



This document is published in:

New Library World (2015), Vol. 116 Iss: 7/8, pp. 345 - 357

DOI: <u>10.1108/NLW-11-2014-0136</u>

© Emerald Group Publishing Limited

# From the library to the Information Commons: an approach to the model's development in Spain

### Ana R. Pacios

Department Library & Information Science, Carlos III University (Getafe) Madrid

#### **Purpose**:

The aim of this article is to show the progress made by thirty-seven universities in Spain in adopting the "Information Commons" model, a strategy planed ten years ago by the Spanish University Library Network (hereafter referred to as REBIUN) to meet the demands of the European Higher Education Area.

### Design/methodology/approach:

A web survey was sent to seventy supervisors or directors of Spanish university libraries.

### Findings:

This article reveal current approaches toward the goal of convergence and provide an idea of the extent to which universities have thus far managed to integrate services and resources in the Information Commons. Not all libraries have initiated this path or it is still in its early stages and the transformation is taking place at different "speeds" or degrees of implementation.

### **Originality/value:**

The paper shows, for the first time, that the incomplete, scant or absent integration of university services and resources in an Information Commons has to do with multiple factors in each library. The human factor is the key element in this type of change process. Commitment, network building and synergies are thus necessary factors in the success of this process.

Keywords: University libraries, Spain, Convergence, Information Commons.

Type: Research paper

#### Introduction

In order to understand the level or degree of development that a sample of thirtyseven university libraries in Spain has achieved to become Information Commons, it is necessary to justify the reasons for this change. Every so often, upon the arrival of important changes, the concept is reviewed, its evolution and the underlying circumstances are shown, and an attempt to formulate its near future is made (Anglada, 1999; Casal Reyes, 2011). While the evolution of university libraries in Spain has been characterized by continuous adaptation to technological change, as demonstrated by technological innovations in their services (Anglada, 2012), it should also be noted that these libraries have made an effort to adapt themselves to new demands placed upon them by institutions and users (Taladriz, 2010). One of several milestones that have marked the development of university libraries in Spain has its origins in the *first decade of* the 21<sup>st</sup> Century, in 1999. This is the year when the Bologna Declaration was signed, marking the starting point of a change in the teaching model that was adapted to the European Higher Education Area (hereafter referred to as EHEA). Its objective was to have a standardized system of education levels for the entire continent, which would allow for the accreditation and mobility of students and workers throughout European territory in 2010. While some Spanish universities began to offer studies adapted to the EHEA in 2008, the process entailed a drastic change in the conception and structure of university education in Spain, a new way of teaching and learning by adopting the philosophy of "life-long training." Implementing the new EHEA required - and still requires- universities to make radical changes, especially with the learning methods, in order to achieve the set objectives (European Ministers of Education, 1999). In order to support these changes, REBIUN (whose General Assembly consists of all the directors of Spanish university libraries) deems it essential that the library assume a new role, adapting its spaces and services to the new learning needs. This model was based on the Learning Centers of the United Kingdom and the North American Information Commons, which were described as physical and virtual spaces

dedicated to learning and studying (Beagle, 1999). The new model of university library became a convincing solution to new challenges. It's expected to be a reality by 2010. The drive toward this new model was made clear in 2003, in the first REBIUN Strategic Plan's: *Learning and Research Resources Center* (hereafter referred to as LRRC; in Spanish, it is known as CRAI).

During 2003, REBIUN and CRUE (Conference of Spanish University Rectors) defined the new university library model (LRRC) as follows: "a dynamic environment in which all the resources providing support to learning and research are integrated, where different services and resources converge: computing, library, audiovisual, pedagogical training services, and others, in a spatial framework, with material, human, information, and learning resources that are apt to integrate common objectives and projects" (REBIUN, 2003). For some libraries, this moment marked the start of a move towards the adoption of the LRRC model. Other universities, however, such as those in Catalonia (the Politécnica and Pompeu Fabra, for example), had already developed different projects at the end of the 1990s which were designed to introduce elements and services that would shape the future LRRC model (Cabo; Espinós and Sort, 1997; Cabo, 2007). It should be noted that REBIUN has provided support in this process through its three strategic plans which occupy the period from 2003 to 2020 and in which a main priority has been the creation, development, support, and improvement of the new LRRC library model. The influence of the EHEA was evident in the second plan in that its great challenge for 2010 was the integration of libraries as key agents and services in the adaptation to the new learning scenario, a scenario that entailed fundamental changes in teaching and learning methods.

Spanish librarians have followed and learned from the experiences of the United States, the UK, Australia and New Zealand (Cabo and Espinós, 2005) and there are some studies that show that the experience from the UK has served as an example for Spanish libraries, possibly because it is closer than other countries (Serrano, 2007).

At this point it is relevant to articulate a few questions on which the present research is based:

- What is the current situation of university libraries that are in the process of becoming LRRCs and which were initiated to deal with the challenges posed by the EHEA?
- Have the university services and resources that provide support to the teaching, learning, and research under the LRRCs been able to integrate?

### Literature review

Even though the convergence of information services at universities is a subject that has produced a considerable amount of English-language literature since the 1980s, when the benefit of such integration was already under consideration (Sutton, 2000; Keating and Gabb, 2005), the appearance of the first studies in Spain concurred with the definition of the LRRC model that REBIUN created in 2003. The same difference may be observed regarding the literature on super-convergence of these services in that there are numerous examples in the English language (Heseltine et al., 2009; Appleton, 2010; Bulpitt, 2012; Melling and Weaver, 2013), and yet there are none in Spanish.

The search for studies related to the implementation of the new LRRC library model in Spain during the 2003-2013 period confirms that the subject of Spanish university libraries' progress towards the LRRC model has not received much attention in the English-language literature. Moreover, it has rarely appeared in academic journals impact factor. Some articles have been published which focus on aspects related to the characteristics of the buildings that house the new LRRCs (Pavesi, 2008) while some mention has also been made of the change that these have brought about to the university community (Jacobs, 2008). In addition, it has also been observed that not all of LRRCs have had enough institutional support since this change has not been reflected in the strategic plans of universities (Pacios and Ortiz-Repiso, 2011).

Subjects of studies about Spanish university libraries show trends common to the issues that affect academic libraries and those of higher education identified by the Research, Planning and Review Committee of the ACRL in recent years are observed (ACRL, 2010; 2012). These include the changes affecting Higher Education, and, consequently, the library (Rodríguez, 2003; Colás and Pablos, 2005; Bentué et al., 2011); the new skills and abilities required by librarians to meet these changes (Celestino, 2007; Falomir, 2007); and others focus specifically on how the university library may better respond to and provide support for the changes that have occurred in its two fundamental activities of teaching and research (Moscoso, 2003; Caridad et al., 2005; Area, Rodríguez and González, 2005; Area, Hernández and Sancho, 2007; Orera, 2007; Pinto, Sales and Osorio, 2008). Other highly recurrent subjects identified in the Spanish-language literature for this period reveals that Spanish librarians share many concerns with their Anglo-American peers.

In reviewing the literature related to the development of the LRRC model in Spanish university libraries, special mention needs be made of the LRRC Conference (Jornadas CRAI) which has been celebrated annually from 2003 until 2014. Another forum that has helped disseminate the LRRC model has been the series of REBIUN Conferences with their discussion of how the LRRC concept is applied in some European universities (namely from the United Kingdom) and in the United States (Jornadas REBIUN, 2003).

Even though a myriad of studies and subjects related to the university library and the characteristics of its new model have appeared in Spanish publications in recent years, there is no study that shows the current status of the issue regarding the process of libraries' change toward the LRRC model. In 2003, Balagué examined the status of cooperation between the library and other services with regard to their coordinated effort to become an LRRC. Afterwards, in 2007, library directors and the faculty presented a discussion on the expectations, level of knowledge and appraisals of the LRRC in the universities (Area, Hernández and Sancho, 2007, p. 47-70). However, no studies have been found which provide evidence of the current levels of convergence achieved in

the LRRC and thus the types or models of organization involved (centralized, decentralized or hybrid), as well as the details regarding the integration of services into the LRRC, are unknown. Nonetheless, there are partial studies that examine the current situation in certain regional governments or in some specific libraries (Cabó and Espinós, 2005).

### **Objective and method**

The objective of this article is to offer an overview of the situation of Spanish university libraries today regarding the process of change toward LRRCs. In particular, the aim is to discuss:

- The level or degree of integration achieved by university services and resources related to learning and research at the LRRCs.
- The reasons related to the provision of resources that have prevented the full transformation of the LRRC model
- The services being offered that are currently integrated in the LRRCs

In order to obtain this overview of the process of convergence, an online survey was designed and sent to directors or supervisors of 70 Spanish university libraries that are members of REBUIN. The survey was deliberately limited and specific because it was intended as a first approach to the topic. While the survey was sent via email in June 2013, a pilot trial had been previously conducted with four libraries in order to verify that the survey was comprehensible and relevant. Thirty-seven supervisors responded to the survey, out of a total of seventy, which represents a response rate of 52.8%. Their observations –and some clarification on some issues- are presented in this research. Their answers underscore their concern with the reasons why integration is not advancing faster, as well as some consequences. However, it is not the intention of this research to make recommendations or suggestions about the courses of action that should be taken to speed up the convergence process.

#### The development of the LRRC model: survey findings

The online survey began by asking for the name, location and the regional community or the territorial entity to which the library belongs. Out of the five questions, four were closed multiple-choice type questions while the fifth was an open question designed to comment on or clarify any circumstance related to the other four. Out of the thirty-seven supervisors who responded, twenty-seven were directors of public university libraries and ten were directors of private ones. The response rate obtained allows us to make some statements with regard to the implementation of the LRRC model. The questions with the results and their corresponding evaluations are shown below.

The first questions asked the library director or supervisor to evaluate, on a scale from 0 to 5 (0 being "no integration" and 5 being "totally integrated"), the level or degree of integration that the university services related to learning and research have under the LRRC.

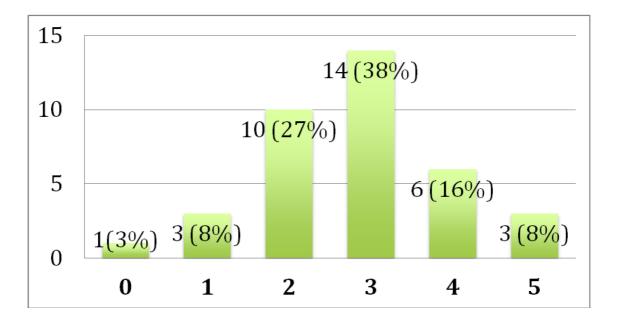


Fig. 1. Levels or degrees of integration that the university services related to learning and research have under the LRRC

Responses from libraries on all levels of the proposed scale indicate the diversity of the situation with respect to LRRCs (Fig.1). Cases thus range from libraries that have not initiated this type of project to libraries for which integration is a reality and which are considering introducing changes to the LRRCs in order to better respond to the needs of new users (Serrat and Sunyer, 2008). Only the Catalan universities have attained the level 5 on the scale. Dominguez Aroca (2005, p. 6) made the following statement some years ago about university libraries: "While some have future projects, others can only be relegated to the theoretical realm from lack of institutional support, and the remaining ones have only started to contemplate the idea". In light of the varied responses in this survey, this circumstance still seems to hold true.

The fact that not all Spanish libraries have initiated the process of convergence is not only reflected in this survey but also in the extent to which libraries use the LRRC acronym on their web page (Herrera, 2009). Thus the review of web pages consulted for this work in September 2013, revealed that only a very limited number of libraries used the acronym LRRC (8.5%) and that half of these combined this acronym with the word "library" (library-LRRC). Some library web pages that did not use the acronym, however, had contents (for instance, "mission") that led us to think that these libraries considered themselves to be LRRC. Although the use of the acronym was not indicative of full integration, the percentage of libraries that had completed the process, according to the survey results, coincided with the percentage of libraries that had chosen the name of LRRC.

Nonetheless, it is worth noting that most responses to the first question chose the third level of the proposed scale, thus indicating that the majority of these libraries are "halfway" along LRRC process of integration or convergence.

If values are differentiated in terms of respondents from public universities and those from private universities, it may be observed that there is more integration

in the former institution than the latter (Fig.2). In fact, only state-run libraries may consider their change process to be complete. Given that none of the supervisors from the private universities answered the last question, it is not possible to indicate what reasons there are for the different levels of integration.

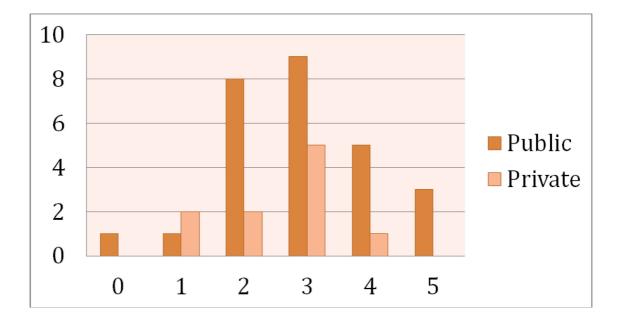


Fig. 2. Difference between the level and degree of integration achieved by public and private university libraries

In the second question, the director or supervisor had to indicate the types of resources related to partial transformation if they had chosen a value lower than 5 in the previous question (which indicated that the integration had not been complete). They could identify four types: financial, human (insufficient, inadequate training, etc.), spatial, and technological infrastructure.

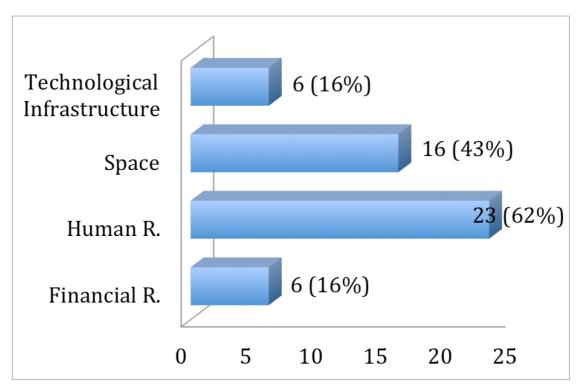


Fig. 3. Lack or inadequacy of resources linked to non-integration

While the answers to this question (Fig. 3) show the lack or inadequacy all the types of resources, those with the highest percentages are those of human resources (62%), followed by resources of space (43%), and then technological infrastructure and financial resources (both with 16%). According to the biannual statistical reports on the staff working for the public administrations in Spain, it is a reality that administrative support staff at universities have been one of the groups that have been affected the most because of the budgetary cuts in the majority of the universities since 2008. In agreement with an observation made by one supervisor or director, the lack of adequate physical space makes it difficult to create diversified spaces, which is a key element in the proper performance of LRRCs.

The third question was aimed at gaining more understanding of the university services that comprise the LRRC in each library, regardless of the characteristics or the model that was followed by the library in question or the way that this model was adopted. The services presented in the survey questions were

selected from a systematic study of this topic (Martínez, 2003, p. 41-46), as well as from the web pages of some LRRCs. Also taken into account was that the set of services included in the question were related to all aspects that affect the academic, educational, and research lives of professors and students, a challenge that an LRRC is supposed to face in a convergent and integrated form (Fig. 4).

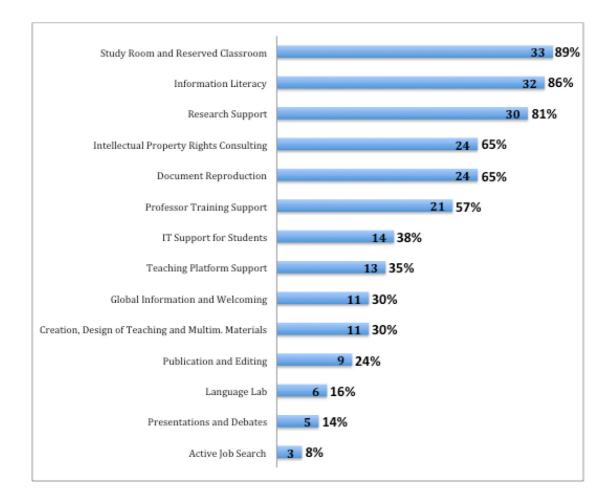


Fig. 4. Services integrated under the LRRC

The services that have the highest statistical presence are the "Study rooms and reserved classrooms" (89%) and "Information Literacy" (86%). The weakest presence occurs in the "Active job search" (8%), the "Presentation and debate services" (14%), and the "Language Laboratory" (16%). The trends of the ACRL

(2012) indicate that the creation and expansion of publishing services is a role that some libraries have assumed very actively. In Spain, in view of the result (24%), it appears to be a service offered by few libraries.

It is also true that most webpages of university libraries or LRRCs currently offer a wide range of services -person or virtual- to the user. Similarities in services between the library that uses the denomination "library" and the other, "LRCC", can be observed by comparing the contents of their respective web pages, although services on the LRRC page seem more complete and innovative.

In the fourth question, respondents were asked whether library-LRRC transformation, through converged support services for learning and research, was offering its users a better service that was more adequate for user needs and that was of higher quality. The majority (94,5%) responded in the affirmative, and only two directors (5,4%) in the negative. These two directors, who indicated levels of integration of 2 and 3 in their libraries, are not convinced that the converged services in the LRRC are of better quality and are better suited to users' needs. In such cases, it would be important to demonstrate that there are differences in quality between the provision of a service from the LRRC and the same one offered from another university service, in addition to the optimization of resources that this would entail.

Finally, an ad hoc section was included in order for the respondents to clarify or comment on any issue related to any questions. More specifically it was created to allow directors to explain why their library did not achieve full transformation into an LRRC when this was not related to lack of resources (question 2). The following includes a summary of the reasons given by the ten directors who took advantage of this section:

a) The lack of an institutional policy that would support the convergence of services, as well as a lack of vision from the university's governing body ("the obstacle is the strategy adopted by the University's upper management"). This issue had already been confirmed in a study conducted about the reference made to the new model of the university library in the strategic plans of Spanish

universities upon the arrival of the EHEA (Pacios & Ortiz-Repiso, 2011, p. 359). Even though the majority of the faculty and librarians may believe that the library is a strategic, basic, and essential service in the university, the strategic plans of the majority do not transmit this view.

b) Good cooperation, coordination and synergy between the different university services and the library; a situation that suggests that convergence is not necessary, as the work is already carried out in a very integrated manner. In this case, one of the directors declared: "the library acts as a support and complement to the organizational structures offered by the university services of assistance to teaching and research". This path, based on collaboration and cooperation between units involved without making structural changes to the same, is an option that might provide a good service but it strays from the received version of the LRRC model and does not have the same implications on an organizational level as a model that aims to join forces. Those in favor of this approach argued that, for the user, it does not matter whether the services belong to an LRRC if the service being received is of good quality. Given the fact that the existence of "an acceptable" level of collaboration with IT services had been confirmed by Balagué in 2003 (p. 22), it is not unreasonable to think that the new scenario set by the EHEA may have led to an increase in this collaboration in some universities.

c) The structure of the university's organization and its philosophy are very much separate from any tendency toward merging services ("problems with administrative policy in making certain services dependent upon or integrate with the library"; "difficulties in establishing a different organizational philosophy in a very traditional institution"). In addition to administrative-policy problems, the lack of institutional support makes it difficult to integrate services in the library that are very transversal in the university, or to make them dependent on the library. Because such circumstances are not associated with good will and understanding, and the creation of the LRRC must be undertaken at an institutional level, is something that has already been pointed out on multiple occasions. To thus make this model viable, such cases require a restructuring of the university's organization, which is a long-term project that entails important changes. The LRRC model may be seen as incompatible with university structures

that are somewhat inflexible, static or rigid, with different organizational structures that are not favorable to change, and with Job to Position Relationships that are very much fixed and that do not favor polyvalence.

The implications of the survey results lead one to reflect upon how much some Spanish university libraries still need to work on institutional awareness if they are to adopt the LRRC model. It seems that the most important obstacles are not related to the availability of resources, but to another topic that is harder to overcome: the lack of vision shown by some sections of government which do not regard libraries to be part of the plan to stimulate innovation in the university. It is also true that overbearing leadership styles and very different organizational styles make it difficult to coordinate services and to re-think the use of certain spaces.

It must also be pointed out that, even though the Bologna Process is a reality in Spain, not all universities have understood the process in the same way. The reform that the Bologna Plan involves has been criticized by some and praised by others. The criticisms have to do with the economic backdrop that some see, and maintain that it lacks three basic elements needed to optimize Spanish university resources: less bureaucracy, greater flexibility in the definition of degrees and the hiring of professors, and sufficient funding for teaching and research (Avendaño, 2011). At this time, pending the continuation of the reforms that have been initiated, the results of applying the Bologna Plan in Spain are similar to those in other participating countries, and they come in spite of difficulties involved in departing from a reality and tradition different from the goals of this European convergence process. This is what some experts have deduced from the 2012 report on the degree of the Plan's implementation in participating countries. Bernabeu (2012) notes that many of the goals have been reached even though in some cases the Plan's implementation seems to have been more formal than real and in others it has not been complete or mistakes have been made and need to be corrected. This is why the reforms should continue, especially in the current crisis. Now that the date for the new EHEA agenda has been set for 2020, university libraries in Spain will need to continue to play a relevant role as a

service in order to contribute to the consolidation process. For those libraries that have not been able to develop a convergence strategy, all these foreseeable changes may present another opportunity- but only as long as libraries show the LRRC is an effective response to their students' demands.

### Conclusions

The responses to the survey of supervisors and directors of Spanish university libraries allow us to state the following about the development of LRRCs in Spain:

- Certain parallels may be seen in the reaction of Spanish universities to the creation of the EHEA, in which they implemented change at a different pace, and the process of transformation of university libraries into LRRCs.
- Currently, not all Spanish universities have an LRRC which integrates those resources and services which are designed to support learning and research.
- While the conversion process of libraries to LRRCs clearly received a stimulus from REBUIN more than 10 years ago, a lack of institutional support has meant that not all libraries have initiated this process or that it is still in its early stages. REBIUN should evaluate whether or not the support lent to libraries in this process is aimed in the right direction and take appropriate measures if not.
- Convergence is taking place at different "speeds" or degrees of implementation for those libraries that began the process. Most of them are halfway into the process. Public university libraries have made the most progress in this direction.
- The fact that the third and last Strategic Plan by REBIUN continues to support the new LRRC model is in line with the survey results, and is indicative of the fact that the desired development has not been reached in all the libraries. This shows that the LRRC is a long-term project that entails important structural changes which are difficult to tackle in many cases and that do not depend solely on the effort of library directors or supervisors.

- The incomplete, scant or absent integration of university services and resources that provide support to teaching, learning, and research in an LRRC has to do with multiple factors in each library. These may range from the inadequate provision of resources (human, spatial, financial, and infrastructure) to the lack of indispensable leadership and institutional strategy from the university's governing body (necessary to break away from very rigid organizational structures), and to different organizational cultures that are hardly or not at all favorable to the change required by the convergence.
- The current lists of integrated services offered by the LRRCs vary significant according to the level of development of these centers. The most significant presence of some services, such as Information Literacy, support to research, or consulting services on Intellectual Property Rights issues, are clearly in line with the changes that the new pedagogical model of the EHEA had requested. Others, such as the language laboratory or the active job search, still have a very weak presence.

#### ACKNOWLEDMENT

I would like to thank the different directors of Spanish university libraries who responded to the survey for this article.

#### REFERENCES

ACRL (2010), "Top ten trends in academic libraries. A review of the current literature", *College & Research Libraries News*, Vol. 71 No. 6, pp. 286-292.

ACRL (2012), "Top ten trends in academic libraries. A review of the trends and issues affecting academic libraries in higher education". *College & Research Libraries News*, Vol. 73 No. 6, pp. 311-320.

Anglada, L. (1999), "Cambios y retos organizativos en las bibliotecas universitarias", *Conferencias sobre bibliotecas universitarias*, Universidad Complutense de Madrid, Madrid, pp. 1-20.

Anglada, L. (2012), "Bibliotecas universitarias: cabalgando la tecnología, siguiendo al usuario", *El profesional de la información*, Vol. 21 No. 6, pp. 553-556.

Appleton, A. (2010), "Living through super-convergence: creating library and student support at Liverpool John Moores University", *SCONUL Focus*, Vol. 49, pp. 67-70.

Area, M.; Rodríguez, F. and González, D. (2005), "Los centros de recursos para el aprendizaje y la investigación (CRAI)", Colas, I.P. and Pablos, J. (Coords.), *La universidad en la Unión Europea. El Espacio Europeo de Educación Superior y su impacto en la docencia*, Aljibe, Málaga, pp. 77-99.

Area, M.; Hernández, F. and Sancho, J.M. (2007), *De la biblioteca al centro de recursos para el aprendizaje y la investigación*, Octaedro, Barcelona.

Avendaño, M.C. (2011), "El plan Bolonia, la crisis económica y la universidad española", *Eidon: Revista de la Fundación de Ciencias de la Salud*, No. 36, available at: <u>http://www.revistaeidon.es/archivo/crisis-y-salud/con-mano-ajena/118083-el-plan-bolonia-la-crisis-economica-y-la-universidad-espanola</u> (accessed 10 November 2014)

Balagué, N. (2003), "La biblioteca universitaria, centro de recursos para el aprendizaje y la investigación: una aproximación al estado de la cuestión en España", in *Jornadas REBIUN 2003: Los centros para recursos del aprendizaje y la investigación docente, Palma de Mallorca 2003,* available at: http://www.rebiun.org/opencms/opencms/handle404?exporturi=/export/docR eb/ponencia balague mola.pdf&%5d (accessed 10 June 2014)

Beagle, D. (1999), "Conceptualizing an Information Commons", *Journal of Academic Librarianship*, Vol. 25 No. 2, pp. 82-89.

Bentué. E. et al. (2011), "La biblioteca universitaria: una llave para entrar en el EEES. La gestión de la información como competencia transversal", Paricio, J. et al. (Coords.), *Experiencias de innovación e investigación educativa en el nuevo contexto universitario*, Prensas Universitarias de Zaragoza, Zaragoza, pp. 125-130.

Bernabeu, G. (2012), "El proceso de Bolonia: luces y sombras", *Informe Conocimiento y Desarrollo*, CYD, Madrid, pp. 159-162, available at: <a href="http://www.fundacioncyd.org/images/informeCyd/2012/Cap3\_ICYD2012.pdf">http://www.fundacioncyd.org/images/informeCyd/2012/Cap3\_ICYD2012.pdf</a> (accessed 10 November 2014).

Bulpitt, G. (Ed.) (2012), *Leading the student experience: super-convergence of organisation, structure and business processes*, Leadership Foundation for Higher Education, London, available at: http://www.lfhe.ac.uk/en/research-resources/publications/index.cfm/S3%20-%2005 (accessed 10 november 2014).

Cabo, M. (2007), "Confluencia de servicios en un entorno CRAI: la experiencia de la universitat Pompeu Fabra", in *Innovaciones de las bibliotecas en la enseñanza y la investigación, El Escorial, 2007*, available at: <u>http://pendientedemigracion.ucm.es/cont/descargas/documento16727.pdf?pg=</u> cont/descargas/documento16727.pdf (accessed 15 September 2014).

Cabo, M. and Espinos, M. (2005), "Els centres de recursos per a l'aprenentatge i la investigació (CRAI): obrint pas a noves aliances i oportunitats", *Bibliodoc: anuari de biblioteconomia, documentació i información*, COBDC, Barcelona, pp. 19-22.

Cabo, M.; Espinós, M. and Sort, J. (1997), "El perquè i el com d'un canvi organitzatiu: el cas de la Biblioteca de la Universitat Pompeu Fabra", *Item: Revista de Biblioteconomía y Documentació*, No. 2, pp. 197-208, available at: <u>http://www.upf.edu/bibtic/es/coneixer/publicac/cobis.html</u> (accessed 12 November 2014).

Caridad, M. et al. (2005), "La biblioteca universitaria como centro de recursos para el aprendizaje y la investigación", *Item: Revista de Biblioteconomía y Documentació*, No. 40, pp. 87-108.

Casal Reyes, M.I. (2011), "El CRAI y nuevos retos de las bibliotecas universitarias", in *Nuevas tecnologías y archivos. I Jornadas, Narón, 2010,* Universidad A Coruña, A Coruña, pp. 89-117.

Celestino, S. (2007), "Los CRAI en Europa: cambio cultura y estrategias en la gestión de recursos humanos", in *Jornada: Profesionales para los CRAI ¿estamos preparados para los cambios?, Madrid, 2007*, available at: http://www.sedic.es/CRAI-Sonsoles Celestino.pdf (accessed 12 June 2014).

Colás, P. and Pablos, J. (2005), *La universidad en la Unión Europea. El Espacio Europeo de Educación Superior y su impacto en la docencia*, Aljibe, Málaga.

Domínguez Aroca, M.I. (2005), "La biblioteca universitaria ante el nuevo modelo de aprendizaje: docentes y bibliotecarios, aprendamos juntos porque trabajamos juntos", *Revista de Educación a Distancia*, Vol. IV, available at: <a href="http://www.um.es/ead/red/M4/dominguez9.pdf">http://www.um.es/ead/red/M4/dominguez9.pdf</a> (accessed 10 November 2014).

European Ministers of Education (1999), *The Bologna Declaration of 19 June 1999,* available at: <u>http://www.eees.es/pdf/Declaracion Bolonia.pdf</u> (accessed 12 November 2014).

Falomir, V. (2007), "Estrategias en la gestión de recursos humanos", in *Jornada: Profesionales para los CRAI ¿estamos preparados para los cambios?, Madrid, 2007,* 

available at: <u>http://www.sedic.es/CRAI-Vicent Falamir.pdf</u> (accessed 12 June 2014).

Heseltine, R. et al. (2009), "Super-convergence: SCONUL shared-experience meeting", *SCONUL Focus*, Vol. 46, pp. 121-124.

Herrera, J. L. (2009), "Visibilidad en la web de los centros de recursos para el aprendizaje y la investigación (CRAI) en las bibliotecas universitarias", *BiD: Textos universitarios en Biblioteconomia y Documentacio*, No. 22, available at: http://www.ub.edu/bid/22/pdf/herrera2.pdf (accessed 11 June 2014).

Jacobs, S. (2008), "The library is dead, long live the CRAI", *Informatie Professional*, Vol. 7-8, pp. 14-15.

JornadasCRAI,(2003-2013),availableat:http://www.rebiun.org/documentos/Paginas/Jornadas-CRAI.aspx(accessed13June 2014).

*Jornadas REBIUN 2003*, available at: <u>http://biblioteca.uam.es/sc/palma.html</u> (accessed 1 June 2014).

Keating, S. and Gabb, R. (2005), *Putting Learning into the Learning Commons: A Literature Review*, Working Paper, Victoria University, Melbourne, Australia, available at: <u>http://vuir.vu.edu.au/94/1/Learning%20Commons%20report.pdf</u> (accessed 2 September 2014).

Martínez, D. (2003), "El Centre de Recursos per a l'Aprenentatge (CRA)", *Item: Revista de Biblioteconomía y Documentació,* No. 35, pp. 35-53.

Melling, M. and Weaver, M. (Eds.) (2013), *Collaboration in libraries and learning environments*, Facet Publishing, London.

Moscoso, P. (2003), "La nueva misión de las bibliotecas universitarias ante el Espacio Europeo de Enseñanza Superior", in *Jornadas REBIUN 2003: Los centros* 

de recursos para el aprendizaje y la investigación en los procesos de innovación docente, Palma de Mallorca, 2003, available at: <a href="http://dspace.uah.es/dspace/handle/10017/809">http://dspace.uah.es/dspace/handle/10017/809</a> (accessed 12 June 2014).

Orera, L. (2007), "La biblioteca universitaria ante el nuevo modelo social y educativo", *El profesional de la información*, Vol.16 No. 4, pp. 329-337.

Pacios, A.R. and Ortiz-Repiso, V. (2011), "Libraries in the Strategic Plans of Spanish Universities", *Libri*, Vol. 60 No.4, pp. 352-360.

Pavesi, A. (2008), "The library of the university Pompeu Fabra in Barcelona", *Biblioteche Oggi*, Vol. 26 No. 3, pp. 11-28.

Pinto, M.; Sales, D. and Osorio, P. (2008), *Biblioteca universitaria, CRAI y alfabetización informacional,* Trea, Madrid.

REBIUN (2003), *Centros de Recursos para el Aprendizaje y la Investigación: Un nuevo modelo de biblioteca universitaria*, Conferencia de Rectores de las Universidades Españolas, Madrid.

Rodríguez, B. (2003), "La biblioteca universitaria ante el reto del Espacio Europeo de Educación Superior", in *III Jornadas Andaluzas de Documentación, Sevilla 2003,* Asociación Andaluza de Bibliotecarios, Sevilla, pp. 367-371.

Serrano, R. (2007), "Los learning centres en el Reino Unido. Estudio de caso de seis universidades medianas", *El profesional de la información*, Vol. 14 No. 4, pp. 307-318.

Serrat, M. and Sunyer, S. (2008), "El Centro de Recursos para el Aprendizaje y la Investigación (CRAI) en permanente transformación: servicios y recursos para el nuevo usuario 2.0", in *X Jornadas de Gestión de la Información*, Madrid, 2008, available at: <u>http://www.sedic.es/S3 C2 UPC.pdf</u> (accessed 11 September 2014).

Sutton, A. (2000), "Convergence: a review of the literature", Reid, B. J. and Foster, W. (Eds.), *Achieving cultural change in networking libraries*, Gower, Aldershot, pp. 63-75.

Taladriz, M. (2010), "La biblioteca universitaria: nuevos servicios para nuevos tiempos", Galán, A.L. (Ed.), *La biblioteca de la universidad de Castilla-La Mancha: 25 años. Homenaje a Marta de Navascués Palacio*, Universidad de Castilla-La Mancha, Cuenca, pp. 181-189.