j.scico.2015.09.005.
- [24] A. González-Torres, R. Therón, F. J. García-Peñalvo, M. Wermelinger y Y. Yu, "Maleku: An evolutionary visual software analytics tool for providing insights into software evolution," in *Proceedings of the 27th IEEE International Conference on Software Maintenance - ICSM 2011 (Williamsburg, VA, USA, September 25 - 30, 2011)*, A. Marcus, J. R. Cordy y P. Tonella, Eds. pp. 594-597, EEUU: IEEE CS Press, 2011. doi: 10.1109/ICSM.2011.6080838.
- [25] F. J. García-Peñalvo, P. Ordóñez de Pablos, J. García y R. Therón, "Using OWL-VisMod through a decision-making process for reusing OWL ontologies," *Behaviour & Information Technology*, vol. 33, no. 5, pp. 426-442, 2014. doi: 10.1080/0144929X.2012.709538.
- [26] F. J. García-Peñalvo, R. Colomo-Palacios, J. García y R. Therón, "Towards an ontology modeling tool. A validation in software engineering scenarios," *Expert Systems with Applications*, vol. 39, no. 13, pp. 11468-11478, 2012. doi: 10.1016/j.eswa.2012.04.009.
- [27] M. J. Rodríguez-Conde, F. Martínez-Abad y S. Olmos-Migueláñez, "Assessment of information skills in secondary education: A causal model," *Cultura y Educación*, vol. 25, no. 3, pp. 361-373, 2013. doi: 10.1174/113564013807749687.
- [28] M. J. Rodríguez-Conde, S. Olmos-Migueláñez, B. García-Riaza, A. B. González-Rogado y F. J. García-Peñalvo, "Students' Active Role on the Assessment of Learning Results in Blended-Learning Environments in Engineering in Spain," in *Information Systems, E-learning, and Knowledge Management Research. 4th World Summit on the Knowledge Society, WSKS 2011, Mykonos, Greece, September 21-23, 2011. Revised Selected Papers (Mykonos, Greece, 21-23 September 2011)*, M. D. Lytras, D. Ruan, R. Tennyson, O. Ordoñez de Pablos, F. J. García-Peñalvo y L. Rusu, Eds. Communications in Computer and Information Science, no. CCIS 278, pp. 408-415, Berlin, Heidelberg: Springer Verlag, 2013. doi: 10.1007/978-3-642-35879-1\_49.
- [29] A. B. González-Rogado, M. J. Rodríguez-Conde, S. Olmos-Migueláñez, M. Borham y F. J. García-Peñalvo, "Experimental evaluation of the impact of b-learning methodologies on engineering students in Spain," *Computers in Human Behavior*, vol. 29, no. 2, pp. 370-377, 2013. doi: 10.1016/j.chb.2012.02.003.
- [30] A. B. González-Rogado, M. J. Rodríguez-Conde, S. Olmos-Migueláñez, M. Borham y F. J. García-Peñalvo, "Key factors for determining student satisfaction in engineering: A regression study," *International Journal of Engineering Education (IJEE)*, vol. 30, no. 3, pp. 576-584, 2014.
- [31] F. Martínez-Abad, S. Olmos-Migueláñez y M. J. Rodríguez-Conde, "Evaluación de un programa de formación en competencias informacionales para el futuro profesorado de E.S.O.," *Revista de Educación*, no. 370, pp. 45-70, 2015. doi: 10.4438/1988-592X-RE-2015-370-296.
- [32] S. Olmos Migueláñez y M. J. Rodríguez Conde, "El profesorado universitario ante la e-evaluación del aprendizaje," *ESE- Estudios sobre Educación*, vol. 23, no. 1, pp. 181-202, 2011.
- [33] H. Barbosa y F. J. García-Peñalvo, "Importance of Online Assessment in the E-Learning Process," in *Proceedings of the 6th International Conference on Information Technology Based Higher Education and Training - ITHET 2005. (Santo Domingo, Dominican Republic, July 7-9, 2005)* pp. F3B-1-F3B-6: IEEE CS-Press, 2005.
- [34] H. Barbosa León, F. J. García-Peñalvo, M. J. Rodríguez-Conde, E. M. Morales-Morgado y P. Ordóñez de Pablos, "Adaptive assessments using open specifications," *International Journal of Distance Education Technologies (IJDET)*, vol. 10, no. 4, pp. 56-71, 2012. doi: 10.4018/jdet.2012100105.
- [35] H. G. Barbosa Leon, F. J. García-Peñalvo y M. J. Rodríguez-Conde, "Defining adaptive assessments. Construction of adaptive assessments based in the learning style of the students," in *Proceedings of Third International Conference on Web Information Systems and Technologies Society, e-Business and e-Government / e-Learning Volume - WEBIST 2007 (Barcelona, Spain, March 3 - 6, 2007)*, J. Filipe y J. Cordeiro, Eds. pp. 409-414, Portugal: INSTICC Press, 2007.

- [36] T. Ferreras-Fernández, J. A. Merlo-Vega y F. J. García-Peñalvo, "Impact of Scientific Content in Open Access Institutional Repositories. A case study of the Repository Gredos," in *Proceedings of the First International Conference on Technological Ecosystems for Enhancing Multiculturality (TEEM'13) (Salamanca, Spain, November 14-15, 2013)*, F. J. García-Peñalvo, Ed. ACM International Conference Proceeding Series (ICPS), pp. 357-363, New York, NY, USA: ACM, 2013. doi: 10.1145/2536536.2536590.
- [37] T. Ferreras-Fernández, J. A. Merlo-Vega y F. J. García-Peñalvo, "Visibilidad de la literatura gris científica a través de repositorios. El caso de las tesis doctorales en GREDOS," presented in XV Workshop de REBIUN sobre proyectos digitales y VI Jornadas de OS-Repositorios (11-13 de marzo de 2015), Córdoba, Spain, 2015.
- [38] F. J. García-Peñalvo, J. A. Merlo-Vega, T. Ferreras-Fernández, A. Casaus-Peña, L. Albás-Aso y M. L. Atienza-Díaz, "Qualified Dublin Core Metadata Best Practices for GREDOS," *Journal of Library Metadata*, vol. 10, no. 1, pp. 13-36, 2010. doi: 10.1080/19386380903546976.
- [39] C. López, F. García-Peñalvo y P. Pernías, "Desarrollo de Repositorios de Objetos de Aprendizaje a través de la Reutilización de los Metadatos de una Colección Digital: De Dublin Core a IMS," *RED. Revista de Educación a Distancia*, vol. IV, no. monográfico II, 2005.
- [40] T. Ferreras-Fernández, J. A. Merlo-Vega y F. J. García-Peñalvo, "Science 2.0 supported by Open Access Repositories and Open Linked Data," in *Proceedings of the First International Conference on Technological Ecosystems for Enhancing Multiculturality (TEEM'13) (Salamanca, Spain, November 14-15, 2013)*, F. J. García-Peñalvo, Ed. ACM International Conference Proceeding Series (ICPS), pp. 331-332, New York, NY, USA: ACM, 2013. doi: 10.1145/2536536.2536586.
- [41] T. Ferreras-Fernández, "Visibilidad e impacto de la literatura gris científica en repositorios institucionales de acceso abierto. Estudio de caso bibliométrico del repositorio Gredos de la Universidad de Salamanca," PhD, Programa de Doctorado en Formación en la Sociedad del Conocimiento, Universidad de Salamanca, Salamanca, España, 2016. Available from: <https://goo.gl/rrNeEJ>.
- [42] T. Ferreras-Fernández, F. J. García-Peñalvo, J. A. Merlo-Vega y H. Martín-Rodero, "Providing open access to PhD theses: Visibility and citation benefits," *Program: Electronic library and information systems*, vol. 50, no. 4, pp. 399-416, 2016. doi: 10.1108/PROG-04-2016-0039.
- [43] T. Ferreras-Fernández, H. Martín-Rodero, F. J. García-Peñalvo y J. A. Merlo-Vega, "The Systematic Review of Literature in LIS: An approach," in *Proceedings of the Fourth International Conference on Technological Ecosystems for Enhancing Multiculturality (TEEM'16) (Salamanca, Spain, November 2-4, 2016)*, F. J. García-Peñalvo, Ed. pp. 291-298, New York, NY, USA: ACM, 2016. doi: 10.1145/3012430.3012531.
- [44] F. J. García-Peñalvo, "Ecosistemas Tecnológicos," *IEEE VAEP-RITA*, vol. 3, no. 1, pp. 36-37, 2015.
- [45] F. J. García-Peñalvo, "Ecosistemas Tecnológicos: Innovando en la Educación Abierta," presented in Programa de la Maestría en Tecnología Educativa. Escuela de Humanidades y Educación, Tecnológico de Monterrey, Monterrey, Nuevo León, México, 17 de enero de 2017, 2017. Available from: <https://goo.gl/zRma4d>. doi: 10.13140/RG.2.2.21822.28489.
- [46] F. J. García-Peñalvo *et al.*, "Mirando hacia el futuro: Ecosistemas tecnológicos de aprendizaje basados en servicios," in *La Sociedad del Aprendizaje. Actas del III Congreso Internacional sobre Aprendizaje, Innovación y Competitividad. CINAIC 2015 (14-16 de Octubre de 2015, Madrid, España)*, Á. Fidalgo Blanco, M. L. Sein-Echaluce Laclela y F. J. García-Peñalvo, Eds. pp. 553-558, Madrid, Spain: Fundación General de la Universidad Politécnica de Madrid, 2015.
- [47] F. J. García-Peñalvo *et al.*, "Enhancing Education for the Knowledge Society Era with Learning Ecosystems," in *Open Source Solutions for Knowledge Management and Technological Ecosystems*, F. J. García-Peñalvo y A. García-Holgado, Eds. Advances in Knowledge Acquisition, Transfer, and Management (AKATM), pp. 1-24, Hershey PA, USA: IGI Global, 2017. doi: 10.4018/978-1-5225-0905-9.ch001.
- [48] F. J. García-Peñalvo *et al.*, "Learning services-based technological ecosystems," in *Proceedings of the Third International Conference on Technological Ecosystems for Enhancing Multiculturality (TEEM'15) (Porto, Portugal, October 7-9, 2015)*, G. R. Alves y M. C. Felgueiras, Eds. pp. 467-472, New York, USA: ACM, 2015.
- [49] A. García-Holgado y F. J. García-Peñalvo, "The evolution of the technological ecosystems: An architectural proposal to enhancing learning processes," in *Proceedings of the First International Conference on Technological Ecosystems for Enhancing Multiculturality (TEEM'13) (Salamanca, Spain,*

- November 14–15, 2013), F. J. García-Peñalvo, Ed. ACM International Conference Proceeding Series (ICPS), pp. 565–571, New York, NY, USA: ACM, 2013. doi: 10.1145/2536536.2536623.
- [50] A. García-Holgado y F. J. García-Peñalvo, "Análisis de integración de soluciones basadas en software como servicio para la implantación de ecosistemas tecnológicos corporativos," in *Avances en Informática y Automática. Séptimo Workshop*, J. Cruz-Benito, A. García-Holgado, S. García-Sánchez, D. Hernández-Alfageme, M. Navarro-Cáceres y R. Vega-Ruiz, Eds. pp. 55–72, Salamanca: Departamento de Informática y Automática de la Universidad de Salamanca, 2013.
- [51] A. García-Holgado y F. J. García-Peñalvo, "Knowledge Management Ecosystem based on Drupal Platform for Promoting the Collaboration between Public Administrations," in *Proceedings of the Second International Conference on Technological Ecosystems for Enhancing Multiculturality (TEEM'14) (Salamanca, Spain, October 1-3, 2014)*, F. J. García-Peñalvo, Ed. ACM International Conference Proceeding Series (ICPS), pp. 619–624, New York, NY, USA: ACM, 2014. doi: 10.1145/2669711.2669964. 2014.
- [52] A. García-Holgado y F. J. García-Peñalvo, "Patrón arquitectónico para la definición de ecosistemas de eLearning basados en desarrollos open source," in *Actas del XVI Simposio Internacional de Informática Educativa (SIIIE'14). Acceso masivo y universal para un aprendizaje a lo largo de la vida (Logroño, La Rioja, España, 12-14 de noviembre, 2014)*, J. L. Sierra Rodríguez, J. M. Doderó Beardo y D. Burgos, Eds. pp. 137–142, 2014.
- [53] A. García-Holgado y F. J. García-Peñalvo, "Architectural pattern for the definition of eLearning ecosystems based on Open Source developments," in *Proceedings of 2014 International Symposium on Computers in Education (SIIIE), Logrono, La Rioja, Spain, 12-14 Nov. 2014*, J. L. Sierra-Rodríguez, J. M. Doderó-Beardo y D. Burgos, Eds. pp. 93–98, USA: Institute of Electrical and Electronics Engineers, 2014. doi: 10.1109/SIIIE.2014.7017711.
- [54] A. García-Holgado y F. J. García-Peñalvo, "Estudio sobre la Evolución de las Soluciones Tecnológicas para Dar Soporte a la Gestión de la Información," Grupo de investigación GRIAL, Universidad de Salamanca, Salamanca, España, Technical Report, GRIAL-TR-2015-001, 2015. Available from: <https://goo.gl/NKRMKX>. doi: 10.13140/RG.2.1.5176.2727.
- [55] A. García-Holgado y F. J. García-Peñalvo, "Architectural pattern to improve the definition and implementation of eLearning ecosystems," *Science of Computer Programming*, vol. 129, pp. 20–34, 2016. doi: 10.1016/j.scico.2016.03.010.
- [56] A. García-Holgado, F. J. García-Peñalvo, Á. Hernández-García y F. Llorens-Largo, "Analysis and Improvement of Knowledge Management Processes in Organizations Using the Business Process Model Notation," in *New Information and Communication Technologies for Knowledge Management in Organizations. 5th Global Innovation and Knowledge Academy Conference, GIKA 2015, Valencia, Spain, July 14–16, 2015, Proceedings*, D. Palacios-Marqués, D. Ribeiro Soriano y K. H. Huarng, Eds. Lecture Notes in Business Information Processing, no. 222, pp. 93–101, Switzerland: Springer International Publishing, 2015. doi: 10.1007/9783-319-22204-2\_9.
- [57] A. García-Holgado, F. J. García-Peñalvo y M. J. Rodríguez-Conde, "Definition of a Technological Ecosystem for Scientific Knowledge Management in a PhD Programme," in *Proceedings of the Third International Conference on Technological Ecosystems for Enhancing Multiculturality (TEEM'15) (Porto, Portugal, October 7–9, 2015)*, G. R. Alves y M. C. Felgueiras, Eds. ACM International Conference Proceeding Series (ICPS), pp. 695–700, New York, NY, USA: ACM, 2015. doi: 10.1145/2808580.2808686.
- [58] F. J. García-Peñalvo, C. García de Figuerola y J. A. Merlo-Vega, "Open knowledge management in higher education," *Online Information Review*, vol. 34, no. 4, pp. 517–519, 2010.
- [59] F. J. García-Peñalvo, C. García de Figuerola y J. A. Merlo-Vega, "Open knowledge: Challenges and facts," *Online Information Review*, vol. 34, no. 4, pp. 520–539, 2010. doi: 10.1108/14684521011072963.
- [60] F. J. García-Peñalvo, "La Universidad de la próxima década: La Universidad Digital," in *Universidad y Desarrollo Social de la Web*, C. Suárez-Guerrero y F. J. García-Peñalvo, Eds. pp. 181–197, Washington DC, USA: Editandum, 2011.
- [61] C. Suárez Guerrero y F. J. García Peñalvo Eds., "Universidad y Desarrollo Social de la Web." Washington DC, USA: Editandum, 2011.
- [62] A. J. Berlanga, F. J. García-Peñalvo y P. B. Sloep, "Towards eLearning 2.0 University," *Interactive Learning Environments*, vol. 18, no. 3, pp. 199–201, 2010. doi: 10.1080/10494820.2010.500498.
- [63] F. J. García-Peñalvo, M. L. Sein-Echaluce y Á. Fidalgo-Blanco, "Educational Innovation Management. A Case Study at the University of Salamanca," in *Proceedings of the Third International Conference on*

- Technological Ecosystems for Enhancing Multiculturality (TEEM'15) (Porto, Portugal, October 7-9, 2015)*, G. R. Alves y M. C. Felgueiras, Eds. ACM International Conference Proceeding Series (ICPS), pp. 151-158, New York, USA: ACM, 2015. doi: 10.1145/2808580.2808604.
- [64] F. J. García-Peñalvo y S. Rivera, M., "Digital University 2010," in *EUNIS 2009. IT: Key of the European Space of Knowledge. (Santiago de Compostela, Spain, June 23rd - 26th, 2009)*, J. R. Canay, J. Franco y P. J. Rey, Eds. p. 32, Santiago de Compostela, Spain: Universidade de Santiago de Compostela Publicacións, 2009.
- [65] L. Briz Ponce y F. J. García-Peñalvo, "An empirical assessment of a technology acceptance model for apps in medical education," *Journal of Medical Systems*, vol. 39, no. 11, p. Paper 176, 2015. doi: 10.1007/s10916-015-0352-x.
- [66] L. Briz Ponce, J. A. Juanes Méndez y F. J. García-Peñalvo, "A systematic review of using mobile devices in medical education," in *Proceedings of 2014 International Symposium on Computers in Education (SIIE), Logrono, La Rioja, Spain, 12-14 Nov. 2014*, J. L. Sierra-Rodríguez, J. M. Dodero-Beardo y D. Burgos, Eds. pp. 205-210, USA: Institute of Electrical and Electronics Engineers, 2014. doi: 10.1109/SIIE.2014.7017731.
- [67] L. Briz Ponce, J. A. Juanes Méndez y F. J. García-Peñalvo, "Analysis of certificated mobile application for medical education purposes," in *Proceedings of the Second International Conference on Technological Ecosystems for Enhancing Multiculturality (TEEM 2014) (Salamanca, Spain, October 1-3, 2014)*, F. J. García-Peñalvo, Ed. ACM International Conference Proceeding Series (ICPS), pp. 13-17, New York, NY, USA: ACM, 2014. doi: 10.1145/2669711.2669871.
- [68] L. Briz Ponce, J. A. Juanes Méndez y F. J. García-Peñalvo, "Dispositivos móviles y apps: Características y uso actual en educación médica," *Novática. Revista de la Asociación de Técnicos en Informática*, vol. 231, pp. 86-91, 2015.
- [69] L. Briz-Ponce y J. A. Juanes-Méndez, "Mobile Devices and Apps, Characteristics and Current Potential on Learning," *Journal of Information Technology Research*, vol. 8, no. 4, pp. 26-37, 2015. doi: 10.4018/JITR.2015100102.
- [70] L. Briz-Ponce, J. A. Juanes-Méndez y F. J. García-Peñalvo, "Synopsis of discussion session on defining a new quality protocol for medical apps," in *Proceedings of the Third International Conference on Technological Ecosystems for Enhancing Multiculturality (TEEM'15) (Porto, Portugal, October 7-9, 2015)*, G. R. Alves y M. C. Felgueiras, Eds. pp. 7-12, New York, NY, USA: ACM, 2015. doi: 10.1145/2808580.2808582.
- [71] L. Briz-Ponce, A. Pereira, L. Carvalho, J. A. Juanes-Méndez y F. J. García-Peñalvo, "Learning with mobile technologies - Students' behavior," *Computers in Human Behavior*, vol. 72, pp. 612-620, 2017. doi: 10.1016/j.chb.2016.05.027.
- [72] J. C. Sánchez-Prieto, S. Olmos-Migueláñez y F. J. García-Peñalvo, "¿Utilizarán los futuros docentes las tecnologías móviles? Validación de una propuesta de modelo TAM extendido," *RED. Revista de Educación a Distancia*, vol. 52, art. 5, 2017. doi: 10.6018/red/52/5.
- [73] R. Therón y L. Fontanillo, "Diachronic-information visualization in historical dictionaries," *Information Visualization*, vol. 14, no. 2, pp. 111-136, 2015. doi: 10.1177/1473871613495844.
- [74] F. J. García-Peñalvo, "Digital Humanities Data Processing," *Journal of Information Technology Research*, vol. 9, no. 1, 2016.
- [75] R. Therón, C. Seguí, L. Cruz y M. Vaquero, "Highly interactive and natural user interfaces: enabling visual analysis in historical lexicography," in *DATECH '14 Proceedings of the First International Conference on Digital Access to Textual Cultural Heritage* pp. 153-158, New York, NY, USA: ACM, 2014. doi: 10.1145/2595188.2595215.
- [76] R. Therón y E. Wandl-Vogt, "The fun of exploration: How to access a non-standard language corpus visually," in *VisLR: Visualization as Added Value in the Development, Use and Evaluation of Language Resources*, A. Hautli-Janisz, V. Lyding y C. Rohrdantz, Eds. pp. 9-12, 2014.
- [77] F. J. García-Peñalvo, R. Colomo-Palacios, P. Soto-Acosta, I. Martínez-Conesa y E. Serradell-López, "SemSEDoc: Use of semantic technologies in the use of document repositories of software development projects," *Information Research-an International Electronic Journal*, vol. 16, no. 4, art. 504, 2011.
- [78] Á. Fidalgo-Blanco, M. L. Sein-Echaluce y F. J. García-Peñalvo, "Knowledge spirals in higher education teaching innovation," *International Journal of Knowledge Management*, vol. 10, no. 4, pp. 16-37, 2014. doi: 10.4018/ijkm.2014100102.

- [79] Á. Fidalgo-Blanco, M. L. Sein-Echaluce y F. J. García-Peñalvo, "Epistemological and ontological spirals: From individual experience in educational innovation to the organisational knowledge in the university sector," *Program: Electronic library and information systems*, vol. 49, no. 3, pp. 266-288, 2015. doi: 10.1108/PROG-06-2014-0033.
- [80] F. J. García-Peñalvo, M. Á. Conde, M. Johnson y M. Alier, "Knowledge co-creation process based on informal learning competences tagging and recognition," *International Journal of Human Capital and Information Technology Professionals (IJHCITP)*, vol. 4, no. 4, pp. 18-30, 2013. doi: 10.4018/ijhcitp.2013100102.
- [81] F. J. García-Peñalvo, J. Cruz-Benito, O. Borrás-Gené y Á. Fidalgo Blanco, "Evolution of the Conversation and Knowledge Acquisition in Social Networks related to a MOOC Course.," in *Learning and Collaboration Technologies. Second International Conference, LCT 2015, Held as Part of HCI International 2015, Los Angeles, CA, USA, August 2-7, 2015, Proceedings*, P. Zaphiris y I. Ioannou, Eds. Lecture Notes in Computer Science, no. 9192, pp. 470-481, Switzerland: Springer International Publishing, 2015. doi: 10.1007/978-3-319-20609-7\_44.
- [82] F. J. García-Peñalvo, J. García y R. Therón, "Analysis of the OWL ontologies: A survey," *Scientific Research and Essays*, vol. 6, no. 20, pp. 4318-4329, 2011. doi: 10.5897/SRE11.1036.
- [83] F. J. García-Peñalvo, M. A. Conde, M. Alier y M. J. Casany, "Opening Learning Management Systems to Personal Learning Environments," *Journal of Universal Computer Science*, vol. 17, no. 9, pp. 1222-1240, 2011. doi: 10.3217/jucs-017-09-1222.
- [84] M. J. Casany, M. Alier, M. Á. Conde y F. J. García-Peñalvo, "SOA initiatives for eLearning. A Moodle case," in *23rd International Conference on Advanced Information Networking and Applications, AINA 2009, Workshops Proceedings. The International Symposium on Mining and Web (MAW 2009)* pp. 750-755, Los Alamitos, California, USA: IEEE Computer Society, 2009. doi: 10.1109/waina.2009.196.
- [85] M. Á. Conde González, F. J. García-Peñalvo, M. J. Casany Guerrero y M. Alier Forment, "Back and Forth: From the LMS to the Mobile Device. A SOA Approach," in *Proceedings of the IADIS International Conference Mobile Learning 2009 (Barcelona, Spain, February 26-28, 2009)*, I. Arnedillo Sánchez y P. Isaías, Eds. pp. 114-120, Portugal: IADIS Press, 2009.
- [86] M. Á. Conde, F. J. García-Peñalvo, M. J. Casany y M. Alier, "Adapting LMS architecture to the SOA: an Architectural Approach," in *Proceedings of the Fourth International Conference on Internet and Web Applications and Services - ICIW 2009 (Venice/Mestre, Italy, 24-28 May 2009)*, H. Sasaki, G. O. Bellot, M. Ehmann y O. Dini, Eds. pp. 322-327, Los Alamitos, California, USA: IEEE Computer Society, 2009. doi: 10.1109/iciw.2009.54.
- [87] E. M. Morales-Morgado, A. B. Gil y F. J. García-Peñalvo, "Arquitectura para la Recuperación de Objetos de Aprendizaje de Calidad en Repositorios Distribuidos," in *Actas del 5º Taller en Sistemas Hipermedia Colaborativos y Adaptativos, SHCA 2007*, vol. 1, F. Gutiérrez Vela y P. Paderewski Rodríguez, Eds. Actas de Talleres de Ingeniería del Software y Bases de Datos, SISTEDES, no. 1, pp. 31-38, Zaragoza, España, 2007.
- [88] R. Colomo-Palacios, C. Casado-Lumbreras, P. Soto-Acosta, F. J. García-Peñalvo y E. Tovar-Caro, "Project managers in global software development teams: A study of the effects on productivity and performance," *Software Quality Journal*, vol. 22, no. 1, pp. 3-19, 2014. doi: 10.1007/s11219-012-9191-x.
- [89] M. Á. Conde, D. A. Gómez, A. D. de Dios y F. J. García-Peñalvo, "Moodle 2.0 Web Services Layer and Its New Application Contexts. First International Conference, TECH-EDUCATION 2010, Athens, Greece, May 19-21, 2010. Proceedings," in *Technology Enhanced Learning: Quality of Teaching and Educational Reform*, vol. 73, M. D. Lytras *et al.*, Eds. Communications in Computer and Information Science, pp. 110-116, Berlin: Springer, 2010. doi: 10.1007/978-3-642-13166-0\_16.
- [90] J. Cruz-Benito, O. Borrás-Gené, F. J. García-Peñalvo, Á. Fidalgo-Blanco y R. Therón, "Extending MOOC ecosystems using web services and software architectures.," in *Proceedings of the XVI International Conference on Human Computer Interaction. Vilanova i la Geltrú, Spain - September 07 - 09, 2015* p. Art. 52, New York, USA: ACM, 2015. doi: 10.1145/2829875.2829923.
- [91] J. Piguillem *et al.*, "Moodbile: A Moodle web services extension for mobile applications," in *Proceedings of the 1st Moodle Research Conference (Heraklion, Crete, Greece, September, 14-15, 2012)*, S. Retalis y M. Dougiamas, Eds. pp. 148-156, 2012.
- [92] F. J. García-Peñalvo, *Modelo de Reutilización Soportado por Estructuras Complejas de Reutilización Denominadas Mecanos* (Vitor, no. 53). Salamanca, España: Ediciones Universidad de Salamanca, 2000.

- [93] A. M. Seoane-Pardo y F. J. García-Peñalvo, "Los orígenes del tutor: Fundamentos filosóficos y epistemológicos de la monitorización para su aplicación a contextos de e-learning," *Education in the Knowledge Society*, vol. 8, no. 2, pp. 9-30, 2007.
- [94] A. M. Seoane-Pardo y F. J. García-Peñalvo, "Philosophical and Epistemological Basis for Building a Quality Online Training Methodology," in *Advances in E-Learning: Experiences and Methodologies*, F. J. García-Peñalvo, Ed. pp. 46-60, Hershey, PA, USA: Information Science Reference 2008.
- [95] F. J. García-Peñalvo y A. M. Seoane-Pardo Eds., "Online Tutor 2.0: Methodologies and Case Studies for Successful Learning," Hershey, PA, USA: IGI Global, 2014. doi: 10.4018/978-1-4666-5832-5.
- [96] A. M. Seoane Pardo y F. J. García-Peñalvo, "Patrones pedagógicos y docencia en red," in *Formación en Red: Aprender con Tecnologías Digitales*, J. M. Jerónimo Montes, Ed. pp. 30-47, México: Universidad Nacional Autónoma de México. Facultad de Estudios Superiores Zaragoza, 2014.
- [97] A. M. Seoane-Pardo y F. J. García-Peñalvo, "Online Tutoring and Mentoring," in *Encyclopedia of Networked and Virtual Organizations*, vol. II, G. D. Putnik y M. M. Cunha, Eds. pp. 1120-1127, Hershey, PA, USA: Information Science Reference, 2008.
- [98] F. J. García-Peñalvo, "The WYRED project: A technological platform for a generative research and dialogue about youth perspectives and interests in digital society," *Journal of Information Technology Research*, vol. 9, no. 4, pp. vi-x, 2016.
- [99] F. J. García-Peñalvo, M. Franco Martín, A. García-Holgado, J. M. Toribio Guzmán, J. Largo Antón y M. C. Sánchez Gómez, "Psychiatric patients tracking through a private Social Network for relatives," *Journal of Medical Systems*, vol. 40, no. 7, p. Paper 172, 2016. doi: 10.1007/s10916-016-0530-5.
- [100] J. M. Toribio-Guzmán, A. García-Holgado, F. Soto Pérez, F. J. García-Peñalvo y M. Franco Martín, "Usability Evaluation of a Private Social Network on Mental Health for Relatives," *Journal of Medical Systems*, vol. 41, p. Paper 137, 2017. doi: 10.1007/s10916-017-0780-x.
- [101] P. No-Gutiérrez, M. J. Rodríguez Conde, V. Zangrando y A. M. Seoane-Pardo, "EERA: Peer Tutoring With Migrant Students: Intercultural Mentoring Programme," presented in ECER 2015 "Education and Transition. Contributions from Educational Research", Budapest, Hungary, 2015. Available from: <https://goo.gl/VZc6mZ>.
- [102] P. No-Gutiérrez, M. J. Rodríguez Conde, V. Zangrando, A. M. Seoane-Pardo y L. Luatti, "Peer tutoring at school with migrant students: intercultural mentoring programme," in *Proceedings of the Second International Conference on Technological Ecosystems for Enhancing Multiculturality (TEEM'14). Salamanca, Spain, October 1-3, 2014*, F. J. García-Peñalvo, Ed. ACM International Conference Proceeding Series (ICPS), pp. 483-487, New York, NY, USA: ACM, 2014. doi: 10.1145/2669711.2669943.
- [103] M. Martín-Cilleros y M. C. Sánchez-Gómez, "Análisis cualitativos de tópicos vinculados a la calidad de vida en personas con discapacidad," *Ciência & Saúde Coletiva*, vol. In press, 2016.
- [104] J. L. Muñoz-Sánchez, M. C. Sánchez-Gómez, M. V. Martín-Cilleros, C. Blanco-Dorado y M. Á. Franco-Martín, "Suicide prevention according to different health professionals: quantification analysis in a qualitative study," *Clinical Practice*, vol. 14, no. 5, pp. 278-289, 2017.
- [105] M. C. Sánchez-Gómez y M. V. Martín-Cilleros, "Implementation of Focus Group in Health Research," in *Computer supported qualitative research*, A. P. Costa, L. P. Reis, F. Neri de Sousa, A. Moreira y D. Lamas, Eds. Studies in Systems, Decision and Control, no. 71, pp. 49-61, Switzerland: Springer International Publishing, 2017.
- [106] M. C. Sánchez-Gómez *et al.*, "Análisis de contenido cualitativo: Estudio de la satisfacción de los usuarios sobre la presentación de un nuevo medicamento en la salud pública," in *La Práctica de la investigación cualitativa: Ejemplificación de estudios*, A. P. Costa, M. C. Sánchez-Gómez y M. V. Martín-Cilleros, Eds. pp. 57-92, Aveiro, Portugal: Ludomedia, 2017.
- [107] P. Zapata-Sepúlveda, F. López-Sánchez y M. C. Sánchez-Gómez, "Content analysis research method with Nvivo-6 software in a PhD thesis: An approach to the long-term psychological effects on Chilean ex-prisoners survivors of experiences of torture and imprisonment," *Quality & Quantity*, vol. 46, no. 1, pp. 379-390, 2012. doi: 10.1007/s11135-011-9551-9.
- [108] A. García-Holgado, J. J. Mena Marcos, F. J. García-Peñalvo y C. González, "Inclusion of gender perspective in Computer Engineering careers. Elaboration of a questionnaire to assess the gender gap in Tertiary Education," presented in EDUCON2018 - IEEE Global Engineering Education Conference (17-20 April 2018), Santa Cruz de Tenerife, Canary Islands, Spain, 2018.
- [109] A. García-Holgado, F. J. García-Peñalvo, J. J. Mena Marcos y C. González, "Introducción de la Perspectiva de Género en la docencia de Ingeniería del Software," in *La innovación docente como misión del*

- profesorado. *Actas del IV Congreso Internacional sobre Aprendizaje, Innovación y Competitividad. CINAIC 2017 (4-6 de Octubre de 2017, Zaragoza, España)*, M. L. Sein-Echaluce Lacleta, Á. Fidalgo-Blanco y F. J. García-Peñalvo, Eds. pp. 627-631, Zaragoza, España: Servicio de Publicaciones Universidad de Zaragoza, 2017. doi: 10.26754/CINAIC.2017.000001\_134.
- [110] A. García-Holgado, F. J. García-Peñalvo, J. J. Mena Marcos y C. González González, "Inclusión de la perspectiva de género en la asignatura de Ingeniería de Software I," in "Memorias de Innovación Docente," núm. ID2016/084, Universidad de Salamanca, Salamanca, España, 2017. Available from: <https://goo.gl/PzZeAN>.
- [111] A. J. Berlanga y F. J. García-Peñalvo, "Learning Technology Specifications: Semantic Objects for Adaptive Learning Environments," *International Journal of Learning Technology*, vol. 1, no. 4, pp. 458-472, 2005. doi: 10.1504/IJLT.2005.007155.
- [112] A. J. Berlanga y F. J. García-Peñalvo, "IMS LD reusable elements for adaptive learning designs," *Journal of Interactive Media in Education*, vol. 11, 2005.
- [113] A. J. Berlanga y F. J. García-Peñalvo, "Learning Design in Adaptive Educational Hypermedia Systems," *Journal of Universal Computer Science*, vol. 14, no. 22, pp. 3627-3647, 2008. doi: 10.3217/jucs-014-22-3627.
- [114] A. J. Berlanga, F. J. García-Peñalvo y J. Carabias, "Authoring adaptive learning designs using IMS LD," in *Adaptive Hypermedia and Adaptive Web-Based Systems. 4th International Conference, AH 2006, Proceedings (Dublin, Ireland, June 21-23, 2006)*, V. Wade, H. Ashman y B. Smyth, Eds. Lecture Notes in Computer Science, no. LNCS 4018, pp. 31-40, Berlin: Springer Verlag, 2006. doi: 10.1007/11768012\_5.
- [115] A. Berlanga y F. J. García-Peñalvo, "An open model to define adaptive educational hypermedia systems based on learning technology specifications," in *Proceedings of the 15th International Workshop on Database and Expert Systems Applications, 2004 (Zaragoza, Spain, 30 August - 3 September 2004)* pp. 198-202, USA: IEEE Computer Society Press, 2004. doi: 10.1109/DEXA.2004.1333473.
- [116] F. J. García-Peñalvo, R. Colomo-Palacios y J. Y. J. Hsu, "Discovering knowledge through highly interactive information based systems foreword," *Journal of Information Science and Engineering*, vol. 29, no. 1, 2013.
- [117] J. Cruz-Benito, A. Vázquez-Ingelmo, J. C. Sánchez-Prieto, R. Therón, F. J. García-Peñalvo y M. Martín-González, "Enabling adaptability in web forms based on user characteristics detection through A/B testing and machine learning," *IEEE Access*, vol. 6, pp. 2251-2265, 2018. doi: 10.1109/ACCESS.2017.2782678.
- [118] M. Alier Forment, M. J. Casany Guerrero, M. Á. Conde González, F. J. García-Peñalvo y C. Severance, "Interoperability for LMS: the missing piece to become the common place for e-learning innovation," *International Journal of Knowledge and Learning (IJKL)*, vol. 6, no. 2/3, pp. 130-141, 2010. doi: 10.1504/IJKL.2010.034749.
- [119] M. Alier Forment *et al.*, "Docs4Learning: Getting Google Docs to Work within the LMS with IMS BLTI," *Journal of Universal Computer Science*, vol. 18, no. 11, pp. 1483-1500, 2012. doi: 10.3217/jucs-018-11-1483.
- [120] F. J. García-Peñalvo y J. García Carrasco, "Educational hypermedia resources facilitator," *Computers & Education*, vol. 44, no. 3, pp. 301-325, Apr 2005. doi: 10.1016/j.compedu.2004.02.004.
- [121] M. J. Casany *et al.*, "Moodbile: A Framework to Integrate m-Learning Applications with the LMS," *Journal of Research and Practice in Information Technology (JRPIT)*, vol. 44, no. 2, pp. 129-149, 2012.
- [122] J. C. Sánchez-Prieto, S. Olmos-Migueláñez y F. J. García-Peñalvo, "Understanding mobile learning: devices, pedagogical implications and research lines," *Education in the Knowledge Society*, vol. 15, no. 1, pp. 20-42, 2014.
- [123] J. C. Sánchez-Prieto, S. Olmos-Migueláñez y F. J. García-Peñalvo, "Informal tools in formal contexts: Development of a model to assess the acceptance of mobile technologies among teachers," *Computers in Human Behavior*, vol. 55A, pp. 519-528, 2016. doi: 10.1016/j.chb.2015.07.002.
- [124] D. A. Gómez-Aguilar, R. Therón y F. J. García-Peñalvo, "Understanding educational relationships in Moodle with ViMoodle," in *Proceedings of the Eighth IEEE International Conference on Advanced Learning Technologies, 2008. ICALT '08. Santander, Cantabria, Spain, 1-5 July 2008*, P. Díaz, A. Ignacio y E. Mora, Eds. pp. 954-956, USA: IEEE, 2008. doi: 10.1109/ICALT.2008.276.
- [125] D. A. Gómez-Aguilar, R. Therón y F. J. García-Peñalvo, "Semantic Spiral Timelines Used as Support for e-Learning," *Journal of Universal Computer Science*, vol. 15, no. 7, pp. 1526-1545, 2009. doi: 10.3217/jucs-015-07-1526.



- [126] Á. Fidalgo-Blanco, F. J. García-Peñalvo y M. L. Sein-Echaluce Lacleta, "A methodology proposal for developing adaptive cMOOC," in *Proceedings of the First International Conference on Technological Ecosystems for Enhancing Multiculturality (TEEM'13)*, F. J. García-Peñalvo, Ed. ACM International Conference Proceeding Series (ICPS), pp. 553-558, New York, NY, USA: ACM, 2013. doi: 10.1145/2536536.2536621.
- [127] Á. Fidalgo-Blanco, M. L. Sein-Echaluce Lacleta, O. Borrás Gené y F. J. García-Peñalvo, "Educación en abierto: Integración de un MOOC con una asignatura académica," *Education in the Knowledge Society*, vol. 15, no. 3, pp. 233-255, 2014.
- [128] Á. Fidalgo-Blanco, M. L. Sein-Echaluce Lacleta y F. J. García-Peñalvo, "MOOC cooperativo. Una integración entre cMOOC y xMOOC," in *Actas del II Congreso Internacional sobre Aprendizaje, Innovación y Competitividad (CINAIC)*, Á. Fidalgo Blanco y M. L. Sein-Echaluce Lacleta, Eds. pp. 481-486, Madrid, Spain: Fundación General de la Universidad Politécnica de Madrid, 2013.
- [129] Á. Fidalgo-Blanco, M. L. Sein-Echaluce Lacleta y F. J. García-Peñalvo, "Methodological Approach and Technological Framework to break the current limitations of MOOC model," *Journal of Universal Computer Science*, vol. 21, no. 5, pp. 712-734, 2015. doi: 10.3217/jucs-021-05-0712.
- [130] F. J. García-Peñalvo, "Massive Open Online Courses as data sources for making decisions in learning processes," *Journal of Information Technology Research*, vol. 8, no. 4, pp. iv-vii, 2015.
- [131] A. García-Holgado, J. Cruz-Benito y F. J. García-Peñalvo, "Analysis of Knowledge Management Experiences in Spanish Public Administration," in *Proceedings of the Third International Conference on Technological Ecosystems for Enhancing Multiculturality (TEEM'15) (Porto, Portugal, October 7-9, 2015)* G. R. Alves y M. C. Felgueiras, Eds. pp. 189-193, New York, NY, USA: ACM, 2015. doi: 10.1145/2808580.2808609.
- [132] M. Á. Conde-González, F. J. García-Peñalvo, M. J. Rodríguez-Conde, M. Alier y A. García-Holgado, "Perceived openness of Learning Management Systems by students and teachers in education and technology courses," *Computers in Human Behavior*, vol. 31, pp. 517-526, 2014. doi: 10.1016/j.chb.2013.05.023.
- [133] E. M. Morales, D. Gómez-Aguilar y F. J. García-Peñalvo, "HEODAR: Herramienta para la Evaluación de Objetos Didácticos de Aprendizaje Reutilizables," in *Actas del X Simposio Internacional de Informática Educativa - SIIE'08* J. Á. Velázquez-Iturbide, F. J. García-Peñalvo y A. B. Gil, Eds. Colección Aquilafuente, Salamanca, España: Ediciones Universidad de Salamanca, 2008.
- [134] C. Muñoz, M. Á. Conde y F. J. García-Peñalvo, "Moodle HEODAR implementation and its implantation in an academic context," *International Journal of Technology Enhanced Learning (IJTEL)*, vol. 2, no. 3, pp. 241-255, 2010. doi: 10.1504/IJTEL.2010.033580.
- [135] C. Muñoz, F. J. García-Peñalvo, E. M. Morales-Morgado, M. Á. Conde-González y A. M. Seoane-Pardo, "Improving Learning Object Quality: Moodle HEODAR Implementation," *International Journal of Distance Education Technologies*, vol. 10, no. 4, pp. 1-16, 2012. doi: 10.4018/jdet.2012100101.
- [136] E. M. Morales, F. J. García-Peñalvo, Á. Barrón, A. J. Berlanga y C. López, "Propuesta de Evaluación de Objetos de Aprendizaje," in *Actas del II Simposio Pluridisciplinar sobre Diseño, Evaluación y Descripción de Contenidos Educativos Reutilizables, SPDECE'05 (Barcelona, 19, 20 y 21 de Octubre de 2005)*, 2005.
- [137] F. J. García-Peñalvo y M. Á. Conde, "The impact of a mobile Personal Learning Environment in different educational contexts," *Universal Access in the Information Society*, vol. 14, no. 3, pp. 375-387, 2015. doi: 10.1007/s10209-014-0366-z.
- [138] P. R. Humanante-Ramos, F. J. García-Peñalvo y M. Á. Conde González, "Towards mobile personal learning environments (MPLE) in higher education," in *Proceedings of the Second International Conference on Technological Ecosystems for Enhancing Multiculturality (TEEM 2014) (Salamanca, Spain, October 1-3, 2014)*, F. J. García-Peñalvo, Ed. ACM International Conference Proceeding Series (ICPS), pp. 677-681, New York, NY, USA: ACM, 2014. doi: 10.1145/2669711.2669973.
- [139] P. R. Humanante-Ramos, F. J. García-Peñalvo y M. Á. Conde-González, "Personal Learning Environments and online classrooms: An experience with university students," *IEEE Revista Iberoamericana de Tecnologías del Aprendizaje (IEEE RITA)*, vol. 10, no. 1, pp. 26-32, 2015. doi: 10.1109/RITA.2015.2391411.
- [140] P. R. Humante-Ramos, F. J. García-Peñalvo y M. Á. Conde-González, "Mobile personal learning environments: conceptualization and structure," in *Proceedings of the Third International Conference on Technological Ecosystems for Enhancing Multiculturality (TEEM'15) (Porto, Portugal, October 7-9,*

- 2015), G. R. Alves y M. C. Felgueiras, Eds. ACM International Conference Proceeding Series (ICPS), pp. 117-123, New York, USA: ACM, 2015. doi: 10.1145/2808580.2808599.
- [141] M. Á. Conde-González, F. J. García-Peñalvo, M. J. Rodríguez-Conde, M. Alier, M. J. Casany y J. Piguiel, "An evolving Learning Management System for new educational environments using 2.0 tools," *Interactive Learning Environments*, vol. 22, no. 2, pp. 188-204, 2014. doi: 10.1080/10494820.2012.745433.
- [142] F. J. García-Peñalvo y M. Alier, "Learning management system: Evolving from silos to structures," *Interactive Learning Environments*, vol. 22, no. 2, pp. 143-145, 2014. doi: 10.1080/10494820.2014.884790.
- [143] Á. Fidalgo-Blanco, M. L. Sein-Echaluce y F. J. García-Peñalvo, "From massive access to cooperation: Lessons learned and proven results of a hybrid xMOOC/cMOOC pedagogical approach to MOOCs," *International Journal of Educational Technology in Higher Education (IETHE)*, vol. 13, p. 24, 2016. doi: 10.1186/s41239-016-0024-z.
- [144] F. J. García-Peñalvo, Á. Fidalgo-Blanco, M. Sein-Echaluce Lacleta y M. Á. Conde-González, "Cooperative Micro Flip Teaching," in *Learning and Collaboration Technologies. Third International Conference, LCT 2016, Held as Part of HCI International 2016, Toronto, ON, Canada, July 17-22, 2016, Proceedings*, P. Zaphiris y I. Ioannou, Eds. Lecture Notes in Computer Science, no. 9753, pp. 14-24, Switzerland: Springer International Publishing, 2016. doi: 10.1007/978-3-319-39483-1\_2.
- [145] M. L. Sein-Echaluce Lacleta, Á. Fidalgo-Blanco, F. J. García-Peñalvo y M. Á. Conde-González, "iMOOC Platform: Adaptive MOOCs," in *Learning and Collaboration Technologies. Third International Conference, LCT 2016, Held as Part of HCI International 2016, Toronto, ON, Canada, July 17-22, 2016, Proceedings*, P. Zaphiris y I. Ioannou, Eds. no. 9753, pp. 380-390, Switzerland: Springer International Publishing, 2016. doi: 10.1007/978-3-319-39483-1\_35.
- [146] F. J. García-Peñalvo, "Docencia," in *Libro Blanco de la Universidad Digital 2010*, J. Laviña Orueta y L. Mengual Pavón, Eds. Colección Fundación Telefónica, pp. 29-61, Barcelona, España: Ariel, 2008.
- [147] F. J. García-Peñalvo, "¿Está cambiando la forma de impartir docencia? ¿Deberíamos cambiarla? - Interacción Persona Ordenador," presented in Seminario Bienal Las Nuevas Formas de Enseñanza en la Universidad Digital, Madrid, 5 de junio de 2014, 2014.
- [148] A. García-Valcárcel y M. Martín, "Análisis de las competencias digitales de los graduados en titulaciones de maestro," presented in XXIII Jornadas Universitarias de Tecnología Educativa, Badajoz, 2015, 2015. Available from: <https://goo.gl/iWM8ny>.
- [149] A. García-Valcárcel Muñoz-Repiso, V. Basilotta y C. López, "Las TIC en el aprendizaje colaborativo en el aula de Primaria y Secundaria," *Comunicar*, vol. XXI, no. 42, pp. 65-74, 2014. doi: 10.3916/C42-2014-06.
- [150] A. García-Valcárcel Muñoz-Repiso y J. J. Mena Marcos, "Information technology as a way to support collaborative learning: What in-service teachers think, know and do," *Journal of Information Technology Research*, vol. 9, no. 1, pp. 1-17, 2016. doi: 10.4018/JITR.2016010101.
- [151] A. García-Valcárcel Muñoz-Repiso y F. J. Tejedor Tejedor, "Evaluación de procesos de innovación escolar basados en el uso de las TIC desarrollados en la Comunidad de Castilla y León," *Revista de Educación*, vol. 352, pp. 125-147, 2010.
- [152] A. García-Valcárcel Muñoz-Repiso y F. J. Tejedor Tejedor, "Variables TIC vinculadas a la generación de nuevos escenarios de aprendizaje en la enseñanza universitaria. Aportes de las curvas ROC para el análisis de diferencias," *Educación XXI*, vol. 14, no. 2, pp. 43-78, 2011. doi: 10.5944/educxx1.14.2.237.
- [153] A. García-Valcárcel Muñoz-Repiso y F. J. Tejedor Tejedor, "The Incorporation of ICT in Higher Education. The contribution of ROC curves in the graphic visualization of differences in the analysis of the variables," *British Journal of Educational Technology*, vol. 43, no. 6, pp. 901-919, 2012. doi: 10.1111/j.1467-8535.2011.01270.x.
- [154] F. J. Tejedor Tejedor y A. García-Valcárcel Muñoz-Repiso, "Evaluación del desempeño docente," *Revista Española de Pedagogía*, vol. LXVIII, no. 247, pp. 439-459, 2010.
- [155] F. J. Tejedor Tejedor y A. García-Valcárcel Muñoz-Repiso, "Sociedad tecnológica e investigación educativa," *Revista Española de Pedagogía*, vol. LXX, no. 251, pp. 3-26, 2012.
- [156] L. I. González-Pérez, L. D. Glasserman Morales, M. S. Ramírez-Montoya y F. J. García-Peñalvo, "Repositorios como soportes para diseminar experiencias de innovación educativa," in *Innovación Educativa. Investigación, formación, vinculación y visibilidad*, M. S. Ramírez-Montoya y J. R. Valenzuela González, Eds. pp. 259-272, Madrid, España: Síntesis, 2017.
- [157] L. I. González-Pérez, M. S. Ramírez-Montoya y F. J. García-Peñalvo, "Discovery Tools for Open Access Repositories: A Literature Mapping," in *Proceedings of the Fourth International Conference on Technological Ecosystems for Enhancing Multiculturality (TEEM'16) (Salamanca, Spain, November 2-4,*

- 2016), F. J. García-Peñalvo, Ed. ICPS: ACM International Conference Proceeding Series, pp. 299-305, New York, NY, USA: ACM, 2016. doi: 10.1145/3012430.3012532.
- [158] L. I. González-Pérez, M. S. Ramírez-Montoya y F. J. García-Peñalvo, "Open access to educational resources in energy and sustainability: Usability evaluation prototype for repositories," in *Proceedings of the Fourth International Conference on Technological Ecosystems for Enhancing Multiculturality (TEEM'16) (Salamanca, Spain, November 2-4, 2016)*, F. J. García-Peñalvo, Ed. ICPS: ACM International Conference Proceeding Series, pp. 1103-1108, New York, NY, USA: ACM, 2016. doi: 10.1145/3012430.3012654.
- [159] L. I. González-Pérez, M. S. Ramírez-Montoya y F. J. García-Peñalvo, "Identidad digital 2.0: Posibilidades de la gestión y visibilidad científica a través de repositorios institucionales de acceso abierto," presented in *Ecosistemas del Conocimiento Abierto (ECA 2017)*, Salamanca, España, 25-27 de octubre de 2017, 2017.
- [160] L. I. González-Pérez, M. S. Ramírez-Montoya y F. J. García-Peñalvo, "User experience in institutional repositories: A systematic literature review," *International Journal of Human Capital and Information Technology Professionals (IJHCITP)*, vol. 9, no. 1, pp. 70-86, 2018. doi: 10.4018/IJHCITP.2018010105.
- [161] L. I. González-Pérez, M. S. Ramírez-Montoya, F. J. García-Peñalvo y J. E. Quintas Cruz, "Usability evaluation focused on user experience of repositories related to energy sustainability: A Literature Mapping," in *Fifth International Conference on Technological Ecosystems for Enhancing Multiculturality (TEEM'17) (Cádiz, Spain, October 18-20, 2017)* J. M. Doderó, M. S. Ibarra Sáiz y I. Ruiz Rube, Eds. ICPS: ACM International Conference Proceeding Series, New York, NY, USA: ACM, 2017. doi: 10.1145/3144826.3145385.
- [162] J. A. Yañez-Figueroa, M. S. Ramírez-Montoya y F. J. García-Peñalvo, "Vinculación universidad-sociedad para la innovación educativa: Los casos de laboratorios ciudadanos," in *Innovación Educativa. Investigación, formación, vinculación y visibilidad*, M. S. Ramírez-Montoya y J. R. Valenzuela González, Eds. pp. 201-225, Madrid, España: Síntesis, 2017.
- [163] M. S. Ramírez Montoya y F. J. García-Peñalvo, "Movimiento Educativo Abierto," *Virtualis*, vol. 6, no. 12, pp. 1-13, 2015.
- [164] M. S. Ramírez-Montoya y F. J. García-Peñalvo, "Co-creation and open innovation: Systematic literature review," *Comunicar*, vol. 26, no. 54, pp. 9-18, 2018. doi: 10.3916/C54-2018-01.
- [165] M. S. Ramírez-Montoya, F. J. García-Peñalvo y R. McGreal, "Shared Science and Knowledge. Open Access, Technology and Education," *Comunicar*, vol. 26, no. 54, pp. 1-5, 2018.
- [166] M. S. Ramírez-Montoya y F. J. García-Peñalvo, "La integración efectiva del dispositivo móvil en la educación y en el aprendizaje," *Revista Iberoamericana de Educación a Distancia*, vol. 20, no. 2, pp. 29-47, 2017. doi: 10.5944/ried.20.2.18884.
- [167] M. S. Ramírez-Montoya, J. J. Mena Marcos y J. A. Rodríguez, "In-service teachers' self-perception on digital competence and OER use as determined by a xMOOC training course," *Computers in Human Behaviour*, vol. 77, pp. 356-364, 2017. doi: 10.1016/j.chb.2017.09.010.
- [168] J. M. Toribio Guzmán, A. García-Holgado, F. Soto Pérez, F. J. García-Peñalvo y M. A. Franco Martín, "Estudio de Usabilidad de la Red Social Privada SocialNet mediante Evaluación Heurística," in *Actas del XVII Congreso Internacional de Interacción Persona-Ordenador - Interacción 2016. 14-16 de septiembre de 2016, Salamanca, España*, L. Moreno López, E. J. Rubia Cuestas, V. M. R. Penichet y F. J. García-Peñalvo, Eds. Aquilafuente, no. 221, pp. 75-77, Salamanca, España: Ediciones Universidad de Salamanca, 2016.
- [169] J. M. Toribio Guzmán, A. García-Holgado, F. Soto Pérez, F. J. García-Peñalvo y M. A. Franco Martín, "Study of the Usability of the Private Social Network SocialNet using Heuristic Evaluation," in *Proceedings of the Interacción '16 Proceedings of the XVII International Conference on Human Computer Interaction (Salamanca, Spain - September 13 - 16, 2016)*, L. Moreno López, E. J. Rubia Cuestas, V. M. R. Penichet y F. J. García-Peñalvo, Eds. p. Article 22, New York, NY, USA: ACM, 2016. doi: 10.1145/2998626.2998674.
- [170] J. M. Toribio-Guzmán, A. García-Holgado, F. Soto Pérez, F. J. García-Peñalvo y M. Á. Franco Martín, "Heuristic evaluation of SocialNet, the private social network for psychiatric patients and their relatives," in *Proceedings of the Fourth International Conference on Technological Ecosystems for Enhancing Multiculturality (TEEM'16) (Salamanca, Spain, November 2-4, 2016)*, F. J. García-Peñalvo, Ed. ICPS: ACM International Conference Proceeding Series, pp. 525-532, New York, NY, USA: ACM, 2016. doi: 10.1145/3012430.3012568.

- [171] Á. Fidalgo-Blanco y M. L. Sein-Echaluce, *Actas del II Congreso Internacional sobre Aprendizaje, Innovación y Competitividad, CINAIC 2013 (Madrid, 6-8 de noviembre de 2013)*. Madrid, España: Fundación General de la Universidad Politécnica de Madrid, 2013. Available from: <https://goo.gl/4owSYa>.
- [172] Á. Fidalgo-Blanco, M. L. Sein-Echaluce y F. J. García-Peñalvo, *La Sociedad del Aprendizaje. Actas del III Congreso Internacional sobre Aprendizaje, Innovación y Competitividad, CINAIC 2015 (14-16 de Octubre de 2015, Madrid, España)*. Madrid: Fundación General de la Universidad Politécnica de Madrid, 2015. Available from: <https://goo.gl/QDr3b7>.
- [173] M. L. Sein-Echaluce, Á. Fidalgo-Blanco y F. J. García-Peñalvo Eds., "La innovación docente como misión del profesorado. Actas del IV Congreso Internacional sobre Aprendizaje, Innovación y Competitividad. CINAIC 2017 (4-6 de Octubre de 2017, Zaragoza, España)." Zaragoza, España: Servicio de Publicaciones Universidad de Zaragoza, 2017. Available from: <https://goo.gl/HnbZ8n>. doi: 10.26754/CINAIC.2017.000001.
- [174] Á. Fidalgo-Blanco, M. L. Sein-Echaluce y F. J. García-Peñalvo, "ECoLab: A Cooperative System to Improve Training Processes," in *Learning and Collaboration Technologies. Novel Learning Ecosystems. 4th International Conference, LCT 2017. Held as Part of HCI International 2017, Vancouver, BC, Canada, July 9-14, 2017. Proceedings, Part I*, P. Zaphiris y A. Ioannou, Eds. Lecture Notes in Computer Science, no. 10295, pp. 90-99, Switzerland: Springer International Publishing, 2017. doi: 10.1007/978-3-319-58509-3\_9.
- [175] Technical University of Madrid (Spain) y University of Zaragoza (Spain). (2018). *Social Networking and Learning course. iMOOC*. Available from: <https://goo.gl/68vyjU>.
- [176] F. J. García-Peñalvo, "Experiencia MOOCs. Caso de Estudio Grupo GRIAL de la USAL," presented in Digitalización y MOOCs, motores de innovación en Educación Superior, Campus San Joaquín de la Pontificia Universidad Católica de Chile 28 de noviembre de 2016, 2016. Available from: <https://goo.gl/NTQAUJ>.
- [177] Á. Fidalgo-Blanco, M. L. Sein-Echaluce Lacleta y F. J. García-Peñalvo, "MOOC cooperativo. Una integración entre cMOOC y xMOOC," in *Actas del II Congreso Internacional sobre Aprendizaje, Innovación y Competitividad, CINAIC 2013 (Madrid, 6-8 de noviembre de 2013)*, Á. Fidalgo Blanco y M. L. Sein-Echaluce Lacleta, Eds. pp. 481-486, Madrid, España: Fundación General de la Universidad Politécnica de Madrid, 2013.
- [178] F. J. García-Peñalvo, Á. Fidalgo-Blanco y M. L. Sein-Echaluce, "An adaptive hybrid MOOC model: Disrupting the MOOC concept in higher education," *Telematics and Informatics*, vol. In Press, 2018. doi: 10.1016/j.tele.2017.09.012.
- [179] F. J. García-Peñalvo, V. Fernández-Hermo, Á. Fidalgo-Blanco y M. L. Sein-Echaluce, "Applied educational innovation MOOC: Learners' experience and valorization of strengths and weaknesses," in *Proceedings of the Second International Conference on Technological Ecosystems for Enhancing Multiculturality (TEEM 2014) (Salamanca, Spain, October 1-3, 2014)*, F. J. García-Peñalvo, Ed. ACM International Conference Proceeding Series (ICPS), pp. 139-145, New York, NY, USA: ACM, 2014. doi: 10.1145/2669711.2669892.
- [180] F. J. García-Peñalvo, Á. Fidalgo-Blanco y M. L. Sein-Echaluce, "Los MOOC: Un análisis desde una perspectiva de la innovación institucional universitaria," *La Cuestión Universitaria*, vol. 9, pp. 117-135, 2017.
- [181] M. L. Sein-Echaluce, Á. Fidalgo-Blanco y F. J. García-Peñalvo, "Adaptive and cooperative model of knowledge management in MOOCs," in *Learning and Collaboration Technologies. Novel Learning Ecosystems. 4th International Conference, LCT 2017. Held as Part of HCI International 2017, Vancouver, BC, Canada, July 9-14, 2017. Proceedings, Part I*, P. Zaphiris y A. Ioannou, Eds. Lecture Notes in Computer Science, no. 10295, pp. 273-284, Switzerland: Springer International Publishing, 2017. doi: 10.1007/978-3-319-58509-3\_22.
- [182] M. Caeiro-Rodríguez *et al.*, "SNOLA: Spanish Network of Learning Analytics," in *Proceedings of the Fourth International Conference on Technological Ecosystems for Enhancing Multiculturality (TEEM'16) (Salamanca, Spain, November 2-4, 2016)*, F. J. García-Peñalvo, Ed. ACM International Conference Proceeding Series (ICPS), New York, NY, USA: ACM, 2016.
- [183] A. García-Valcárcel Muñoz-Repiso, L. M. González Rodero, V. Basilotta Gómez-Pablos y M. Martín del Pozo, "REUNI+D: una red universitaria para la construcción colaborativa de conocimiento," *RIED. Revista Iberoamericana de Educación a Distancia*, vol. 21, no. 2, 2018. doi: 10.5944/ried.21.2.20605.

- [184] M. Á. Conde, F. J. García-Peñalvo, M. J. Casany y M. Alier Forment, "Personal Learning Environments and the Integration with Learning Management Systems," in *Information Systems, E-learning, and Knowledge Management Research. 4th World Summit on the Knowledge Society, WSKS 2011, Mykonos, Greece, September 21-23, 2011. Revised Selected Papers*, vol. CCIS 278, M. D. Lytras, D. Ruan, R. Tennyson, P. Ordoñez de Pablos, F. J. García-Peñalvo y L. Rusu, Eds. Communications in Computer and Information Science, pp. 16-21, Berlin, Heidelberg: Springer Verlag, 2013. doi: 10.1007/978-3-642-35879-1\_3.
- [185] M. Á. Conde-González, "Personalización del aprendizaje: Framework de servicios para la integración de aplicaciones online en los sistemas de gestión del aprendizaje," PhD, Programa de Doctorado Informática y Automática, Universidad de Salamanca, Salamanca, 2012. Available from: <https://goo.gl/WXitBm>.
- [186] M. Á. Conde González, A. d. Pozo de Dios y F. J. García Peñalvo, "e-Learning Services in Moodle 2.0," *CEPIS Upgrade*, vol. XII, no. 2, pp. 43-50, 2011.
- [187] M. Á. Conde-González, F. J. García-Peñalvo, M. Alier y J. Piguillem, "The implementation, deployment and evaluation of a Mobile Personal Learning Environment," *Journal of Universal Computer Science*, vol. 19, no. 7, pp. 854-872, 2013. doi: 10.3217/jucs-019-07-0854.
- [188] M. Á. Conde-González, F. J. García-Peñalvo y M. Alier, "Interoperability scenarios to measure informal learning carried out in PLEs," in *Proceedings of the Third IEEE International Conference on Intelligent Networking and Collaborative Systems, IEEE INCoS 2011* F. Xhafa, L. Barolli y M. Köppen, Eds. pp. 801-806, Los Alamitos, CA, USA: IEEE CS Press, 2011. doi: 10.1109/INCoS.2011.104.
- [189] F. J. García-Peñalvo *et al.*, "TRAILER project (Tagging, recognition, acknowledgment of informal learning experiences). A Methodology to make visible learners' informal learning activities to the institutions," *Journal of Universal Computer Science*, vol. 19, no. 11, p. 1661, 2013. doi: 10.3217/jucs-019-11-1661.
- [190] F. J. García-Peñalvo *et al.*, "TRAILER project overview: Tagging, recognition and acknowledgment of informal learning experiences," presented in 2012 International Symposium on Computers in Education (SIIE), Andorra La Vella, Andorra. October 29-31, 2012, 2012. Available from: <https://goo.gl/kn6puc>.
- [191] M. C. Delgado-Álvarez, M. C. Sánchez Gómez y P. A. Fernández-Dávila Jara, "Atributos y estereotipos de género asociados al ciclo de la violencia contra la mujer," *Universitas Psychologica*, vol. 11, no. 3, pp. 769-777, 2012.
- [192] P. Humanante-Ramos, F. J. García-Peñalvo y M. Conde-González, "Entornos personales de aprendizaje móvil: Una revisión sistemática de la literatura," *RIED. Revista Iberoamericana de Educación a Distancia*, vol. 20, no. 2, pp. 73-92, 2017. doi: 10.5944/ried.20.2.17692.
- [193] P. R. Humante-Ramos, F. J. García-Peñalvo y M. Á. Conde-González, "PLEs en contextos móviles: Nuevas formas para personalizar el aprendizaje," *IEEE VAEP-RITA*, vol. 4, no. 1, pp. 33-39, 2016.
- [194] S. Popp *et al.*, "European history crossroads as pathways to intercultural and media education (EHISTO)," in *Proceedings of the TEEM'13 Track on Knowledge Society Related Projects (Salamanca, Spain, November 16, 2013)*, F. J. García-Peñalvo, A. García-Holgado y J. Cruz-Benito, Eds. pp. 31-35, Salamanca, Spain: Grupo GRIAL, 2013.
- [195] E. Carboni *et al.*, "Intercultural Mentoring tools to support migrant integration at school (INTO)," in *Proceedings of the TEEM'13 Track on Knowledge Society Related Projects (Salamanca, Spain, November 16, 2013)*, F. J. García-Peñalvo, A. García-Holgado y J. Cruz-Benito, Eds. pp. 53-58, Salamanca, Spain: Grupo GRIAL, 2013.
- [196] F. J. García-Peñalvo, "Multidisciplinary and interdisciplinary approaches in information technology research," *Journal of Information Technology Research*, vol. 10, no. 1, pp. vi-viii, 2017.
- [197] F. J. García-Peñalvo, "La mentorización Intercultural - El proyecto INTO," *Education in the Knowledge Society*, vol. 17, no. 3, pp. 7-12, 2016. doi: 10.14201/eks2016173712.
- [198] P. No-Gutiérrez, M. J. Rodríguez Conde, V. Zangrando y A. M. Seoane-Pardo, "Assessment of the intercultural mentoring programme," in *Proceedings of the Third International Conference on Technological Ecosystems for Enhancing Multiculturality (TEEM'15) (Porto, Portugal, October 7-9, 2015)*, G. R. Alves y M. C. Felgueiras, Eds. ACM International Conference Proceeding Series (ICPS), pp. 349-354, New York, NY, USA: ACM, 2015. doi: 10.1145/2808580.2808632.
- [199] F. J. García-Peñalvo *et al.*, "Developing Win-Win Solutions for Virtual Placements in Informatics: The VALS Case," in *Proceedings of the Second International Conference on Technological Ecosystems for Enhancing Multiculturality (TEEM'14)*, F. J. García-Peñalvo, Ed. ACM International Conference

- Proceeding Series (ICPS), pp. 733-738, New York, USA: ACM, 2014. doi: <http://dx.doi.org/10.1145/2669711.2669982>.
- [200] F. J. García-Peñalvo y J. Cruz-Benito. (2015). *Informe de Buena Práctica - Proyecto Europeo VALS y Semester of Code: Prácticas Virtuales en Empresas y Fundaciones relacionadas con el Software Libre a nivel Europeo*. Available from: <http://repositorio.grial.eu/handle/grial/410>.
- [201] F. J. García-Peñalvo y J. Cruz-Benito, "Proyecto Europeo VALS y Semester of Code: Prácticas Virtuales en Empresas y Fundaciones relacionadas con el Software Libre a nivel Europeo (Versión póster)," presented in Seminario Bienal "La Universidad Digital". Taller de Buenas Prácticas: Presentación de Experiencias, Madrid, 11 de junio, 2015. Available from: <http://repositorio.grial.eu/handle/grial/409>.
- [202] F. J. García-Peñalvo *et al.*, "VALS: Virtual Alliances for Learning Society," in *Proceedings of the TEEM'13 Track on Knowledge Society Related Projects*, F. J. García-Peñalvo, A. García-Holgado y J. Cruz-Benito, Eds. pp. 19-26, Salamanca, Spain: Grupo GRIAL, 2013.
- [203] F. J. García-Peñalvo, J. Cruz-Benito, M. Á. Conde y D. Griffiths, "Semester of Code: Piloting Virtual Placements for Informatics across Europe," in *Proceedings of Global Engineering Education Conference, EDUCON 2015. Tallinn, Estonia, 18-20 March 2015* pp. 567-576, USA: IEEE, 2015. doi: 10.1109/EDUCON.2015.7096026.
- [204] F. J. García-Peñalvo, J. Cruz-Benito, M. Á. Conde y D. Griffiths, "Virtual placements for informatics students in open source business across Europe," in *2014 IEEE Frontiers in Education Conference Proceedings (October 22-25, 2014 Madrid, Spain)* pp. 2551-2555, USA: IEEE, 2014. doi: 10.1109/FIE.2014.7044411.
- [205] F. J. García-Peñalvo, J. Cruz-Benito, D. Griffiths y A. P. Achilleos, "Tecnología al servicio de un proceso de gestión de prácticas virtuales en empresas: Propuesta y primeros resultados del Semester of Code," *IEEE VAEP-RITA*, vol. 3, no. 1, pp. 52-59, 2015.
- [206] F. J. García-Peñalvo, J. Cruz-Benito, D. Griffiths y A. P. Achilleos, "Virtual placements management process supported by technology: Proposal and firsts results of the Semester of Code," *IEEE Revista Iberoamericana de Tecnologías del Aprendizaje (IEEE RITA)*, vol. 11, no. 1, pp. 47-54, 2016. doi: 10.1109/RITA.2016.2518461.
- [207] F. J. García-Peñalvo, "Entrepreneurial and problem solving skills in software engineers," *Journal of Information Technology Research*, vol. 8, no. 3, pp. iv-vi, 2015.
- [208] F. J. García-Peñalvo *et al.*, "Understanding the barriers to virtual student placements in the Semester of Code," *Education in the Knowledge Society*, vol. 17, no. 1, pp. 147-173, 2016. doi: 10.14201/eks2016171147173.
- [209] M. Á. Conde González y F. J. García-Peñalvo, "Desarrollo de un repositorio de aplicaciones móviles para mayores," *Cuadernos de la Cátedra Telefónica - Universidad de León - TIC y Envejecimiento de la Sociedad*, vol. 2, pp. 37-47, 2014.
- [210] F. J. García-Peñalvo, M. Conde-González y V. Matellán-Olivera, "Mobile Apps for Older Users - The Development of a Mobile Apps Repository for Older People," in *Learning and Collaboration Technologies Technology-Rich Environments for Learning and Collaboration. First International Conference, LCT 2014 Held as Part of HCI International 2014 Heraklion, Crete, Greece, June 22-27, 2014. Proceedings, Part II (Creta Maris, Heraklion, Crete, Greece, June 22 - 27, 2014)*, P. Zaphiris y A. Ioannou, Eds. Lecture Notes in Computer Science, no. 8524, pp. 117-126, Switzerland: Springer International Publishing, 2014. doi: 10.1007/978-3-319-07485-6\_12.
- [211] M. Raveri *et al.*, "Intercultural Education through Religious Studies (IERS)," in *Proceedings of the TEEM'13 Track on Knowledge Society Related Projects (Salamanca, Spain, November 16, 2013)*, F. J. García-Peñalvo, A. García-Holgado y J. Cruz-Benito, Eds. pp. 43-48, Salamanca, Spain: Grupo GRIAL, 2013.
- [212] F. J. García-Peñalvo, "Proyecto TACCLE3 - Coding," in *XVIII Simposio Internacional de Informática Educativa, SIIE 2016*, F. J. García-Peñalvo y J. A. Mendes, Eds. no. 222, pp. 187-189, Salamanca, España: Ediciones Universidad de Salamanca, 2016.
- [213] F. J. García-Peñalvo, "Presentación del Proyecto TACCLE3 Coding," presented in Workshop Ek18. Educación en Informática sub 18, Salamanca, España, 2016. Available from: <https://goo.gl/VZc6mZ>. doi: 10.5281/zenodo.163216.
- [214] F. J. García-Peñalvo, "A brief introduction to TACCLE 3 - Coding European Project," in *2016 International Symposium on Computers in Education (SIIE 16)*, F. J. García-Peñalvo y J. A. Mendes, Eds., USA: IEEE, 2016. doi: 10.1109/SIIE.2016.7751876.

- [215] F. J. García-Peñalvo, "Pensamiento computacional en los estudios preuniversitarios. El enfoque de TACCLE3," presented in Máster en las TIC en la Educación: Análisis y Diseño de Procesos, Recursos y Prácticas Formativas, Salamanca, España, 9 de marzo de 2017, 2017. Available from: <https://goo.gl/iyaVyT>. doi: 10.5281/zenodo.376310.
- [216] F. J. García-Peñalvo *et al.*, "Evaluation of existing resources (study/analysis)," TACCLE3 Consortium, Belgium, 2016. doi: 10.5281/zenodo.163112.
- [217] F. J. García-Peñalvo, D. Reimann, M. Tuul, A. Rees y I. Jormanainen, "An overview of the most relevant literature on coding and computational thinking with emphasis on the relevant issues for teachers," TACCLE3 Consortium, Belgium, 2016. doi: 10.5281/zenodo.165123.
- [218] TACCLE 3 Consortium. (2017). *TACCLE 3: Coding Erasmus + Project website*. Available from: <https://goo.gl/f4QZUA>.
- [219] W. Nielsen, J. Mena, A. Clarke, S. O'Shea, H. Hoban y J. Collins, "Australia's supervising teachers: Motivators and challenges to inform professional learning," *Asia-Pacific Journal of Teacher Education*, vol. 45, no. 4, pp. 346-368, 2017. doi: 10.1080/1359866X.2017.1304527.
- [220] F. J. García-Peñalvo, "WYRED Project," *Education in the Knowledge Society*, vol. 18, no. 3, pp. 7-14, 2017. doi: 10.14201/eks2017183714.
- [221] F. J. García-Peñalvo y N. A. Kearney, "Networked youth research for empowerment in digital society. The WYRED project," in *Proceedings of the Fourth International Conference on Technological Ecosystems for Enhancing Multiculturality (TEEM'16) (Salamanca, Spain, November 2-4, 2016)*, F. J. García-Peñalvo, Ed. ACM International Conference Proceeding Series (ICPS), pp. 3-9, New York, NY, USA: ACM, 2016. doi: 10.1145/3012430.3012489.
- [222] F. J. García-Peñalvo, "En clave de innovación educativa. Construyendo el nuevo ecosistema de aprendizaje," presented in I Congreso Internacional de Tendencias en Innovación Educativa, CITIE 2016, Arequipa, Perú, 2016. Available from: <https://goo.gl/8HQovc>.
- [223] F. J. García-Peñalvo, "La evolución de los sistemas software educativos: Los ecosistemas tecnológicos de aprendizaje," presented in Programa de Doctorado en Ingeniería Informática Universidad Complutense de Madrid, Madrid, España, 28 de abril de 2017, 2017. Available from: <https://goo.gl/Ykwrty>. doi: 10.5281/zenodo.569347.
- [224] A. García-Holgado y F. J. García-Peñalvo, "A metamodel proposal for developing learning ecosystems," in *Learning and Collaboration Technologies. Novel Learning Ecosystems. 4th International Conference, LCT 2017. Held as Part of HCI International 2017, Vancouver, BC, Canada, July 9-14, 2017. Proceedings, Part I*, P. Zaphiris y A. Ioannou, Eds. Lecture Notes in Computer Science, no. 10295, pp. 100-109, Switzerland: Springer International Publishing, 2017. doi: 10.1007/978-3-319-58509-3\_10.
- [225] A. García-Holgado y F. J. García-Peñalvo, "Preliminary validation of the metamodel for developing learning ecosystems," in *Fifth International Conference on Technological Ecosystems for Enhancing Multiculturality (TEEM'17) (Cádiz, Spain, October 18-20, 2017)* J. M. Doderó, M. S. Ibarra Sáiz y I. Ruiz Rube, Eds. ACM International Conference Proceeding Series (ICPS), p. Article 91, New York, NY, USA: ACM, 2017. doi: 10.1145/3144826.3145439.
- [226] A. García-Holgado y F. J. García-Peñalvo, "Definición de ecosistemas de aprendizaje independientes de plataforma," in *La innovación docente como misión del profesorado. Actas del IV Congreso Internacional sobre Aprendizaje, Innovación y Competitividad. CINAIC 2017 (4-6 de Octubre de 2017, Zaragoza, España)*, M. L. Sein-Echaluce Lacleta, Á. Fidalgo-Blanco y F. J. García-Peñalvo, Eds. pp. 668-673, Zaragoza, España: Servicio de Publicaciones Universidad de Zaragoza, 2017. doi: 10.26754/CINAIC.2017.000001\_143.
- [227] A. García-Holgado y F. J. García-Peñalvo, "Gestión del conocimiento abierto mediante ecosistemas tecnológicos basados en soluciones Open Source," presented in Ecosistemas del Conocimiento Abierto (ECA 2017), Salamanca, España, 25-27 de octubre de 2017, 2017.
- [228] Gobierno de España. (2007). *Ley Orgánica 4/2007, de 12 de abril, por la que se modifica la Ley Orgánica 6/2001, de 21 de diciembre, de Universidades*. Jefatura de Estado. BOE-A-2007-7786, no. 89, de 13 de abril de 2007, sección I. Disposiciones generales, pp. 16241-16260. Madrid, España: Agencia Estatal Boletín Oficial del Estado. Available from: <https://goo.gl/ZDqv1W>.
- [229] R. Colomo-Palacios, C. Casado-Lumbreras, P. Soto-Acosta, F. J. García-Peñalvo y E. Tovar-Caro, "Competence gaps in software personnel: A multi-organizational study," *Computers in Human Behavior*, vol. 29, no. 2, pp. 456-461, Mar 2013. doi: 10.1016/j.chb.2012.04.021.

- [230] M. D. Lytras, F. J. García-Peñalvo y P. Ordóñez de Pablos, "Advanced human-computer interaction," *Computers in Human Behavior*, vol. 29, no. 2, pp. 305-306, 2013. doi: 10.1016/j.chb.2012.11.018.
- [231] F. J. García-Peñalvo y L. Vicent Safont, "Human behaviors in computer-based education systems," *Computers in Human Behavior*, vol. 31, pp. 432-433, 2014. doi: 10.1016/j.chb.2013.10.003.
- [232] F. J. García-Peñalvo, M. Johnson, G. Ribeiro Alves, M. Minovic y M. Á. Conde-González, "Informal learning recognition through a cloud ecosystem," *Future Generation Computer Systems*, vol. 32, pp. 282-294, 2014. doi: 10.1016/j.future.2013.08.004.
- [233] J. P. Hernández-Ramos, F. Martínez-Abad, F. J. García-Peñalvo, M. E. Herrera García y M. J. Rodríguez-Conde, "Teachers' attitude regarding the use of ICT. A factor reliability and validity study," *Computers in Human Behavior*, vol. 31, pp. 509-516, 2014. doi: 10.1016/j.chb.2013.04.039.
- [234] R. Santamaría, R. Therón y L. Quintales, "BicOverlapper: Visual analysis for gene expression," *Bioinformatics*, vol. 30, no. 12, pp. 1785-1786, 2014. doi: 10.1093/bioinformatics/btu120.
- [235] R. Casado Muñoz, F. Lezcano Barbero y M. J. Rodríguez Conde, "Envejecimiento activo y acceso a las tecnologías: Un estudio empírico evolutivo," *Comunicar*, vol. XXIII, no. 45, pp. 37-46, 2015. doi: 10.3916/C45-2015-04.
- [236] J. Cruz-Benito, R. Therón, F. J. García-Peñalvo y E. Pizarro Lucas, "Discovering usage behaviors and engagement in an Educational Virtual World," *Computers in Human Behavior*, vol. 47, pp. 18-25, 2015. doi: <http://dx.doi.org/10.1016/j.chb.2014.11.028>.
- [237] Á. Fidalgo-Blanco, M. L. Sein-Echaluce, F. J. García-Peñalvo y M. Á. Conde-González, "Using Learning Analytics to improve teamwork assessment," *Computers in Human Behavior*, vol. 47, pp. 149-156, 2015. doi: 10.1016/j.chb.2014.11.050.
- [238] N. Galanis, E. Mayol, M. Alier y F. J. García-Peñalvo, "Supporting, evaluating and validating informal learning. A social approach," *Computers in Human Behavior*, vol. 55A, pp. 596-603, 2016. doi: 10.1016/j.chb.2015.08.005.
- [239] C. García-Pérez, R. Peláez, R. Therón y J. L. López-Pérez, "JADOPPT: java based AutoDock preparing and processing tool," *Bioinformatics*, vol. 2016, p. btw677, 2016. doi: 10.1093/bioinformatics/btw677.
- [240] D. Griffiths y F. J. García-Peñalvo, "Informal learning recognition and management," *Computers in Human Behavior*, vol. 55A, pp. 501-503, 2016. doi: 10.1016/j.chb.2015.10.019.
- [241] J. Joo-Nagata, F. Martínez Abad, J. García-Bermejo Giner y F. J. García-Peñalvo, "Augmented reality and pedestrian navigation through its implementation in m-learning and e-learning: Evaluation of an educational program in Chile," *Computers & Education*, vol. 111, pp. 1-17, 2017. doi: 10.1016/j.compedu.2017.04.003.
- [242] A. M. Pinto-Llorrente, M. C. Sánchez Gómez, F. J. García-Peñalvo y S. Casillas Martín, "Students' perceptions and attitudes towards asynchronous technological tools in blended-learning training to improve grammatical competence in English as a second language," *Computers in Human Behavior*, vol. 72, pp. 632-643, 2017. doi: 10.1016/j.chb.2016.05.071.
- [243] J. C. Sánchez-Prieto, S. Olmos-Migueláñez y F. J. García-Peñalvo, "MLearning and pre-service teachers: An assessment of the behavioral intention using an expanded TAM model," *Computers in Human Behavior*, vol. 72, pp. 644-654, 2017. doi: 10.1016/j.chb.2016.09.061.
- [244] A. Iglesias Rodríguez, B. García Rianza y M. C. Sánchez Gómez, "Collaborative learning and mobile devices: An educational experience in Primary Education," *Computers in Human Behavior*, vol. 72, pp. 664-677, 2017/07/01/ 2017. doi: 10.1016/j.chb.2016.07.019.
- [245] V. Basilotta Gómez-Pablos, M. Martín del Pozo y A. García-Valcárcel Muñoz-Repiso, "Project-based learning (PBL) through the incorporation of digital technologies: An evaluation based on the experience of serving teachers," *Computers in Human Behavior*, vol. 68, pp. 501-512, 2017. doi: 10.1016/j.chb.2016.11.056.
- [246] J. Mena, P. Henissen y J. Loughran, "Developing pre-service teachers' professional knowledge of teaching: The influence of mentoring," *Teaching and Teacher Education*, vol. 66, pp. 47-59, 2017. doi: 10.1016/j.tate.2017.03.024.
- [247] M. Á. Conde-González, R. Colomo-Palacios, F. J. García-Peñalvo y X. Larrueca, "Teamwork assessment in the educational web of data: A learning analytics approach towards ISO 10018," *Telematics and Informatics*, vol. 35, no. 3, pp. 551-563, 2018. doi: 10.1016/j.tele.2017.02.001.
- [248] C. Fernández-Llamas, M. Á. Conde-González, F. J. Rodríguez-Lera, F. J. Rodríguez-Sedano y F. J. García-Peñalvo, "May I teach you? Students' behavior when lectured by robotic vs. human teachers," *Computers in Human Behavior*, vol. 80, pp. 460-469, 2018. doi: 10.1016/j.chb.2017.09.028.



- [249] R. Colomo-Palacios, C. Casado-Lumbreras, P. Soto-Acosta, S. Misra y F. J. García-Peñalvo, "Analyzing Human Resource Management Practices Within the GSD Context," *Journal of Global Information Technology Management*, vol. 15, no. 3, pp. 30-54, 2012. doi: 10.1080/1097198X.2012.10845617.
- [250] J. J. Mena Marcos, M. L. García-Rodríguez y H. Tillema, "Student teacher reflective writing: what does it reveal?," *European Journal of Teacher Education*, vol. 36, no. 2, pp. 147-163, 2012. doi: 10.1080/02619768.2012.713933.
- [251] F. J. García-Peñalvo y M. Á. Conde-González, "Using informal learning for business decision making and knowledge management," *Journal of Business Research*, vol. 67, no. 5, pp. 686-691, 2014. doi: 10.1016/j.jbusres.2013.11.028.
- [252] L. Briz-Ponce, J. A. Juanes-Méndez, F. J. García-Peñalvo y A. Pereira, "Effects of Mobile Learning in Medical Education: A Counterfactual Evaluation," *Journal of Medical Systems*, vol. 40, no. 6, p. Paper 136, 2016. doi: 10.1007/s10916-016-0487-4.
- [253] A. G. Losada, R. Therón y A. Benito, "BKViz: A Basketball Visual Analysis Tool," *IEEE Computer Graphics and Applications*, vol. 36, no. 6, pp. 58-68, 2016. doi: 10.1109/MCG.2016.124.
- [254] F. Martínez-Abad, M. Bielba Calvo y M. E. Herrera García, "Evaluación, formación e innovación en competencias informacionales para profesores y estudiantes de Educación Secundaria," *Revista de Educación*, no. 376, pp. 110-134, 2017.
- [255] F. Martínez-Abad y A. A. Chaparro Caso López, "Data-mining techniques in detecting factors linked to academic achievement," *School Effectiveness and School Improvement*, vol. 28, no. 1, pp. 39-55, 2017. doi: 10.1080/09243453.2016.1235591.
- [256] P. Marqués-Sánchez *et al.*, "Co-operative Networks and their Influence on Engagement: A Study with Students of a Degree in Nursing," *Journal of Medical Systems*, vol. 41, p. Paper 103, 2017. doi: 10.1007/s10916-017-0747-y.
- [257] R. Colomo-Palacios, F. J. García-Peñalvo, V. Stantchev y S. Misra, "Towards a social and context-aware mobile recommendation system for tourism," *Pervasive and Mobile Computing*, vol. 38, pp. 505-515, 2017. doi: 10.1016/j.pmcj.2016.03.001.
- [258] S. González Izard, J. A. Juanes, F. J. García-Peñalvo, J. M. Gonçalves Estella, M. J. Sánchez Ledesma y P. Ruisoto, "Virtual Reality as an Educational and Training Tool for Medicine," *Journal of Medical Systems*, journal article vol. 42, art. 50, February 01 2018. doi: 10.1007/s10916-018-0900-2.
- [259] A. M. Pinto-Llorente, S. Casillas-Martín, M. Cabezas-González y F. J. García-Peñalvo, "Building, coding and programming 3D models via a visual programming environment," *Quality & Quantity*, vol. In Press, 2018. doi: 10.1007/s11135-017-0509-4.
- [260] F. J. García-Peñalvo, S. Bravo, M. Á. Conde-González y H. Barbosa, "SET, A CASE Tool to Guide the Creation of Domain and Use Case Models in an Introductory Software Engineering Course," *International Journal of Engineering Education (IJEE)*, vol. 27, no. 1, pp. 31-40, 2011.
- [261] M. Alier *et al.*, "Clustering Projects for eLearning Interoperability," *Journal of Universal Computer Science*, vol. 18, no. 1, pp. 106-122, 2012. doi: 10.3217/jucs-018-01-0106.
- [262] R. Colomo-Palacios, P. Soto-Acosta, F. J. García-Peñalvo y A. García-Crespo, "A study of the impact of global software development in packaged software release planning," *Journal of Universal Computer Science*, vol. 18, no. 19, pp. 2646-2668, 2012. doi: 10.3217/jucs-018-19-2646.
- [263] F. J. García-Peñalvo, M. Alier y M. D. Lytras, "Some reflections about service oriented architectures, cloud computing applications, services and interoperability," *Journal of Universal Computer Science*, vol. 18, no. 11, pp. 1405-1409, 2012.
- [264] F. J. García-Peñalvo, R. Colomo-Palacios y M. D. Lytras, "Outcomes of international research projects on technology applied to education," *Journal of Universal Computer Science*, vol. 18, no. 1, pp. 1-4, 2012.
- [265] F. J. García-Peñalvo, R. Colomo-Palacios y M. D. Lytras, "Informal learning in work environments: Training with the Social Web in the workplace," *Behaviour & Information Technology*, vol. 31, no. 8, pp. 753-755, 2012. doi: 10.1080/0144929X.2012.661548.
- [266] J. A. Merlo-Vega y T. Ferreras-Fernández, "Digital preservation and distribution of the education and the library journal by the University of Salamanca's Gredos Repository," *El Profesional de la Información*, vol. 22, no. 2, pp. 143-148, 2013. doi: 10.3145/epi.2013.mar.08.
- [267] M. Á. Conde-González, F. J. García-Peñalvo, M. Alier, E. Mayol y C. Fernández-Llamas, "Implementation and design of a service-based framework to integrate personal and institutional learning environments," *Science of Computer Programming*, vol. 88, pp. 41-53, 2014. doi: 10.1016/j.scico.2013.10.012.

- [268] C. Maderuelo, A. Martín-Suárez, J. S. Pérez-Blanco, H. Zazo, J. Cruz-Benito y A. Domínguez-Gil, "Facility-based inspection training in a virtual 3D laboratory," *Accreditation and Quality Assurance*, vol. 19, no. 5, pp. 403-409, 2014. doi: 10.1007/s00769-014-1065-4.
- [269] M. Á. Conde-González, F. J. García-Peñalvo, C. Fernández-Llamas y A. García-Holgado, "The application of business process model notation to describe a methodology for the recognition, tagging and acknowledge of informal learning activities," *International Journal of Engineering Education (IJEE)*, vol. 31, no. 3, pp. 884-892, 2015.
- [270] Á. Fidalgo-Blanco, D. Leris, M. L. Sein-Echaluce y F. J. García-Peñalvo, "Monitoring indicators for CTMTC: Comprehensive training model of the teamwork competence in engineering domain," *International Journal of Engineering Education (IJEE)*, vol. 31, no. 3, pp. 829-838, 2015.
- [271] F. J. García-Peñalvo y R. Colomo-Palacios, "Innovative teaching methods in engineering," *International Journal of Engineering Education (IJEE)*, vol. 31, no. 3, pp. 689-693, 2015.
- [272] A. B. González-Rogado, A. M. Vivar Quintana y I. Elorza, "Mobile technology in academic laboratories in engineering," *International Journal of Engineering Education*, vol. 31, no. 3, pp. 694-701, 2015.
- [273] J. Mena, M. L. García, A. Clarke y A. Barkatsas, "An analysis of three different approaches to student teacher mentoring and their impact on knowledge generation in practicum settings," *European Journal of Teacher Education*, vol. 39, no. 1, pp. 53-76, 2016. doi: 10.1080/02619768.2015.1011269.
- [274] E. M. Torrecilla Sánchez, S. Olmos-Migueláñez y M. J. Rodríguez-Conde, "Efectos de la metodología didáctica sobre el aprendizaje de competencias para la gestión de conflictos en educación secundaria," *Educación XXI*, vol. 19, no. 2, pp. 293-315, 2016. doi: 10.5944/educxx1.16468.
- [275] A. García-Valcárcel Muñoz-Repiso y F. J. Tejedor, "Percepción de los estudiantes sobre el valor de las TIC en sus estrategias de aprendizaje y su relación con el rendimiento," *Educación XXI*, vol. 20, no. 2, pp. 137-159, 2017. doi: 10.5944/educXXI.13447.
- [276] N. Arroyo-Vázquez y J. A. Merlo-Vega, "Comparing the usage data of an app and a mobile website for an academic library," *El Profesional de la Información*, vol. 26, no. 6, pp. 1119-1126, 2017. doi: 10.3145/epi.2017.nov.11.
- [277] M.-A. Tena-Espinoza-de-los-Monteros y J. A. Merlo-Vega, "Tecnología cívica para la participación ciudadana. El caso de Codeando México," *El Profesional de la Información*, vol. 26, no. 1, pp. 114-124, 2017. doi: 10.3145/epi.2017.ene.12.
- [278] D. Fonseca Escudero, M. Á. Conde-González y F. J. García-Peñalvo, "Improving the information society skills: Is knowledge accessible for all?," *Universal Access in the Information Society*, vol. In Press, 2018. doi: 10.1007/s10209-017-0548-6.
- [279] Á. Fidalgo-Blanco, M. L. Sein-Echaluce y F. J. García-Peñalvo, "Ontological flip teaching: A flip teaching model based on knowledge management," *Universal Access in the Information Society*, vol. In Press, 2017. doi: 10.1007/s10209-017-0556-6.
- [280] F. J. García-Peñalvo y L. Moreno, "Special Issue on exploring new Natural User Experiences," *Universal Access in the Information Society*, vol. In Press, 2018. doi: 10.1007/s10209-017-0578-0.
- [281] M. Alier Forment *et al.*, "Didactical Patterns for the Usage of Wikis in Educational and Learning Activities," *International Journal of Engineering Education*, vol. 28, no. 6, pp. 1347-1352, 2012.
- [282] M. Sierra y M. C. López Esteban, "La descentralización del currículo de matemáticas en la educación obligatoria en España durante la década 1990-2000," *Enseñanza de las Ciencias*, vol. 30, no. 2, pp. 275-296, 2012. doi: 10.5565/rev/ec/v30n2.425.
- [283] P. Zapata-Sepúlveda, P. A. Fernández-Dávila Jara y M. C. Sánchez Gómez, "Violencia de género en mujeres con ascendencia étnica aymara en el extremo norte de Chile," *Revista de Psiquiatría y Salud Mental*, vol. 5, no. 3, pp. 769-777, 2012. doi: 10.1016/j.rpsm.2012.02.003.
- [284] M. Á. Conde-González, F. J. García-Peñalvo, M. Alier, M. J. Casany y J. Piguillem, "Mobile devices applied to Computer Science subjects to consume institutional functionalities through a Personal Learning Environment," *International Journal of Engineering Education (IJEE)*, vol. 29, no. 3, pp. 610-619, 2013.
- [285] F. J. García-Peñalvo, J. Á. Velázquez-Iturbide y M. Llamas-Nistal, "International research projects on socio-semantic technologies applied to education," *Journal of Universal Computer Science*, vol. 19, no. 11, pp. 1496-1499, 2013.
- [286] R. Colomo-Palacios, J. L. López-Cuadrado, I. González-Carrasco y F. J. García-Peñalvo, "SABUM0-dTest: Design and Evaluation of an Intelligent collaborative distributed testing framework," *Computer Science and Information Systems (ComSIS)*, vol. 11, no. 1, pp. 29-45, 2014. doi: 10.2298/CSIS130129019C.

- [287] A. Hervás, F. Buendía García y F. J. García-Peñalvo, "A Method of Assessing Academic Learning Experiences in Virtual Learning Environments," *IEEE Latin America Transactions*, vol. 12, no. 2, pp. 219-226, 2014. doi: 10.1109/TLA.2014.6749541.
- [288] A. V. Martín García y M. C. Sánchez-Gómez, "Modelo predictivo de la intención de adopción de blended learning en profesores universitarios," *Universitas Psychologica*, vol. 13, no. 2, pp. 601-614, 2014.
- [289] A. V. Martín García, M. J. Hernández Serrano y M. C. Sánchez-Gómez, "Phases and profile of blended learning adopters in university contexts. The CHAID analysis," *Revista Española de Pedagogía*, vol. 72, no. 259, pp. 457-476, 2014.
- [290] J. L. Muñoz, M. C. Sánchez-Gómez, B. Palacios Vicario y M. Á. Franco Martín, "Approach and treatment of suicidal behavior in the clinical practice of different groups of health professionals in Spain: Results of the project EUREGENAS," *Revista Escola Enfermagem USP*, vol. 48, no. Esp2, pp. 139-147, 2014. doi: 10.1590/S0080-623420140000800021.
- [291] R. Hernández-Rizzardini, F. J. García-Peñalvo y C. Delgado Kloss, "Massive Open Online Courses: Combining methodologies and architectures for a success learning," *Journal of Universal Computer Science*, vol. 21, no. 5, pp. 636-637, 2015.
- [292] J. A. Merlo-Vega y C. M. Chu, "Out of necessity comes unbridled imagination for survival: Contributive justice in Spanish libraries during economic crisis," *Library Trends*, vol. 64, no. 2, pp. 299-328, 2015. doi: 10.1353/lib.2015.0051.
- [293] M. Minović, F. J. García-Peñalvo y N. A. Kearney, "Gamification in engineering education," *International Journal of Engineering Education (IJEE)*, vol. 32, no. 1B, pp. 308-309, 2016.
- [294] M. L. Sein-Echaluce, Á. Fidalgo-Blanco y F. J. García-Peñalvo, "Students' knowledge sharing to improve learning in engineering academic courses," *International Journal of Engineering Education (IJEE)*, vol. 32, no. 2B, pp. 1024-1035, 2016.
- [295] C. Fernández, G. Esteban, M. Á. Conde-González y F. J. García-Peñalvo, "Improving motivation in a haptic teaching/learning framework," *International Journal of Engineering Education (IJEE)*, vol. 32, no. 1B, pp. 553-562, 2016.
- [296] R. Durán-Martínez, F. Beltrán-Llavador y F. Martínez-Abad, "A contrastive analysis between novice and expert teachers' perceptions of school bilingual programmes," *Cultura y Educación*, vol. 28, no. 4, pp. 738-770, 2016. doi: 10.1080/11356405.2016.1237339.
- [297] J. P. Hernández-Ramos, F. Martínez-Abad, S. Olmos-Migueláñez y M. J. Rodríguez-Conde, "Evaluación de competencias informacionales con el instrumento IL-HUMASS: Escalamiento multidimensional," *Revista Iberoamericana de Diagnóstico y Evaluación Psicológica*, vol. 2, no. 42, pp. 39-48, 2016.
- [298] M. V. Martín Cilleros y M. C. Sánchez-Gómez, "Qualitative analysis of topics related to the quality of life of people with disabilities," *Ciência & Saúde Coletiva*, vol. 21, no. 8, pp. 2365-2374, 2016. doi: 10.1590/1413-81232015218.04182016.
- [299] J. Joo-Nagata, J. García-Bermejo Giner y F. Martínez Abad, "Augmented reality in pedestrian navigation applied in a context of mobile learning: Resources for enhanced comprehension of Science, Technology, Engineering and Mathematics," *International Journal of Engineering Education*, vol. 33, no. 2B, pp. 768-780, 2017.
- [300] F. J. García-Peñalvo y M. Llamas Nistal, "The engineering behind the technological-based educational innovation," *International Journal of Engineering Education (IJEE)*, vol. 33, no. 2B, pp. 763-767, 2017.
- [301] P. R. Humanante-Ramos, F. J. García-Peñalvo y M. Á. Conde-González, "Electronic devices and Web 2.0 tools: Usage trends in engineering students," *International Journal of Engineering Education (IJEE)*, vol. 33, no. 2B, pp. 790-796, 2017.
- [302] M. L. Sein-Echaluce Laclela, Á. Fidalgo-Blanco, J. Esteban-Escaño y F. J. García-Peñalvo, "The learning improvement of engineering students using peer-created complementary resources," *International Journal of Engineering Education (IJEE)*, vol. 33, no. 2B, pp. 927-937, 2017.
- [303] M. L. Sein-Echaluce, Á. Fidalgo-Blanco, J. Esteban-Escaño, F. J. García-Peñalvo y M. Á. Conde, "Using learning analytics to detect authentic leadership characteristics at engineering degrees," *International Journal of Engineering Education (IJEE)*, vol. In Press, 2018.
- [304] I. González-Carrasco, R. Colomo-Palacios, J. L. López-Cuadrado y F. J. García-Peñalvo, "SEffEst: Effort estimation in software projects using fuzzy logic and neural networks," *International Journal of Computational Intelligence Systems*, vol. 5, no. 4, pp. 679-699, Aug 2012. doi: 10.1080/18756891.2012.718118.

- [305] R. Durán Martínez, G. Gutiérrez, F. Beltrán Llavador y F. Martínez-Abad, "The impact of an Erasmus placement in students' perception of their intercultural communicative competence," *Journal of Intercultural Communication Research*, vol. 45, no. 4, pp. 338-354, 2016. doi: 10.1080/17475759.2016.1186721.
- [306] F. J. García-Peñalvo, M. Ortega-Cantero y P. Rodríguez, "Special Collection on Computers & Education," *Journal of Research and Practice in Information Technology (JRPIT)*, vol. 45, no. 3/4, pp. 171-174, 2013.
- [307] E. Pizarro Lucas, J. Cruz-Benito y O. Gil Gonzalo, "USALSIM: learning, professional practices and employability in a 3D virtual world," *International Journal of Technology Enhanced Learning*, vol. 5, no. 3/4, pp. 307-321, 2013. doi: 10.1504/IJTEL.2013.059498.
- [308] C. López García, M. C. Sánchez Gómez y B. Palacios Vicario, "Estado actual de los proyectos colaborativos educativos en Twitter," *Historia y Comunicación Social*, vol. 18, no. Esp. Dic., pp. 733-751, 2013. doi: 10.5209/rev\_HICS.2013.v18.44362.
- [309] F. J. García-Peñalvo, "Informal Learning Management Experiences," *International Journal of Human Capital and Information Technology Professionals (IJHCITP)*, vol. 5, no. 3, pp. iv-ix, 2014.
- [310] F. J. García-Peñalvo, J. Cruz-Benito, C. Maderuelo, J. S. Pérez-Blanco y A. Martín-Suárez, "Usalpharma: A cloud-based architecture to support quality assurance training processes in health area using virtual worlds," *The Scientific World Journal*, vol. 2014, 2014. doi: 10.1155/2014/659364.
- [311] C. Viegas *et al.*, "TRAILER - a Tool for Managing Informal Learning," *International Journal of Human Capital and Information Technology Professionals (IJHCITP)*, vol. 5, no. 3, pp. 1-17, 2014. doi: 10.4018/ijhcitp.2014070101.
- [312] F. J. García-Peñalvo, "Engineering contributions to a Knowledge Society multicultural perspective," *IEEE Revista Iberoamericana de Tecnologías del Aprendizaje (IEEE RITA)*, vol. 10, no. 1, pp. 17-18, 2015. doi: 10.1109/RITA.2015.2391371.
- [313] M. Á. Conde-González, F. J. García-Peñalvo, D. A. Gómez-Aguilar y R. Therón, "Exploring software engineering subjects by using visual learning analytics techniques," *IEEE Revista Iberoamericana de Tecnologías del Aprendizaje (IEEE RITA)*, vol. 10, no. 4, pp. 242-252, 2015. doi: 10.1109/RITA.2015.2486378.
- [314] S. Casillas Martín, M. Cabezas y J. Martín, "Knowledge management: Experiences of collaborative work using ICT with students," *Digital Education Review*, vol. 30, pp. 184-206, 2016.
- [315] A. Pérez Escoda y M. J. Rodríguez-Conde, "Evaluación de las competencias digitales autopercebidas del profesorado de Educación Primaria en Castilla y León," *Revista de Investigación Educativa*, vol. 34, no. 2, pp. 399-415, 2016. doi: 10.6018/rie.34.2.215121.
- [316] E. M. Torrecilla Sánchez, S. Olmos-Migueláñez, M. J. Rodríguez-Conde y F. Martínez-Abad, "Eficacia de un programa de formación de profesorado de Educación Secundaria sobre resolución de conflictos, con apoyo tecnológico," *Digital Education Review*, vol. 29, pp. 193-226, 2016.
- [317] S. Nieto Isidro, F. Martínez-Abad y M. J. Rodríguez-Conde, "La influencia de la elección de materias en la Prueba de Acceso a la Universidad en los conocimientos matemáticos de los estudiantes de Ingeniería," *Revista Complutense de Educación*, vol. 28, no. 1, pp. 125-144, 2017. doi: 10.5209/rev\_RCED.2017.v28.n1.48977.
- [318] M. C. Sánchez-Gómez, A. M. Pinto-Llorente y F. J. García-Peñalvo, "The Impact of wikis and discussion boards on learning English as a second language. A mixed methods research," *Digital Education Review*, vol. 32, pp. 35-59, 2017.
- [319] E. M. Torrecilla Sánchez, M. J. Rodríguez-Conde, S. Olmos-Migueláñez y P. Torrijos Fincias, "Determinantes de la satisfacción de los profesores de secundaria, como indicador de calidad de un programa formativo en resolución de conflictos," *Revista Complutense de Educación*, vol. 28, no. 2, pp. 517-535, 2017. doi: 10.5209/rev\_RCED.2017.v28.n2.49572.
- [320] J. Mena y T. Russell, "Collaboration, Multiple methods, trustworthiness: Issues arising from the 2014 Conference on Self Study of Teacher Education Practices," *Studying Teacher Education*, vol. 13, no. 1, pp. 105-122, 2017. doi: 10.1080/17425964.2017.1287694.
- [321] A. García-Valcárcel Muñoz-Repiso y V. Basilotta Gómez-Pablos, "Aprendizaje Basado en Proyectos (ABP): Evaluación desde la perspectiva de alumnos de Educación Primaria," *Revista Investigación Educativa*, vol. 35, no. 1, pp. 113-131, 2017. doi: 10.6018/rie.35.1.246811.
- [322] A. García-Valcárcel Muñoz-Repiso y F. J. Tejedor Tejedor, "Valoración del trabajo colaborativo en los procesos de enseñanza-aprendizaje en entornos escolares con alto nivel TIC," *Estudios sobre Educación*, vol. 34, pp. 155-175, 2018. doi: 10.15581/004.34.155-175 .

- [323] E. M. Morales-Morgado, F. J. García-Peñalvo, C. Muñoz, M. Á. Conde-González y E. Díaz San Millán, "Promoting quality during learning-object management through experts and users," *International Journal of Technology Enhanced Learning*, vol. 3, no. 2, pp. 190-203, 2011. doi: 10.1504/IJTEL.2011.039402.
- [324] M. Á. Conde-González, D. A. Gómez, A. Pozo y F. J. García-Peñalvo, "Web services layer for Moodle 2.0: A new area of possibilities in web based learning," *International Journal of Technology Enhanced Learning (IJTEL)*, vol. 3, no. 3, pp. 308-321, 2011. doi: 10.1504/IJTEL.2011.040227.
- [325] F. J. García-Peñalvo, V. Zangrando, A. M. Seoane-Pardo, A. García-Holgado y E. Ovide, "Learning European history and geography in a multicultural and ICT perspective," *International Journal of Technology Enhanced Learning (IJTEL)*, vol. 3, no. 4, pp. 343-354, 2011. doi: 10.1504/IJTEL.2011.041278.
- [326] A. García-Valcárcel, A. Hernández y A. Recamán, "La metodología del aprendizaje colaborativo a través de las TIC: Una aproximación a las opiniones de profesores y alumnos," *Revista Complutense de Educación*, vol. 23, no. 1, pp. 161-188, 2012.
- [327] A. Iglesias Rodríguez y F. Beltrán LLavador, "Prácticum sin fronteras: Estudio de un caso de acción y reflexión intercultural y pedagógica," *Teoría de la Educación: Revista Interuniversitaria*, vol. 24, no. 1, pp. 105-131, 2012.
- [328] M. Á. Conde-González y F. J. García-Peñalvo, "Mobile Personal Learning applied to a software engineering subject," *IEEE Revista Iberoamericana de Tecnologías del Aprendizaje (IEEE RITA)*, vol. 9, no. 3, pp. 114-121, 2014. doi: 10.1109/RITA.2014.2340051.
- [329] J. M. Doderó *et al.*, "Development of e-learning solutions: Different approaches, a common mission," *IEEE Revista Iberoamericana de Tecnologías del Aprendizaje (IEEE RITA)*, vol. 9, no. 2, pp. 72-80, 2014. doi: 10.1109/RITA.2014.2317532.
- [330] F. J. García-Peñalvo, "Managing the knowledge society construction," *International Journal of Knowledge Management*, vol. 10, no. 4, pp. iv-vii, 2014.
- [331] F. J. García-Peñalvo, A. Sarasa Cabezuelo y J. L. Sierra González, "Innovating in the engineering processes: Engineering as a means of innovation," *IEEE Revista Iberoamericana de Tecnologías del Aprendizaje (IEEE RITA)*, vol. 9, no. 4, pp. 131-132, 2014. doi: 10.1109/RITA.2014.2363004.
- [332] F. J. García-Peñalvo, A. Sarasa-Cabezuelo y J. L. Sierra-Rodríguez, "Educational software: Case studies and development," *IEEE Revista Iberoamericana de Tecnologías del Aprendizaje (IEEE RITA)*, vol. 9, no. 2, pp. 41-42, 2014. doi: 10.1109/RITA.2014.2317521.
- [333] F. Martínez-Abad, M. J. Rodríguez-Conde y F. J. García-Peñalvo, "Evaluación del impacto del término "MOOC" vs "eLearning" en la literatura científica y de divulgación," *Profesorado. Revista de currículum y formación del profesorado*, vol. 18, no. 1, pp. 185-201, 2014.
- [334] E. M. Morales-Morgado, R. A. Campos Ortuño, L. L. Yang y T. Ferreras-Fernández, "Adaptation of descriptive metadata for managing educational resources in the GREDOS repository," *International Journal of Knowledge Management*, vol. 10, no. 4, pp. 50-72, 2014. doi: 10.4018/ijkm.2014100104.
- [335] S. Olmos-Migueláñez, F. Martínez-Abad, E. M. Torrecilla Sánchez y J. J. Mena-Marcos, "Análisis psicométrico de una escala de percepción sobre la utilidad de Moodle en la universidad," *RELIEVE - Revista Electrónica de Investigación y Evaluación Educativa*, vol. 20, no. 2, art. 1, 2014. doi: 10.7203/relieve.20.2.4221.
- [336] E. M. Torrecilla Sánchez, F. Martínez-Abad, S. Olmos-Migueláñez y M. J. Rodríguez-Conde, "Formación en competencias básicas para el futuro profesorado de educación secundaria: competencias informacionales y de resolución de conflictos," *Profesorado, Revista de Currículum y Formación del Profesorado*, vol. 18, no. 2, pp. 189-208, 2014.
- [337] A. M. Vivar Quintana *et al.*, "Application of new assessment tools in engineering studies: The rubric," *IEEE Revista Iberoamericana de Tecnologías del Aprendizaje (IEEE RITA)*, vol. 9, no. 4, pp. 139-143, 2014. doi: 10.1109/RITA.2014.2363008.
- [338] F. J. García-Peñalvo y M. S. Ramírez Montoya, "Educational innovation with a multicultural perspective," *Journal of Cases on Information Technology*, vol. 17, no. 1, pp. iv-vi, 2015.
- [339] C. Orozco Rodríguez, E. M. Morales-Morgado y F. Gonçalves da Silva Cordeiro Moita, "Learning objects and geometric representation for teaching "Definition and applications of geometric vector", " *Journal of Cases on Information Technology*, vol. 17, no. 1, pp. 13-30, 2015. doi: 10.4018/JCIT.2015010102.
- [340] A. M. Pinto-Llorente, M. C. Sánchez-Gómez y F. J. García-Peñalvo, "To be or not to be successful? That does not only depend on technology, but also on human factors," *Journal of Cases on Information Technology*, vol. 17, no. 1, pp. 51-71, 2015. doi: 10.4018/JCIT.2015010104.

- [341] A. M. Pinto-Llorente, M. C. Sánchez-Gómez y F. J. García-Peñalvo, "Assessing the effectiveness of interactive and collaborative resources to improve reading and writing in English," *International Journal of Human Capital and Information Technology Professionals (IJHCITP)*, vol. 7, no. 1, pp. 66-85, 2016. doi: 10.4018/IJHCITP.2016010105.
- [342] B. García-Riaza y A. Iglesias-Rodríguez, "Students' Perception of the integration of mobile devices as learning tools in pre-primary and primary teacher training degrees at the University of Salamanca," *International Journal of Human Capital and Information Technology Professionals (IJHCITP)*, vol. 7, no. 2, pp. 19-35, 2016. doi: 10.4018/IJHCITP.2016040102.
- [343] J. Cruz-Benito *et al.*, "Usalpharma: A software architecture to support learning in virtual worlds," *IEEE Revista Iberoamericana de Tecnologías del Aprendizaje (IEEE RITA)*, vol. 11, no. 3, pp. 194-204, 2016. doi: 10.1109/RITA.2016.2589719.
- [344] F. J. García-Peñalvo, "Technological ecosystems," *IEEE Revista Iberoamericana de Tecnologías del Aprendizaje (IEEE RITA)*, vol. 11, no. 1, pp. 31-32, 2016. doi: 10.1109/RITA.2016.2518458.
- [345] P. R. Humante-Ramos, F. J. García-Peñalvo y M. Á. Conde-González, "PLEs in mobile contexts: New ways to personalize learning," *IEEE Revista Iberoamericana de Tecnologías del Aprendizaje (IEEE RITA)*, vol. 11, no. 4, pp. 220-226, 2016. doi: 10.1109/RITA.2016.2619121.
- [346] J. Joo Nagata, J. R. García-Bermejo Giner y F. Martínez-Abad, "Virtual heritage of the territory: Design and implementation of educational resources in augmented reality and mobile pedestrian navigation," *IEEE Revista Iberoamericana de Tecnologías del Aprendizaje (IEEE RITA)*, vol. 11, no. 1, pp. 41-46, 2016. doi: 10.1109/RITA.2016.2518460.
- [347] M. Cabezas, S. Casillas y A. Hernández, "A case study on computer supported collaborative learning in Spanish schools," *Journal of Information Technology Research*, vol. 9, no. 2, pp. 89-102, 2016. doi: 10.4018/JITR.2016040105.
- [348] F. J. García-Peñalvo, "Digital humanities data processing," *Journal of Information Technology Research*, vol. 9, no. 1, pp. v-viii, 2016.
- [349] F. J. García-Peñalvo, "Mobile information technologies," *Journal of Information Technology Research*, vol. 9, no. 2, pp. v-ix, 2016.
- [350] F. J. García-Peñalvo, "What computational thinking is," *Journal of Information Technology Research*, vol. 9, no. 3, pp. v-viii, 2016.
- [351] A. García-Valcárcel, V. Basilotta y I. Mulas, "Fomentando la ciudadanía digital mediante un proyecto de aprendizaje colaborativo entre escuelas rurales y urbanas para aprender inglés," *Profesorado, revista de currículum y formación del profesorado*, vol. 20, no. 3, pp. 549-581, 2016.
- [352] F. Martínez-Abad, P. Torrijos-Fincias y M. J. Rodríguez-Conde, "The eAssessment of key competences and their relationship with academic performance," *Journal of Information Technology Research*, vol. 9, no. 4, pp. 16-27, 2016. doi: 10.4018/JITR.2016100102.
- [353] M. Sotos, M. C. López Esteban y S. A. B., "La perspectiva biográfica. El proceso de construcción del saber pedagógico," *Teoría de la Educación*, vol. 28, no. 2, pp. 249-265, 2016. doi: 10.14201/teoredu282249265.
- [354] F. Martínez-Abad, L. Lizasoain Hernández, M. Castro Morera y L. M. Joaristi Olariaga, "Selección de escuelas de alta y baja eficacia en Baja California (México)," *Revista Electrónica de Investigación Educativa*, vol. 19, no. 2, pp. 38-53, 2017. doi: 10.24320/redie.2017.19.2.960.
- [355] J. Alves, N. Lima, G. Alves y F. J. García-Peñalvo, "Adjusting higher education competences to companies professional needs: A case study in an engineering master's degree," *International Journal of Human Capital and Information Technology Professionals (IJHCITP)*, vol. 8, no. 1, pp. 66-78, 2017. doi: 10.4018/IJHCITP.2017010105.
- [356] J. Cruz-Benito, O. Borrás Gené, F. J. García-Peñalvo, Á. Fidalgo-Blanco y R. Therón, "Learning communities in social networks and their relationship with the MOOCs," *IEEE Revista Iberoamericana de Tecnologías del Aprendizaje*, vol. 12, no. 1, pp. 24-36, 2017. doi: 10.1109/RITA.2017.2655218.
- [357] S. Nieto Isidro y H. Ramos, "Use of a symbolic computation program to reinforce the spatial abilities of engineering students," *IEEE Revista Iberoamericana de Tecnologías del Aprendizaje (IEEE RITA)*, vol. 12, no. 1, pp. 37-44, 2017. doi: 10.1109/RITA.2017.2658978.
- [358] F. J. García-Peñalvo, "Publishing in open access," *Journal of Information Technology Research*, vol. 10, no. 3, pp. vi-viii, 2017.
- [359] M. V. Martín-Cilleros, A. Sánchez-Prada, M. C. Delgado-Álvarez y M. C. Sánchez-Gómez, "Valoración de un diseño educativo tecnológico para prevenir el abandono escolar," *RISTI - Revista Ibérica de Sistemas e Tecnologías de Informação*, no. 23, pp. 61-77, 2017. doi: 10.17013/risti.23.61-77.

- [360] C. Orozco y E. M. Morales-Morgado, "Geometric Representations built with GeoGebra for improving the visualization and reasoning cognitive process," *Journal of Information Technology Research*, vol. 10, no. 1, pp. 39-58, 2017. doi: 10.4018/JITR.2017010104.
- [361] F. J. García-Peñalvo, "Technological ecosystems for enhancing the interoperability and data flows," *Journal of Information Technology Research*, vol. 11, no. 1, pp. vi-x, 2018.
- [362] F. J. García-Peñalvo, "Computational thinking," *IEEE Revista Iberoamericana de Tecnologías del Aprendizaje (IEEE RITA)*, vol. 13, no. 1, pp. 17-19, 2018. doi: 10.1109/RITA.2018.2809939.
- [363] A. Rojas y F. J. García-Peñalvo, "Learning scenarios for the subject Methodology of Programming from evaluating the Computational Thinking of new students," *IEEE Revista Iberoamericana de Tecnologías del Aprendizaje (IEEE RITA)*, vol. 13, no. 1, pp. 30-36, 2018. doi: 10.1109/RITA.2018.2809941.
- [364] F. J. García-Peñalvo, "Educational Innovation Successful Cases - Part 1," *Journal of Cases on Information Technology*, vol. 16, no. 3, pp. 1-3, 2014. doi: 10.4018/jcit.2014070101.
- [365] F. J. García-Peñalvo, "Educational Innovation Successful Cases - Part 2," *Journal of Cases on Information Technology*, vol. 16, no. 4, pp. iv-vii, 2014.
- [366] F. J. García-Peñalvo, M. Á. Conde-González, M. Alíer y R. Colomo-Palacios, "A case study for measuring Informal Learning in PLEs," *International Journal of Emerging Technologies in Learning (IJET)*, vol. 9, no. 7, pp. 47-55, 2014. doi: 10.3991/ijet.v9i7.3734.
- [367] A. Iglesias Rodríguez, M. C. Sánchez-Gómez y C. Pedrero Muñoz, "Case study on collaborative work experiences with web 2.0 in spanish Primary Schools with the Highest Institutional Accreditation Level," *Journal of Cases on Information Technology (JCIT)*, vol. 16, no. 3, pp. 33-50, 2014. doi: 10.4018/JCIT.2014070104.
- [368] S. Nieto Isidro y H. Ramos, "Improving mathematical competencies of students accessing to Higher Education from Vocational Training Modules," *Journal of Cases on Information Technologies*, vol. 16, no. 3, pp. 56-69, 2014. doi: 10.4018/jcit.2014070105.
- [369] M. F. Jiménez *et al.*, "Impact of the objective evaluation of clinical and surgical basic skills (CSBS) on medicine students (Spain): An experimental design," *Journal of Information Technology Research*, vol. 7, no. 2, pp. 52-62, 2014. doi: 10.4018/jitr.2014040105.
- [370] A. Martín-Suárez *et al.*, "Scientific knowledge transfer training through a virtual world," *Journal of Information Technology Research*, vol. 7, no. 2, pp. 24-35, 2014. doi: 10.4018/jitr.2014040103.
- [371] J. S. Pérez-Blanco *et al.*, "Construcción de una plataforma online para la difusión de resultados científicos (pFARMA) de la Facultad de Farmacia de Salamanca," *Ars Pharmaceutica*, vol. 55, no. suppl2, pp. 45-46, 2014.
- [372] J. S. Pérez-Blanco *et al.*, "Educafarma 2.0 Programa de formación continuada de profesores y alumnos de la Facultad de Farmacia de Salamanca con recursos propios," *Ars Pharmaceutica*, vol. 55, no. suppl2, pp. 39-40, 2014.
- [373] M. C. Sánchez Gómez, B. Palacios Vicario, C. López García y A. Sánchez García, "Percepciones de los empresarios de Pymes rurales sobre la integración de las TIC," *RISTI - Revista Iberica de Sistemas e Tecnologías de Informacao*, vol. E2, pp. 71-84, 2014.
- [374] F. J. García-Peñalvo, "Information technology research," *Journal of Information Technology Research*, vol. 8, no. 1, pp. iv-v, 2015.
- [375] M. González Sánchez, S. Olmos-Migueláñez y S. Serrate González, "Pensamiento y acción socioeducativa en contextos de enseñanza secundaria. Un estudio descriptivo-correlacional," *Teoría de la Educación*, vol. 27, no. 2, pp. 91-114, 2015. doi: 10.14201/teoredu201527291114.
- [376] F. J. García-Peñalvo y M. S. Ramírez Montoya, "Technology cases for improving the university Third Mission," *Journal of Cases on Information Technology*, vol. 18, no. 4, pp. v-viii, 2016.
- [377] A. García-Valcárcel Muñoz-Repiso y M. Martín del Pozo, "¿Se sienten preparados los graduados en maestro de primaria para afrontar la profesión docente?," *Bordón. Revista de Pedagogía*, vol. 68, no. 2, pp. 69-84, 2016. doi: 10.13042/Bordon.2016.68205.
- [378] M. Bielba Calvo, F. Martínez-Abad y M. J. Rodríguez-Conde, "Validación psicométrica de un instrumento de evaluación de competencias informacionales en la educación secundaria," *Bordón. Revista de Pedagogía*, vol. 69, no. 1, pp. 27-43, 2017. doi: 10.13042/Bordon.2016.48593.
- [379] F. Martínez-Abad y M. J. Rodríguez-Conde, "Comportamiento de las correlaciones producto-momento y tetracórica-policórica en escalas ordinales: Un estudio de simulación," *RELIEVE - Revista Electrónica de Investigación y Evaluación Educativa*, vol. 23, no. 2, 2017. doi: 10.7203/relieve.23.2.9476.

- [380] M. A. Tena-Espinoza-de-los-Monteros, A. García-Holgado, J. A. Merlo-Vega y F. J. García-Peñalvo, "Diseño de un plan de visibilidad científica e identidad digital para los investigadores de la Universidad de Guadalajara (México)," *Ibersid: Revista de sistemas de información y documentación*, vol. 11, no. 1, pp. 83-92, 2017.
- [381] J. Joo-Nagata, F. Martínez Abad y J. García-Bermejo Giner, "Realidad aumentada y navegación peatonal móvil con contenidos patrimoniales: Percepción del aprendizaje," *RIED. Revista Iberoamericana de Educación a Distancia*, vol. 20, no. 2, pp. 93-118, 2017. doi: 10.5944/ried.20.2.17602.
- [382] M. V. Agila-Palacios, M. S. Ramírez-Montoya, A. García-Valcárcel y J. Samaniego-Franco, "Uso de la tableta digital en entornos universitarios de aprendizaje a distancia," *RIED. Revista Iberoamericana de Educación a Distancia*, vol. 20, no. 2, pp. 255-271, 2017. doi: 10.5944/ried.20.2.17712.
- [383] J. C. Sánchez-Prieto, S. Olmos-Migueláñez y F. J. García-Peñalvo, "Motivación e innovación: Aceptación de tecnologías móviles en los maestros en formación," *Revista Iberoamericana de Educación a Distancia*, vol. 20, no. 2, pp. 273-292, 2017. doi: 10.5944/ried.20.2.17700.
- [384] F. J. García-Peñalvo, "Mitos y realidades del acceso abierto," *Education in the Knowledge Society*, vol. 18, no. 1, pp. 7-20, 2017. doi: 10.14201/eks2017181720.
- [385] N. M. Lima, M. C. Viegas y F. J. García-Peñalvo, "Learning from complementary ways of developing experimental competences," *Education in the Knowledge Society*, vol. 18, no. 1, pp. 63-74, 2017. doi: 10.14201/eks20171816374.
- [386] F. Llorens Largo, F. J. García-Peñalvo, X. Molero Prieto y E. Vendrell Vidal, "La enseñanza de la informática, la programación y el pensamiento computacional en los estudios preuniversitarios," *Education in the Knowledge Society*, vol. 18, no. 2, pp. 7-17, 2017. doi: 10.14201/eks2017182717.
- [387] F. J. García-Peñalvo, "The Future of Institutional Repositories," *Education in the Knowledge Society*, vol. 18, no. 4, pp. 7-19, 2017. doi: 10.14201/eks2017184719.
- [388] F. J. García-Peñalvo y M. S. Ramírez-Montoya, "Aprendizaje, Innovación y Competitividad: La Sociedad del Aprendizaje," *RED. Revista de Educación a Distancia*, vol. 52, art. 1, 2017. doi: 10.6018/red/52/1.
- [389] A. M. Pinto Llorente, M. C. Sánchez Gómez, F. J. García-Peñalvo y M. Cabezas, "La modalidad semipresencial y la pronunciación de la lengua inglesa: Resultados de un modelo apoyado con TIC," *RED-Revista de Educación a Distancia*, vol. 52, art. 4, 2017. doi: 10.6018/red/52/4.
- [390] F. J. García-Peñalvo, J. Cruz-Benito, M. Martín-González, A. Vázquez-Ingelmo, J. C. Sánchez-Prieto y R. Therón, "Proposing a machine learning approach to analyze and predict employment and its factors," *International Journal of Interactive Multimedia and Artificial Intelligence*, vol. In Press, 2018. doi: 10.9781/ijimai.2018.02.002.
- [391] F. J. García-Peñalvo, "The transversal competences of graduates of university master's degrees," *Education in the Knowledge Society*, vol. 19, no. 1, pp. 7-19, 2018. doi: 10.14201/eks2018191719.
- [392] F. Michavila, J. M. Martínez, M. Martín-González, F. J. García-Peñalvo y J. Cruz Benito, "Empleabilidad de los titulados universitarios en España. Proyecto OEEU," *Education in the Knowledge Society*, vol. 19, no. 1, pp. 21-39, 2018. doi: 10.14201/eks20181912139.
- [393] F. J. García-Peñalvo, L. Vicent, M. Ribó, A. Climent, J. L. Sierra y A. Sarasa Eds., "2012 International Symposium on Computers in Education (SIIE)." USA: IEEE, 2012. Available from: <https://goo.gl/ePLxPF>.
- [394] F. J. García-Peñalvo, L. Vicent, M. Ribó, A. Climent, J. L. Sierra y A. Sarasa Eds., "Actas del XIV Simposio Internacional de Informática Educativa – SIIE 2012 (Andorra la Vella, Andorra, 29-31 de octubre de 2012)." Andorra la Vella, Andorra: Publicaciones La Salle, La Salle Open University, 2012.
- [395] F. J. García-Peñalvo y J. A. Mendes Eds., "XVIII Simposio Internacional de Informática Educativa, SIIE 2016," Aquilafuente 222. Salamanca, España: Ediciones Universidad de Salamanca, 2016. Available from: <https://goo.gl/zNJf6U>.
- [396] F. J. García-Peñalvo y J. A. Mendes, *2016 International Symposium on Computers in Education (SIIE 16) (Salamanca, Spain, September 13-15, 2016)*. USA: IEEE, 2016. Available from: <https://goo.gl/8n8b6Y>.
- [397] L. Moreno López, E. J. Rubia Cuestas, V. M. R. Penichet y F. J. García-Peñalvo Eds., "Actas del XVII Congreso Internacional de Interacción Persona-Ordenador – Interacción 2016," Aquilafuente 221. Salamanca, España: Ediciones Universidad de Salamanca, 2016. Available from: <https://goo.gl/vDeE5n>.
- [398] L. Moreno López, E. J. Rubia Cuestas, V. M. R. Penichet y F. J. García-Peñalvo Eds., "Proceedings of the XVII International Conference on Human Computer Interaction (Salamanca, Spain – September 13 - 16, 2016)." New York, NY, USA: ACM, 2016. Available from: <https://goo.gl/vjCWQv>.



- [399] AIDIPE Ed. "Actas XVIII Congreso Internacional de Investigación Educativa. Interdisciplinariedad y transferencia, AIDIPE 2017, (Salamanca, España, 28-30 de junio de 2017)." Salamanca: Instituto Universitario de Ciencias de la Educación (IUCE), 2017. Available from: <https://goo.gl/EZuhEL>.
- [400] AIDIPE Ed. "Actas I Encuentro de doctorandos e investigadores noveles. Interdisciplinariedad y transferencia, AIDIPE 2017, (Salamanca, España, 28 de junio de 2017)." Salamanca: Instituto Universitario de Ciencias de la Educación (IUCE), 2017. Available from: <https://goo.gl/6591eN>.
- [401] J. Mena, A. García-Valcárcel, F. J. García-Peñalvo y M. Martín del Pozo Eds., "Search and research: Teacher Education for contemporary contexts," Colección Aquilafuente 227. Salamanca, Spain: Ediciones Universidad de Salamanca, 2017. Available from: <https://goo.gl/TjGzsy>.
- [402] A. P. Costa, M. C. Sánchez-Gómez y M. V. Martín-Cilleros Eds., "La Práctica de la investigación cualitativa: Ejemplificación de estudios (2ª Parte)." Aveiro, Portugal: Ludomedia, 2017. Available from: <https://goo.gl/qCmcin>.
- [403] A. P. Costa, L. P. Reis, F. Neri de Souza y A. Moreira Eds., "Proceedings ISQR2017. International Symposium on Qualitative Research - Volume 5 (Salamanca, Spain, July 12-14, 2017)". Aveiro, Portugal: Ludomedia, 2017. Available from: <https://goo.gl/5PGA5S>.
- [404] A. P. Costa, L. P. Reis, F. Neri de Souza y A. Moreira Eds., "Computer Supported Qualitative Research. Second International Symposium on Qualitative Research (ISQR 2017) (Salamanca, Spain, July 12-14, 2017)," Advances in Intelligent Systems and Computing Series AISC 621. Cham: Springer International Publishing, 2018. Available from: <https://goo.gl/sKb3yq>. doi: 10.1007/978-3-319-61121-1.
- [405] F. J. García-Peñalvo Ed. "Proceedings of the First International Conference on Technological Ecosystems for Enhancing Multiculturality (TEEM'13) (Salamanca, Spain, November 14-15, 2013)," First International Conference on Technological Ecosystems for Enhancing Multiculturality. New York, USA: ACM, 2013. Available from: <https://goo.gl/hKUJSm>.
- [406] F. J. García-Peñalvo, A. García-Holgado y J. Cruz-Benito Eds., "Proceedings of the TEEM'13 Track on Knowledge Society Related Projects." Salamanca, Spain: Grupo GRIAL, 2013. Available from: <https://goo.gl/4a3JHq>.
- [407] F. J. García-Peñalvo Ed. "Proceedings of the Second International Conference on Technological Ecosystems for Enhancing Multiculturality (TEEM'14) (Salamanca, Spain, October 1-3, 2014)." New York, USA: ACM, 2014. Available from: <https://goo.gl/qcJq6X>.
- [408] G. R. Alves y M. C. Felgueiras Eds., "Proceedings of the Third International Conference on Technological Ecosystems for Enhancing Multiculturality (TEEM'15) (Porto, Portugal, October 7-9, 2015)." New York, USA: ACM, 2015. Available from: <https://goo.gl/zu1vpJ>.
- [409] F. J. García-Peñalvo Ed. "Proceedings of the Fourth International Conference on Technological Ecosystems for Enhancing Multiculturality (TEEM'16) (Salamanca, Spain, November 2-4, 2016)." New York, USA: ACM, 2016. Available from: <https://goo.gl/AVa3wZ>.
- [410] J. M. Doderó, M. S. Ibarra Sáiz y I. Ruiz Rube Eds., "Proceedings of the Fifth International Conference on Technological Ecosystems for Enhancing Multiculturality (TEEM'17) (Cádiz, Spain, October 18-20, 2017)." New York, NY, USA: ACM, 2017. Available from: <https://goo.gl/Rdmjft>.
- [411] Grupo GRIAL, "Manual de identidad," Grupo GRIAL, Universidad de Salamanca, Salamanca, España, 2018. Available from: <https://goo.gl/NUsy8E>.
- [412] Grupo GRIAL. (2018). GRIAL Logo versions. Salamanca, Spain: Grupo GRIAL, University of Salamanca. Available from: <https://goo.gl/bejW29>.