

Figures on Employability of Spanish Library and Information Science Graduates

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This study analyses the ability of Spanish library and information science graduates to meet the needs of the companies and institutions employing them. The survey focused on the employability of Carlos III University of Madrid Documentation Department BA students and graduates. Students graduating between 1996 and 1999 were surveyed. Information was also collected from employers approaching the

placement office run by the Carlos III University of Madrid's Professional Guidance and Planning Service (SOPP). These employers were surveyed to obtain some insight into how satisfactorily newly hired employees performed. The results are expressed in percentages and discussed in comparison to the results obtained in prior surveys conducted for the same purpose.

Introduction

The purpose of this study is to analyse the labour market for Spanish documentation graduates from both the perspective of the students and the graduates themselves and from the standpoint of the management responsible for selecting information personnel.

Associate degrees in library and information science and documentation schools or faculties have been incorporated into the Spanish university system only after the year 1985. After a period of soaring growth, formal university training is now available in fourteen Spanish universities for the first cycle or *Diplomatura* (courses that last three years). The second cycle or *Licenciatura* (two additional years of study) in documentation (information science) is now offered in another twelve universities. Doctorate courses are also offered in six universities.

There is an obvious social benefit to be gained from a review of recently implemented university courses in analysing how well they fulfil

their role of training students for a profession. There are essentially three procedures that can be employed in such an analysis [1]:

- Surveys of graduates and/or companies on working conditions.
- Interviews with graduates and/or companies.
- Meetings (round tables) with everyone involved in the process: society (represented by associations, politicians), university (professors, students) and business (executives, human resource managers).

The ultimate objective is to ascertain whether what is being taught is what is needed to practise the profession, and to determine how well employer demands, needs and requirements are met by the knowledge and skills acquired in university training. That is to say, the aim is to see how well the curricula are suited to actual professional endeavour; in short, graduate suitability to labour market demands. In labour market research, the degree of competence acquired through university training is associated with a series of crucial factors, several of which are relevant here:

- Accreditation of academic institutions is strictly enforced by professional associations such as the American Library Association or the Association for Library and Information Science Education [2].
- The domestic models followed to establish guidelines for curricula.
- Certification of professional careers. Here the reference is to the French certification model or the SEDIC (Spanish Society for Scientific Information and Documentation) model recently implemented in Spain.
- Anything relevant to education and training, including life-long education.
- Promotion within the profession.
- Personal aptitudes and background.

One of the most pertinent references for this survey was a prior analysis of the occupational status of holders of associate degrees in library and information science. That survey, conducted in 1995, covered the entire country of Spain and focused on graduates from the schools with the longest tradition: then, the university schools of Barcelona, Granada, Murcia and Salamanca [3]. It was limited to holders of associate degrees because bachelor's courses were only just starting to be delivered. That analysis enabled us to:

- Determine the impact of documentation studies on access to jobs in the field.
- Identify hiring trends for documentation professionals.

In addition to furthering the above aims, the present survey also pursues dual objectives:

- On the one hand, to detect the features that training for information professions should address to enable graduates to suitably perform their professional functions in keeping with the tasks assigned to them by management with responsibility for information units.
- And at the same time identify the demands made of these professionals to access the labour market.

We have attempted to determine the labour market expectations in connection with the possibility of employing graduates trained to analyse and manage information and, consequently, the characteristics that the training provided to such professionals should feature to enable them to suitably fulfil their occupational tasks. As no analysis had been conducted to date in Spain of the demand for information professionals on the part of businesses and institutions, a real need

was felt for research in this respect. Thus the survey proposes to clarify the various aspects of the mechanisms underlying the changes affecting institutions, the management responsible for such institutions and the employers in general as regards recruitment of their professional teams.

Methodology

The research was conducted along two different but complementary lines. On the one hand, we measured the effect of earning or working towards a bachelor's degree in documentation on the students' and the graduates' occupational status. On the other, we studied the attitudes and opinions of the people employing the graduates in connection with training needs and the advisability of hiring them. In both cases, the technique used was a *pre-coded statistical survey*, applied to a quantifiably reliable sample of the populations analysed.

The project was implemented in two phases. The first consisted of the following steps:

- Survey formulation.
- Filling in and receipt of the questionnaires from September 1996 to November 1999.
- Review of responses for consistency and closure of open questions.

The following steps were taken during the second phase:

- Formulation of results tables, with denomination and abbreviation of variables/columns.
- Coding, recording, tabulating.
- Processing responses to each of the survey questions for results expressed in percentage.
- Comments on open questions.

Finally, the data compiled from the questionnaires was analysed and interpreted.

Survey characteristics of university graduates and their employers

Universe

The study's population included the students working towards and graduates having earned their BA in documentation from the Carlos III

University of Madrid, (160 in all, from the 1st through the 4th graduating classes). Conducting the analysis among documentation BAs for the first time was precisely the most innovative feature of this survey. To meet our second objective we surveyed fifty-five managers responsible for hiring personnel in companies and governmental organisations [4]. In this case, the universe was defined to include the companies, institutions and information units that had employed documentation students and graduates from Carlos III University between 1996 and 1999. This covered government offices and state-owned companies as well as private companies engaging in activities relating to documentation, which had approached the placement office run by the university's Professional Guidance and Planning Service (SOPP).

Filling in the questionnaires

Two methods were used: face-to-face with groups of students and individual reply to postal delivered questionnaires by the graduates. The high – 76% of 160 questionnaires – response rate is an indication of how highly motivated respondents were. The response rate for the questionnaires mailed to institutions and companies was 67% (36 of 55) of the questionnaires sent.

Codifying, recording, tabulating and analysis

These tasks were performed using the SPSS-PC (Statistical Package for the Social Sciences) survey program which converts all the information collected into numerical data matrices, in turn used for analysis and tabulation. Frequency distributions were obtained for each of the variables and two (or more) variable cross-tabulations were formulated. Interval variables were likewise statistically tested for dispersion (using mean and standard deviation).

The design of the pre-coded quantitative surveys was divided into major sections, so it could in turn be broken down into specific indicators:

- *Curricular and personal particulars:* age, sex, kind of degree, year of graduation, grade average, foreign language and level of command, time spent abroad, command of IT systems, etc.
- *Features of current occupational status:* previous jobs, kind of employment contract, size of organisation, job access, company's line of business, relation between curriculum and landing a job.
- *Company particulars:* line of business, size, etc.
- *Employability conditions:* company needs, candidates' demands, degree of satisfaction with various aspects of the job or degree of graduate competence.

Table 1. Profile of University Carlos III Documentation graduates.

	95/96 school year		Now	
	English	French	English	French
Language	82.7	28.6	83.1	26.4
Command of English	Average	Excellent	Average	Excellent
	35.3	6.8	34.2	6.9
Time spent in English-speaking country	Yes	No	Yes	No
	9.0	91.0	9.5	90.2
OA	Yes	No	Yes	No
Word processing	97.7	2.3	98.1	1.9
Spread sheets	35.5	64.5	38.2	61.8
Databases	67.7	32.3	68.5	31.5
Graphics packages	25.6	74.4	24.7	75.3
<i>Automated documentation</i>				
Database managers	91.5	8.5	92.6	7.4
Database distributors	69.2	30.8	68.8	31.2
Library management systems	84.2	15.8	88.6	11.4
Automated cataloguing systems	85.6	14.4	85.7	14.3
	Yes	No	Yes	No
<i>Specialisation courses</i>	49.6	50.4	47.8	52.2
In Documentation	39.2		40	
In Information Technology	31.2		32	

Comments on results

In our discussion of the most significant results, we are taking the findings of the 1995 survey as the point of departure to establish a comparison between the two. This enables us to observe the evolution during the interim and to contrast the results of this survey to a valid reference point.

The overall profile of University Carlos III documentation graduates and last-year students closely resembles some of the findings discussed in the management report drafted by the Carlos III University of Madrid Foundation's Professional Guidance and Planning Service (SOPP) in the 95/96 school year [5].

Table 1 reveals that most students have some knowledge of English as well as a good command of information technology, in particular as regards databases and automated cataloguing. They usually acquire some complementary post-graduate training in the field of documentation and information technology. The percentages show that only around one-half of the students takes such courses and that some of the same people that take documentation courses also take IT courses. This is also an indication of the importance of continuing education to keep abreast of new developments. Moreover, it should be pointed out that one of the Carlos III University requisites for a bachelor's degree is at least one hundred hours of internship in information units. Students with associate degrees in library and information science had already interned for at least two hundred hours in such sites.

Gender

As far as gender is concerned, the number of women grew during the period studied. The 1995 survey found that women held 73% of the jobs in our field in Spain. This majority has been maintained both in terms of the percentage of women enrolled, which has always been larger than the percentage of men, and of the number accessing the labour market. Women accounted for 74.9% of the total. Ours continue to be fields preferred by women.

Employability features

In 1995 only 30% of the sample analysed (library and information science students working to-

wards associate degrees in the Universities of Barcelona, Granada, Murcia and Salamanca) worked during the last year of school. In Barcelona, however, the doyen of all these schools and the one with the deepest social roots, 60% [6] of the third-year students worked. The present survey found that 77% of the students on the brink of earning their bachelor's degree combined work and school. That is to say, only 22.9% of the last-year students working towards their bachelor's degree devoted all their time to academic activities only. In all, 82% of the graduates claimed to be working.

Most of them began to work before enrolling in the bachelor's level documentation courses, since they claimed to have been working, on average, for one and a half years. This means that they began their bachelor's studies with some kind of work experience. Of the students working, 21.3% had begun to work when they were still taking first cycle courses (it should be borne in mind that not all BA undergraduates took these courses, or even studied at this university). Another important feature is the presence of professionals with solid work experience (6.1%). These students enrol to update their knowledge and earn a degree more in line with their current position, acquired on the basis of some other university background or training before degrees in documentation existed. The length of time these professionals most frequently claimed to have been working was 18 years and the time least frequently specified was one month. Employability was very high in our study. Indeed, a survey conducted by another Spanish university found that the percentage of students with jobs when graduating was fewer than 25% in all fields of study [7].

With regard to job access (see Table 2), the SOPP placement office was the main avenue used, followed by personal connections. The National Employment Institute (INEM) also proved to play a predominant role, placing 20% of the students with jobs.

The high percentage of students working under fellowship arrangements confirms a definite relationship between the final stages of schooling and the initial phases of professional practice. Hence, the percentage of students combining school with work (72.6%) is mitigated by the fact that they engage in professional activities subject

Table 2. Job access.

	1995	Now
University's Placement Office	5%	22.6%
Personal connections	3%	20.9%
INEM	27%	20.0%
Spontaneous candidacies	11%	10.4%
Internship or prior job	5%	7.8%
Competitive exam	21%	7.8%
Journal's advertisements	15%	4.2%
All others	13%	6.3%

Table 3. Occupational status.

Permanent position	11.2%
Temporary position	16.4%
Internship	7%
Fellowship	60.8%
Others	4.6%

Table 4. Place of work.

Public sector	51.5%
Private sector	48.4%

Table 5. Occupational status by sector.

	Public sector	Private sector
Permanent contract	72.4 %	27.6 %
Temporary contract	26.5 %	73.5 %
Fellowships	59.3 %	40.7 %

to supervision or that involve monitored access to the working world.

In 1995 it was also found that fellowships were the prevailing vehicle for hiring students. At that time, 21% of all working students were employed under such arrangements. Fellowships and temporary work accounted for over 60% of the jobs held by students. That situation has now become a trend, as these figures show. Temporary or fellowship employment, or holding a job with no employment contract, is now the prevailing arrangement for the majority. There has been a growing tendency to hire workers on a temporary basis in Spain since the 1980s. The 1998 Survey of the Working Population estimated that 33% of all workers had a temporary contract. In 1998 a total of 10,156,600 people were employed, 3,352,300 in temporary jobs. As far as the region of Madrid is concerned, temporary jobs have also been on the rise in recent years: in 1996 422,700 people had temporary employment contracts, while the figure grew to 439,200 in 1997 and

464,400 in 1998 [8]. Fostering of employment through internship in the region has followed a similar pattern: the 14,681 internship contracts in 1996 grew to 17,570 in 1997 and 20,694 in 1998 [9]. The inordinate percentage of students working under fellowships would seem to indicate that many actual jobs are held under the cover of such arrangements. The reasons for this are not just an overall trend in Spain. The youth of our degrees and the fragility of our sector, which still lacks sufficient strength to consolidate its labour market, also contribute to this situation.

While in 1995 79% worked for the government, in the interim the pattern has clearly been towards a better balance with respect to places of work [10] as shown in Table 4.

Occupational status by sector is broken down in Table 5.

Of the students and graduates who work 88.3% hold library and information science positions and 11.6% jobs in other fields. These figures indicate a slight rise in the number of jobs in the field compared to 1995 (when 17% were employed in other areas). This is evidence of the growing regard for our professions in what aspires to be a knowledge society.

In 1995, of the students who worked one year before finishing their schooling, 47% were employed as aides and 28% as auxiliary, 17% as professional and 8% as subordinate personnel. These percentages have since varied. Now the tasks performed are as follows:

	Present	1995
Executive/professional	7.61%	17%
Aide	37.5%	47%
Auxiliary	45.2%	28%
Subordinate	9.7%	8%

It should be recalled, in this connection, that some long-term professionals enrol to earn their BA in courses, which did not exist until very recently. In their case, professional practice precedes university training. This explains the high percentage of students in positions of substantial responsibility (e.g. professionals, managers) while they are still studying or when they have nearly completed their schooling. Most of these people (85%), naturally, have permanent employment contracts. The increase in the number of students

Table 6: Main activity at place of work.

Type of Centre	% of Jobs
Administrative records	2
Document databases	10.4
Libraries	32.4
Computer centre	2
Document centres and services	34.4
Image document centres	3.1
Scientific departments	4.2
Management information systems	8.3
Information services	3.1

with auxiliary jobs should be seen as an outcome of the labour situation. Fellowship and internship employment encourages the casting of students in non-technical roles.

The main activity at the work site, as far as information systems are concerned, can be broken down as shown in Table 6.

Table 6 represents a turnaround with respect to the pattern observed in 1995 (60% of jobs in libraries and 23% in document centres), even more impressive given the breakdown of document centres into several subdivisions in the present survey. This shows the variety of units and functions in which graduates in our field can engage. It has always been maintained that library and information science are organised into a variety of systems to solve different access and information management problems. Proof of this variety can be found in the rise in the number and kinds of units that we consider to be covered by such systems. Moreover, the diversity of industries where they are applied contributes even further to the wealth of occupational possibilities the field has to offer. This reversal of tendencies can also be explained in terms of the high percentage of fellowships as compared to steady jobs, as the former are more typically offered by companies' document centres. Nor should sight be lost of the fact that the population studied is partially comprised of students, for whom fellowships are ideal tools for combining schooling and the acquisition of work experience.

As far as monthly salaries are concerned, the breakdown is as follows:

- Up to Pta 70.000 26%
- From Pta 70.001 to Pta 100.000 29%
- From Pta 100.001 to Pta 150.000 36%
- Over Pta 150.000. 9%

Table 7. Number of jobs offered

Government	22
Agribusiness	3
Graphic arts	2
Banking and finance	2
Trade	3
Construction	2
Consultancy	35
Publishing	3
Education and research	6
Energy and water	5
Education	2
Processing industry	5
Information technology	3
Bookstores	3
Communication media	8
Leisure time and culture	2
Health	2
Business services	22
Telecommunications	14
Transport and communications	12
Total	154

Even though fellowship workers and interns are generally part-time employees, the fact that 26% of the salaries are below the minimum wage (Pta 69.270 in 1999) gives cause for concern. The argument that some of them are in training is not a valid excuse for this situation, either, for such low salaries take no account of their university background. These low salaries also contribute to a low self-esteem, much lower level than merited, a characteristic feature of our profession everywhere [11].

An analysis of the industries where companies and institutions have hired our students and graduates over the years is of great interest. Although only valid for those who sought work through the SOPP, it does reveal which industries tend to take an interest in documentary work. Such trends are an indication of the standing of our trade in today's society. Table 7 shows the businesses in which employers engage and the number of jobs offered in each industry [12].

Analysis of employer requirements

In addition to a degree or training, companies expect candidates to have other qualifications and skills to apply to the jobs offered. Table 8 lists the explicit requirements of the jobs considered in this study.

From the information in Table 7, it may be deduced that the profile in greatest demand, ac-

Table 8. Job requirements

Explicit requirements	No. of offers
Military service finished	2
Languages	
English	46
French	5
Computer skills	
Operating systems	21
Programming languages	5
Databases	68
Spread sheets	19
Word processors	46
Others	26

According to demand-side labour market figures for 1996, 1997 and 1998, is as follows [13]:

- Activity was most intense in the fields of consultancy, business services and government.
- The job most often offered was for documentalists, followed by librarian's aide for tasks relating to classification and cataloguing, selection of specialised information, search for information on the Internet, cleansing of records and search results, library organisation and management and database maintenance.
- Up to 34% of the job offers required a good command of English, although some knowledge of the language was called for in nearly 40% of the job offers.
- Most offers also required a command of database management and word processors, along with expertise in information and communication technologies (Internet, Intranet, HTML, e-mail) and document management systems (ABSYS, MARC, KNOSYS).

As fellowships are the most common working arrangements offered by companies, they prefer graduates and second-cycle students. The distinction they make is based not on the functions to be covered, but on the training required. It is odd, to say the least, to note that 7% of the job offers require students and new graduates to have over one year of work experience.

Student and graduate strong points

The following discussion addresses new recruits' strong and weak points as observed by the management responsible for hiring employees to fill documentary positions in their organisations. With respect to the university background acquired, the strong points observed by businesses, namely automated documentation, OA, command of foreign languages and ongoing education, co-

incide closely with the results discussed in the SOPP report mentioned above. The features most appreciated by companies in connection with the qualifications that students and graduates bring to the labour market are:

- High level of expertise in library and information science techniques (80%), enabling new recruits to perform information processing functions well from the outset.
- Suitable training in connection with new technologies, so they have excellent technological skills when hired (82%). In particular, they are found to have a good command of OA tools (93%) and sufficient know-how in connection with library and information science techniques and software (83%).
- Another highly appreciated feature is their knowledge of foreign languages (85%), although they are not as fluent in such languages as might be desired. And not all graduates and students are capable of working in other languages.
- They have often rounded out their training with long post-graduate or extracurricular courses (49%), with an outstanding background in business studies in many cases (28%).
- Flexibility, enthusiasm for their profession and aptitude for hard work are other highly valued traits (48%).

Weak points

On the other side of the coin, the general and specific shortcomings in the training received are equally relevant to this discussion:

- There is a certain imbalance between university training and information unit needs (6%). Although the percentage is low, it does draw attention to the fact that curricula should be brought closer in line with real needs, no matter how difficult it is to adapt university course syllabi to the rapidly changing techniques and technologies in our field.
- A comment that gives greater cause for concern is the assertion that the level of general education is low and that a broader cultural background is needed (22%). In recent years curricula have tended to become more specialised and it can no longer be taken for granted that graduates will have a certain level of background knowledge. This same comment is heard in connection with students entering the university after schooling under the LOGSE (Constitutional Act on Education). The humanities would seem to have been relegated to mere reminiscences of times past, while what companies are seeking with this requirement is the ability to reason and draw from a philosophical *acquis* to understand and participate in the demands of today's world.
- Greater initiative and creativity (15%).

- Good command and use of languages, in particular English (18%). This is undoubtedly one of the weak points that Spanish university training is endeavouring to overcome.
- Insufficient knowledge of specific technological environments (14%). This is somewhat utopian, given the constant release of new documentary software. The university cannot train students to use all the programs on the market. In this case, general IT skills acquired during the university years should be valued more highly than a comprehensive know-how of all existing market software.
- Handling of specific sources of information: legal, economic, health, actuarial etc. (38%). This shortfall is unquestionably due to the fact that it is impossible, in a schooling of a general nature, to address all the specific applications of information sources. The variety of fields of knowledge renders virtually universal specialisation impossible.
- Finally, there is a series of comments relating to deficiencies in project presentation and formulation techniques (7%) and job-finding strategies (interview techniques, presentation of resume) (15%). The mention of this flaw in training is odd, since certain disciplines include these areas in their syllabi, which are delivered with sufficient emphasis on theory and practice. Much the same may be said with respect to business management (9%).

Most relevant conclusions

The overall conclusion to be drawn from the above discussion is that the standardisation of education through university degrees has made a difference not only in the consequential training that earning a degree entails, but in the emergence of candidates better suited for the jobs offered. The curricula delivered in Spanish universities provide good training for documentalists in terms of fundamental professional demands. Even so, they do not ensure that these professionals will be able to conduct all the activities that companies or public institutions may request of them.

Early on in a person's career, the potential that is to be developed to aspire to a position carries more weight than having a specific profile. Companies distinguish between candidates by means of personal evaluations. Since potential employees have a similar theoretical background, their maturity, adaptation to their surroundings and even a knowledge of companies and business operations may suffice to distinguish among them.

The number of job offers on the documentation market is presently growing, but at the same time

greater demands are being made of candidates. Therefore, both graduates and professionals must be able to adapt continually to society, techniques and technologies that are subject to constant change. Moreover, demand-side profiles are imprecise, due perhaps to the continuous appearance of new jobs and the recent institution of schooling in this field.

Internships and fellowships have become the means of selecting personnel for businesses. The time a student spends in a company is not only a training period, but an observation period as well. It serves as a way to come to know and evaluate a candidate, who may eventually be hired, if it is in the employer's interest.

During the early years of their career, candidates' salaries are much lower than merited in view of their qualifications and the demands placed upon them by their employers.

The requirements that companies ask candidates to meet together with the shortcomings both businesses and students identify when they begin to work serve to establish the guidelines that undergraduate training should follow. Any design for future curricula, if it is to be up-to-date and realistic, should take such proposals into account. Such requirements should also be the point of departure for a much-needed dialogue among the university, professional circles and the government when such curricula are to be revised. This might contribute to improving the scant coordination among the different programmes existing in Spanish universities, which are similar in backbone courses only, but not in course content or even names of subjects [14].

- The functions of the LIS curriculum's traditional disciplines (abstracting, cataloguing, indexing, classifying, archiving, etc.) are still valid. They continue to support the necessary technical core to develop adequately the professional functions.
- The information technologies are appreciated as essential tools for information systems work.
- A set of knowledge appears related to human relations, social and cultural attitudes, and management.
- The knowledge, abilities and competencies acquired in the university must be complete with periods of internship in information units.

The confounding of functions between associate and bachelor's degrees is readily perceptible. On

the one hand, companies often ask BA graduates to perform tasks that would be more appropriately assigned to professionals with associate degrees. On the other, competition for jobs leads to accepting functions less demanding than the level of expertise acquired to earn a degree. Many BA documentation students and graduates also have an associate degree in library and information science and may have landed their jobs on the grounds of the latter. What is not reasonable is for them to engage in subordinate or auxiliary tasks. This would seem to cast doubts on the main objective of a BA in documentation, namely, to train students for management responsibilities.

Society is undergoing rapid and even dizzying changes in certain areas of knowledge. The information management disciplines are very acutely impacted by these phenomena. Professional tools quickly become obsolete, requiring documentalists to enrol in continuing education if they are to be able to competently perform the tasks their profession demands of them. There is a clear tendency to acquire extracurricular expertise to adapt to labour market demands, which is in itself an implicit acknowledgement of the value of both a general background culture and lifelong education. The latter usually consists of monographic courses generally delivered by the universities themselves or the CINDOC (Scientific Information and Documentation Centre).

The use of multimedia is gaining in importance in today's job offers. This has made it mandatory to address their use and management in educational institutions.

The requirement for a command of the English language as an essential qualification stands as proof that our activity is European and even world wide in scope [15]. French and German are often secondary requisites, although a command of these languages is usually instrumental in landing the job in question when it lists these languages as requisites.

Notes

1. Their use is described by Bryman, Alan. *Quantity and quality in social research*. London: Routledge, 1996. Other useful references in this same vein are: Albarello, Luc. *Pratiques et méthodes de recherche en Sciences Sociales*. Paris: Armand Colin, 1995; Bryman, Alan and Robert Burgess (eds.). *Analyzing qualita-*

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2. Since 1950 the journals *Library Journal* and *Library Personnel News* have been the vehicles for dissemination of ALA papers on training, professional demands, accreditation of academic institutions, etc. Examples of such papers are ALA – Changing role of professionals and paraprofessionals in *Library Personnel News*, (1988), 21(1), and in ALA – Human resources in the 1990's in *Library Personnel News*, (1990), 41(2): pp. 17-19. Since 1980 ALISE has made public the annual *Library and Information Science Education Statistical Report* (The 1997, 1998, 1999 and 2000 editions are available via the Internet at the URL: <http://www.ils.unc.edu/ALISE/>). These reports contain data on the LIS education programs in the USA and Canada from personnel, student, curricular, and financial perspectives.
3. Moreiro, J.A., P. Moscoso, and V. Ortiz. 1995. El mercado de trabajo de los diplomados españoles en Biblioteconomía y Documentación. *Revista Española de Documentación Científica* 18(4): 444-63.
4. Along the lines established by the Carlos III University of Madrid. *Estudio de inserción laboral de los titulados de la Universidad Carlos III de Madrid*. Madrid: Fundación Universidad Carlos III, 1996. Carlos III University of Madrid Foundation. – *Estudio de la oferta laboral dirigida a titulados universitarios*. Madrid: Carlos III University of Madrid Foundation, Professional Guidance and Planning Service, 1999. 39 pp. Also, by Caridad, Mercedes, and Moreiro, José. – Acerca de los métodos de estudio de la relación entre las condiciones laborales y formativas en Biblioteconomía y Documentación: el caso de la Universidad Carlos III, in *Anales de Documentación*, (1998), No. 1. p. 137-156.
5. Carlos III University of Madrid. *Informe de gestión. SOPP. Curso académico 95/96*. Madrid: Fundación de la Universidad Carlos III de Madrid, 1997.
6. Moreiro, J.A., Moscoso, P. and Ortiz, V. – Análisis del empleo de los Diplomados en Biblioteconomía y Documentación: el caso de la Escola Jordi Rubió i Balaguer, in *5es. Jornades Catalanes de Documentació*. Barcelona: Col.legi oficial de bibliotecaris-docu-

- mentalistas de Catalunya – Societat catalana de documentació i informació, 1995. p. 609–620.
7. Gil Jurado, José Angel. 1999. Los titulados universitarios y el mercado de trabajo. Un estudio del desajuste educativo. Las Palmas: La Caja de Canarias, p. 88.
 8. Comunidad de Madrid (Regional Government of Madrid). 1999. *Anuario estadístico de la Comunidad de Madrid 2000*. Madrid: Consejería de Hacienda, p. 215.
 9. Comunidad de Madrid (Regional Government of Madrid). 1999. *Anuario estadístico de la Comunidad de Madrid 2000*. Madrid: Consejería de Hacienda, p. 221.
 10. This tendency for more and more jobs to be provided by private business is corroborated in García Sicilia, Francisca. 1999. Las dificultades para la especialización en España. ¿Dónde se forman nuestros especialistas? *Boletín de la SEDIC* 31: 1–3.
 11. As reflected in Prins, Hans and Wilco de Gier. Status and reputation of Librarianship and Information. With regard to Spain, see Moreiro, José Antonio, Purificación Moscoso, and Virginia Ortiz. 1995. El mercado de trabajo de los diplomados españoles en Biblioteconomía y Documentación, in *Revista Española de Documentación Científica* 18(4): 457.
 12. From Universidad Carlos III de Madrid. – *Informe de gestión. SOPP. Curso académico 95/96* y siguientes. Madrid: Fundación de la Universidad Carlos III de Madrid, 1997 *et sequentes*.
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 14. Borne out by the extensive “Índice alfabético de asignaturas”, in FESABID. *Guía de los estudios de Biblioteconomía y Documentación en las universidades españolas. Primer Ciclo*. Madrid: FESABID, 1994. pp. 179–188.
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