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State of the Art of Information Literacy in Spanish University Libraries and a Proposal for the Future

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Abstract. The design of new curricula, as a result of the European Higher Education Area (EHEA), and new teaching methodology has meant an opportunity to overcome traditional training provided by Spanish University Libraries (SUL). The aim of this paper is to report the state of affairs of training in information management competency over the past three years in Spanish University Libraries and to present the role of REBIUN (Spanish University Library Network). For this purpose, a diagnosis of the current situation has been carried out. This will enable us to have a vision of the practices as well as of the consolidation level of the different training models on Information Competency (IC) and Computing Competency and Information Skills (IC2), taking into account good practices of a number of reference and cutting-edge libraries within the Spanish panorama.

Keywords: University libraries, information literacy, computing and information competencies, digital literacy

1 Introduction and Theoretical Framework

Since the 1990s librarians have been aware of the need to articulate students' acquisition of information competencies. A milestone was the Information Literacy Competency Standards for Higher Education¹, published in 2000 by the Association of College and Research Libraries (ACRL/ALA); this was followed by the appearance of standards and guidelines addressed to establish the aims of information literacy in University Libraries, training programmes, examples of good practice, definition of competencies of coordinators and librarians responsible for such training, and so on (ACRL Guidelines & Standards) [1]. This coincided in time with

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¹ http://www.ala.org/acrl/standards/informationliteracycompetency Spanish translation in http://www.ala.org/acrl/standards/informationliteracycompetencystandards

the Bologna Process and the integration of the Spanish university system in the European Higher Education Area (EHEA), which involved the introduction of legislative amendments in the structure of official teaching, the implementation of the European system of credits, and the regulation of undergraduate and postgraduate programmes. In this context, it is remarkable the implementation of a new teaching methodology that incorporates "digital competency" among other key competencies aimed at facilitating lifelong learning. This competency refers to the "management of information" and the competencies needed to search, gather and treat information, using it critically and systematically and evaluating its relevance.

This new panorama offered a good opportunity to go beyond traditional, validated and instrumental user training (UT), taught to students and teachers in Spanish Universities Libraries (SUL) to implement a training programme in ALFIN (also called Training on Information Competency: IC). ALFIN aimed to carry out studies and practical activities, useful for designing new degree courses adapted to the EHEA, in which the "management of information" was included as a cross-curricular competence.

This is recorded in the II Strategic Plan 2007-2012 of the Spanish University Library Network (REBIUN), which takes as a core theme "Learning and EHEA" and considers of high importance the transformation of SUL into services aimed at fulfilling different needs of students and teachers in the development of the new European learning model. This context contributes to the emergence of CRAIs (Resource Centres for Learning and Research), which provide spaces for study and group work. REBIUN includes it in its strategic line 1, establishing two important objectives in order to promote a) University Libraries as CRAIs; and b) ALFIN aimed at "enhancing and stimulating actions for the development and implementation of information skills as cross-curricular competencies in the new educational model".

As a result, some important documents are elaborated, Information Competency (IC) and Computing Competency and Information Skills (IC2) become the major themes since 2008 in ALFIN, SUL and CRAI meetings, participation in ALFARED³ increases and, more recently, the IC2 website⁴ is created. Current Strategic Plan 2020⁵, approved by REBIUN, includes the following statement in its strategic line 2: "Providing support to teaching, learning, research and management", with the general aim of "progressively integrating Computing Competency and Information Skills (IC2) as an educational strategy in different university study programmes in order to develop valid lifelong competencies.

2 Method

The present report aims at describing the state of affairs of training models on information management competency in SUL since 2011. This will enable us to have

² REBIUN. II Plan Estratégico 2007-2010. http://www.rebiun.org/doc/plan.pdf

³ http://www.alfared.org/

⁴ http://ci2.es/

⁵ http://rebiun.org/opencms/opencms/handle404?exporturi=/export/docReb/PE_REBIUN_2020.pdf&%5d.

a vision of practices and consolidation level of the different training models on IC, and IC2, as well as to expose trends and proposals for future action. Good practices of reference and cutting-edge Spanish libraries are mentioned.

With this purpose in mind, a diagnosis of the current situation was applied. It was based on a triple review of:

- Specialized literature about IC, IC2 and UT in Spain: a thorough review of databases was carried out in order to identify a number of articles about specific experiences of implementation of ALFIN, IC and IC2 in SUL⁶.
- Encounters, conferences, specialised meetings, reports from working groups and libraries' training plans, and systematic search in databases and websites of libraries and institutions related to IC training in SUL⁷. Among others, some remarkable events are: CRAI meetings organized by REBIUN, about the evaluation and accreditation of competencies (2011)⁸, and about IC2 (2012)⁹; a meeting on responsible work of ALFIN of REBIUN (2011)¹⁰. In professional events it is also common to find general approaches about ALFIN, such as training plans of specific projects being implemented in university libraries. Concerning reports, we highlight "Digital Literacy and Information Competency" [2], [3], and the report UNIVERSITIC 2012 [4], whose strategic priority is the "Management of information".
- Official statistics and training websites of SUL¹¹. All SUL's websites have been reviewed in order to identify the section addressed to training programmes, their proposals and their names. It can be accessed online¹²

The present report does not cover traditional UT or other basic or introductory training models, such as information days, participation in welcoming ceremonies offered by universities to new students, on-demand information, self-training, guided visits, open doors days, and training in the university for the elderly or information beyond the university community.

Regarding terminology used, ALFIN and IC are considered synonymous, whereas IC2, that can be considered synonymous with digital competences, is used to differentiate those libraries whose policy intends to support information competencies together with computing competencies.

3 Results

Traditional UT presents similar characteristics among Spanish universities. However, training in ALFIN, especially when it is integrated in curricular university studies, is

⁹ http://biblioteca.unirioja.es/crai2012/

⁶ Document in Google Drive http://tinyurl.com/BibliographyIL

⁷ Document in Google Drive http://tinyurl.com/BibliographyIL

http://www.usc.es/es/congresos/crai/

http://www.rebiun.org/opencms/opencms/handle404?exporturi=/export/sites/Rebiun/Resu_3JALFIN.pdf

Document in Google Drive http://tinyurl.com/BibliographyIL

¹² Excel in Google Drive http://tinyurl.com/SpanishUL

diverse and complex since there are different proposals, attitudes, priorities or needs depending on the disciplines and areas of knowledge. Even when IC is established, the level of implementation and execution is different, as one must add the continuous change and constant technological development of society nowadays.

3.1 Plans and Integration Programmes

One of the keys for a successful implementation of IC/IC2 has been the development of training programmes and plans in SUL¹³. To this end, the presence of information competencies in university degrees [5] has been studied, in keeping with the strategic recommendations defined in REBIUN strategic plans. All of them sketch out the principles and the context which justify and support the plan. Moreover, they contain an analysis of the training necessities, determine the actions to carry out, segment the target users, establish training levels and modalities (face-to-face, semi-virtual and virtual), stress the importance of the spread of information, and establish a monitoring process (evaluation, revision and updating).

3.2 Type of Training

Traditional "on-demand courses" or "tailor-made courses" are still present on the web pages and they fall within the interest of teachers or students in a specific electronic resource. They are increasingly supplemented by IC courses linked to a particular subject or inserted in the curriculum, presented in different modalities (face-to-face, semi-virtual and virtual) and acknowledged sometimes with ECTS credits or a certification.

Training Offered by the Library and Acknowledged with ECTS. This type of training involves a previous study of needs and resources. Libraries disseminate its training courses, both instrumental and ALFIN, through their web pages, print media and digital/social media [6], [7]. This own offer of libraries existed before Bologna, sometimes as free-choice credits. After Bologna, some of these courses were integrated in the curriculum as free choice courses.

Some libraries are still offering courses without ECTS credits. However, the trend is to integrate this training in the curricular study plans, with ECTS credits offered individually by the library or implying any kind of collaboration. For example, in UNED (National University of Distance Education) courses are compulsory and must be taken before the presentation of the final master project.

There are some Spanish University Libraries which offer IC and IC2 (the latter very few) training courses acknowledged with 1, 2 or 3 ETCS credits such as Burgos, Castilla La Mancha, Complutense, Santiago de Compostela, Sevilla (COE course¹⁴), Zaragoza; UNED, La Laguna and Polytechnic University of Cataluña (UPC¹⁵).

¹³ Document in Google Drive http://tinyurl.com/BibliographyIL

¹⁴ http://bib.us.es/cursos_orientacion/index-ides-idweb.html

¹⁵ http://bibliotecnica.upc.edu/content/estudiants-de-grau

ALFIN/IC Training Integrated in University Degrees (Curricular). Integration means ensuring students' acquisition of information competencies in a curricular manner. In order to design joint activities to work competencies simultaneously, the library identifies in which subjects IC issues are approached. Then, it contacts teachers to know if they are interested in working in an interdisciplinary way or with people responsible for cross-curricular competences.

As a result, IC is mainly integrated in the first years of some degrees (Sevilla, Alcalá, Burgos, Murcia, etc.) where the inclusion of IC in teaching guides is increasing, end of degree projects, Masters and PhD projects (Girona¹⁶ or Granada) and scarcely in higher levels (UPC, Pompeu Fabra, La Laguna, etc.). There are also collaboration agreements with university agents (Barcelona and Carlos III Department of Information Science) and trends towards virtualization (UPC) [8]. The reality is that IC has been integrated only in some study plans, since there is no institutional strategy from the library or the university governing body.

IC2 Training Integrated in University Degrees (Curricular). The impact of digital content on the net pushed toward convergence of IC and computing or technological competencies, leading to IC2, a term coined by REBIUN in 2011, coming from the union of Computing and Information Competencies (IC+I). This concept is closer to digital competencies [9]. The working group of the mixed committee CRUE-TIC and REBIUN elaborated in April 2009¹⁷ the report "Computing and Information Competencies in degree studies", and an IC2 catalogue.

REBIUN has developed an intense plan in order to introduce IC2 in SUL training programmes, creating audio-visual materials¹⁸, an IC2 webpage, adapting tutorials and translating relevant documents. Moreover, it has launched a project for the certification of IC2 competencies. Until now there are only a few examples of integration of IC2 in university curricula, whose premise has been the collaboration between Computing Service and Library: Alicante¹⁹, La Laguna [10], and Sevilla [6]. Other university libraries that have also incorporated IC2 in their strategic policies are Oviedo, Alicante, Pompeu Fabra, Mondragón, Navarra, UDIMA and San Pablo CEU. REBIUN draw a map of IC2 in Spain in 2012 [11].

Training in IC/IC2 Integrated in University Degrees (Curricular) Shared with Other Universities without Credit Acknowledgment. One outstanding example is UNICI2²⁰, a cooperation agreement signed by rectors of a group of universities in order to exchange best practice experiences in IC. Every member library develops or improves different issues related to information. These libraries are from the universities of La Laguna, Alicante, Zaragoza, Huelva and Santiago de Compostela [10], [12].

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¹⁶ http://www.rebiun.org/export/docReb/CRAI/X Bib Univ Girona y Estudios de grado.ppt

http://www.rebiun.org/doc/documento_competencias_informaticas.pdf

¹⁸ Document in Google Drive http://tinyurl.com/BibliographyIL

¹⁹ http://biblioteca.unirioja.es/crai2012/documentos/XCRAI_UA.pdf

http://www.unici2.es/

4 Certification - Accreditation

The evaluation of acquisition of competencies is strategic. This means Spanish University Libraries are looking for a system that could credit these competencies with regard to the labour market. At the European level, there exists an accreditation in computing called ECDL (European Computer Driving License) that in Spain is coordinated by ATI²¹. Several universities have already implemented it, such as Cádiz²², Alcalá and Extremadura. Other universities have established an agreement with the Catalan Agency of Accreditation in ICT (ACTIC)²³. One of the objectives of the III Strategic Plan of REBIUN is to collaborate with such an agency and ensure that universities can provide this certification.

Regarding accreditation of information competencies, universities use different forms to credit their courses, ranging from certificates issued by the library directorate to other formulas such as accreditation provided by other competent bodies within every university (La Laguna, Málaga, Zaragoza). Nowadays, REBIUN is studying how to credit jointly both competences (IC2).

5 Conclusions and Proposals for the Future

Among the results obtained in the study, the following can be highlighted: the generalization (100%) of traditional UT, followed by a reduced supply in IC (75%) and a limited incidence in IC2 (15%); the coexistence of training offered exclusively by libraries (with or without curricular certification) and training where libraries and teachers collaborate within the frame of subjects in a curricular or non-curricular way; the integration of IC/IC2 in new undergraduate degrees, especially in first grades; the trend toward a semi-virtual or virtual IC/IC2 training programmes; the importance of assessment in REBIUN proposals aimed to credit the competencies.

Proposals:

- 1) To prove the value of IC and IC2 for the university.
- 2) Greater collaboration and convergence with other agents involved in training, mainly teachers and computer technicians.
- 3) To improve librarians' knowledge of technological and pedagogical resources.
- 4) Librarians have to explore the intersections between library services and students' learning in order to identify opportunities to impact this learning.

Answers could be transformed in interesting future proposals to reach the goal of including information competencies within study plans, useful for lifelong learning.

http://www20.gencat.cat/portal/site/actic?newLang=es_ES

²¹ <u>http://www.ecdl.es/es/acreditacion/procedimiento-y-titulaciones</u>

²² http://fueca.uca.es:8080/c/document_library/get_file?uuid=3c516cee-32e2-4f77-a5ed-

⁰e4a89065fe1&groupId=10157

References

- 1. ACRL/ALA: Guidelines & Standards, http://www.ala.org/acrl/standards
- Area Moreira, M., Gutiérrez Martín, A., Vidal Fernández, F.: Alfabetización Digital y Competencias Informacionales. Ariel, Fundación Encuentro, Barcelona (2012) http://www.fundacion.telefonica.com/es/que_hacemos/conocimiento/publicaciones/detalle/ 161
- Area Moreira, M. Guarro, A.: La Alfabetización Informacional y Digital: Fundamentos Pedagógicos para la Enseñanza y el Aprendizaje Competente. Revista Española de Documentación Científica (2012) (monográfico) http://redc.revistas.csic.es/index.php/redc/article/view/744
- Uceda Antolín, J., Píriz Durán, S. (eds.): UNIVERSITIC 2012: Descripción, Gestión y Gobierno de las TI en el Sistema Universitario Español. CRUE, TIC, Madrid (2012)
- Salvador Olivan, J.A. et al.: La Presencia de Competencias en Información en los Títulos de Grado de la Universidad de Zaragoza. Anales de Documentación, 14 (2), 1--16 (2012), http://revistas.um.es/analesdoc/article/view/114981/125071
- González Fernández-Villavicencio, N.: Biblioteca de Universidad de Sevilla, de la FU a las CI2. In: Monográfico sobre Alfabetización Informacional: Veintitantas Experiencias ALFIN y una Canción Esperanzada. ALFARED (2012), http://www.alfared.org/sites/www.alfared.org/files/u49/08-nievesgonz%C3%Allez.pdf
- Penadés, H.: Consideraciones y Propuestas sobre el Marketing de la Alfabetización en Información. In: Monográfico sobre Alfabetización Informacional: Veintitantas Experiencias ALFIN y una Canción Esperanzada. ALFARED (2012), http://www.alfared.org/sites/www.alfared.org/files/u49/10-MarketingALFIN.pdf
- 8. Carreras Marcos, E. et al. La Competencia Informacional en las Bibliotecas de la UPC. In: Monográfico sobre Alfabetización Informacional: Veintitantas Experiencias ALFIN y una Canción Esperanzada. ALFARED. (Homenaje a la revista Educación y Bibliotecas) (2012), http://www.alfared.org/sites/www.alfared.org/files/u49/17-competenciainformacionalUPN.pdf
- Cobo Romaní, C.: Strategies to Promote the Development of E-competencies in the Next Generation of Professionals: European and International Trends. SKOPE. Oxford, Issues Paper Series, N°13 September (2009), http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1904871
- Rey Pinzón, L. y Erbez Rodríguez, J.: Formación en CI2 mediante E-learning: Biblioteca de la Universidad de La Laguna y UNICI2. In: 10th Jornadas CRAI, Logroño, 28 y 29 de junio, (2012),
 - http://biblioteca.unirioja.es/crai2012/documentos/Jornadas_CRAI_2012_ULL.pdf
- 11. Muñoz Martínez, I. y Rueda Barranco, M.: Mapa de las Competencias Informáticas e Informacionales (CI2) en las Universidades Españolas. Resultados de la Implantación de las Competencias Informáticas e Informacionales (CI2) en las Universidades Españolas. In: 10th Jornadas CRAI, Logroño, 28 y 29 de junio, (2012), http://biblioteca.unirioja.es/crai2012/documentos/mapaci2.pdf
- 12. Varela Prado, C., Hernández Hernández, C.J.: Formar en Competencias Informacionales de Forma Cooperativa en Bibliotecas Universitarias Españolas. In Seminario "Lecciones aprendidas en programas de alfabetización informacional en Iberoamérica", Congreso INFO Cuba (2012), http://www.slideshare.net/alfiniberoamerica/presentacin-info-2012modificado