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ICA/SAE, Section of Archival Education and Training

2nd APACE Executive Committee

**THE 2ND ASIA-PACIFIC CONFERENCE FOR
ARCHIVAL EDUCATORS AND TRAINERS**

**“The Archival Science and Archival Education in the
Electronic Age”**

Professional Seminar

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「電子時代におけるアーカイブズ学研究とアーカイブズ学教育」

専門セミナー

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The Archival Training in the *Post-Custodial* Era, in Accordance with a Scientific-Informational Paradigm: The Portuguese Model

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1. The dominant paradigm in Archivistics and the changes in progress

The appearing of *Archivistics* as a discipline is a recent reality that can be integrated in the context of political-ideological, social-economic and cultural changes operated by the French Revolution. It is also closely related to the process of Historical Science development. In fact, the interest in archives as information repositories, that is, as memory's holdings of collective entities, whose social action influenced, in a diachronic way, people, societies and states' evolution, started to manifest, mainly, from 18th century in the scope of Illuminist Rationalism.

Before that, archives were seen as a support to administration (in a legal and administrative perspective) and to political interests, more than information sources of cultural character. Along the 19th century and, in particular, in the second half of it, the development of History and Positivism increased and, in consequence of that, some instrumental areas related to History, such as Palaeography, Diplomatics and Archivistics, became to be seen as "auxiliary sciences". They were practical subjects indispensable to the historian's *métier*.

The archivist-palaeograph, trained in the *École Nationale des Chartes* (established in Paris in 1821), appeared as the typical professional in archives, whose work was directed to the dissemination (through transcriptions, indexes, inventories, calendars and catalogues) of the information sources indispensable to the writing of the History of the Nation, one of the dearest values of liberal ideology.

It is in the scope of History and because of History that Archivistics essayed its assertion. Such a millenary and empirical knowledge gained value and disciplinary "conscience" and archives become to be considered as memory sites and appreciated as cultural heritage. Along the 19th century, many countries created state institutions (following the idea of French National Archives) to direct archival politics (and, in some cases, also library politics).

The French model – historical, positivist and oriented to cultural heritage – developed and consolidated itself along the 20th century. However, by the effect of the social-economic conditions (generated by the 2nd and 3rd waves of industrialization) the bureaucratic complexity of administrations and the technological and scientific evolution, it gained new borders, which lead to the autonomy of the discipline as an autonomous body of knowledge and to the improvement of its technical aspects. Thus, side by side with the valorisation of the documents' custody / memory's preservation that got particular expression in archives, appeared the necessity of control and appraisal of large amount of documentation produced by administrations in general and a new professional area (records management), which provoke a conceptual break in disciplinary terms.

The autonomy of Archivistics, essayed through the technical reinforcement, has not been enough to surpass the dominant paradigm and, because of that, didn't liberate Archivistics of a subsidiary

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position in relation to History. The historiographical interests that during 19th century contributed to archives' valorisation and to the importance of archivists' work generated paradoxically a perverse effect limiting the scientific growth of Archivistics, its scope and study's object.

In fact, the predominant view along the 20th century continued to be the historicist, custodial and documental one, despite the influence of the so called "Manual of Dutch Archivists"¹ having contributed to a progressive autonomy from History and resulted in an improvement of the technical and administrative components of Archivistics.

However, during the last two decades, in the social-economic, cultural and technological context of Information Society, Archivistics entered, definitively, in a new stage – the post-custodial era – in which the archives emerge as social information systems, whose complexity can't be reduced to the physical organisation of documents and their technical treatment – production of guides, inventories, catalogues and indexes, addressed to researchers (meaning historians). On the contrary, it is essential to study and to know the information organicity (structural component of the information system) and functionality (workflow, use, organisation and representation), as basic elements of the system that generates informational memory.

In these new circumstances, Archivistics comes back, in a certain way, to its origin, because it releases itself from the tutelage of History, surpassing the dominant empirical and technical view. Thanks to the development of an epistemological foundation and of a conceptual *corpus* in the scope of a broader area – **Information Science** – Archivistics, as an applied discipline, could get a basic theoretical referential.

2. The traditional archival training in Portugal

Portugal is one of the countries in the world where the implementation of the higher education in Librarianship and Archivistics began earlier. It started side by side with the training inside institutions, the type of education that, in the most part of European countries, was the only way to train professionals able to work in libraries and archives. The Decree of 29th December 1887 created the Inspeccão Geral das Bibliotecas e Arquivos Públicos and, at the same time, established the first and innovative course of professional education, of higher level, directed to train librarians and archivists². The Course, named *Curso Superior de Bibliotecário-Arquivista* (Librarian-Archivist Superior Course) included the following subjects: Portuguese and Universal History; Philology or Language Science; Latin and Greek Literature; Modern Literature of Europe, specially the Portuguese one; Diplomatics; Numismatics; and Bibliology.

The classes of the last three subjects were delivered in the National Archives (*Torre do Tombo*) and in the National Library and the teachers were employees of these institutions. The other subjects were taught in the *Curso Superior de Letras* (Superior Course of Arts), in Lisbon.

One of the most interesting characteristics of this course is the fact that from the beginning it supplied an integrated education to librarians and archivists, what constituted a quite singular model. In fact, in the most part of the European countries, librarians and archivists were educated separately and that circumstance still remains today, in spite of they assume themselves as information professionals.

¹ MULLER, S.; FEITH, J. A.; FRUIN, R. – *Handleiding voor het ordenen en beschrijven van de vereniging van archivariissen*. Groningen : Erven B. van der Kamp., 1898.

² PORTUGAL. Leis, decretos, etc. – [Decreto de 29 de Dezembro de 1887]. *Diario do Governo*. Lisboa. 3 (4 Jan. 1888) art. 13.º, p. 18-20.

After the institution of the republican govern, in 5th October 1910, the state interest in the promotion of the culture and the public instruction increased and, because of that, the concerns about access to information, public reading, promotion of libraries and archives have also been improved. In fact, some months later, in the 22nd March 1911, was created the University of Lisbon and the *Curso Superior de Letras* was transferred to its scope. The archivists and librarians' education became, therefore, integrated in the academic space, although the technical subjects remain to be taught at the National Archives and at the National Library.

The Librarian-Archivist Course could be attended by everyone who completed the grammar school. It was an under graduated course (not equivalent to a modern bachelor), with the duration of three years and it gave a specialized professional training.

Some years later, the Decree 19.952, dated 27th June 1931, reorganised all the library and archive services depending on the state and introduced some important changes in the Librarian-Archivist Course³. It became an "exclusively professional" course and was retired from the university. It has been reduced in what concerned general and cultural subjects and the technical ones were reinforced. The tutelage of the course was, from now on, competence of the *Inspecção das Bibliotecas e Arquivos* and the access conditions also changed. It was transformed into a post-graduated course, which required a previous graduation in Arts or, at least, the approval in the following subjects: Portuguese Philology; History of Portugal; Portuguese Literature; Latin Language and Literature; French, English and German Language and Literature; Archaeology; and Art History.

Although, this new format quickly demonstrated that the practical training disconnected from an academic institution, was quite difficult to be assured by the technical services that were responsible for the teaching. Therefore, after four years, a new reformation has been taken and the Librarian-Archivist Course has been established in the Faculty of Arts of the University of Coimbra⁴. It remained as a post-graduated course, with the duration of two years and a "practicum" of six months and it could be accessed by anyone who got a graduation in any subject and who passed an entry examination of general culture.

The Librarian-Archivist Course included in the first year subjects as Palaeography and Diplomatics, Numismatics and Sfragistics, Bibliography and Librarianship and in the second year a Course of Improvement in Palaeography and Archivology and Archivoeconomy. In spite of the professional and technical character of the Course it didn't deviate of a historicist and erudite matrix, what was normal if we consider the status of auxiliary discipline strongly attached to Archivistics and a little bit less to Librarianship.

The new format of the Librarian-Archivist Course remained unchanged until almost half a century, that is, until 1982. In this year it has been extinguished and replaced by a new training model, designated *Curso de Especialização em Ciências Documentais* (Specialization Course in Documentary Sciences)⁵. During about one hundred years (1887-1982), the Librarian-Archivist

³ PORTUGAL. Leis, decretos, etc. – Ministério da Instrução Pública : Direcção Geral do Ensino Superior e das Belas Artes : Decreto n.º 19:952. *Diário do Governo. 1.ª série*. Lisboa. 147 (27 Jun. 1931) 1.253- 1.269.

⁴ PORTUGAL. Leis, decretos, etc. – Decreto-lei n.º 26:026 [de 7 de Novembro de 1935]. *Diário do Governo. 1.ª série*. Lisboa. 258 (7 Nov. 1935) 1.633-1.635.

⁵ *Diário da República. 1.ª série*. Lisboa. 159 (13 Jul. 1982) 2.089-2.090.

Course has been the only way to the education of information professionals in Portugal. In 1969 it was established an alternative, through a Technical Training more oriented to Documentation, which took place in libraries or archives designated by the Ministry of Education, but this experience only lasted five years⁶. This kind of training was carried during fifteen months and the students should have previously a graduation in any subject. At the end they got a librarian-archivist-documentalist diploma.

By practical and economical reasons the training “in land” came back again. Based in experience and improving above all the technical aspects, this Technical Training was in consonance with the dominant paradigm at the time it was implemented – the emphasis in technique in detriment of science – especially in the North of Europe and in the USA. Portugal aimed to follow the general trend, although with huge structural differences, because of the political, economic, social and cultural situation.

By one hand, the cultural and historicist vision still dominated (represented by the Librarian-Archivist Course in the University of Coimbra); by the other hand, the new trends, more in accordance to the American model were followed through a technical training, with some connection with technologies and some proximity to Information Science, what lead to a reduction of the cultural and historical subjects.

After 1982, the Specialization in Documentary Sciences Course became the dominant training model in Portugal and remains, even today, as the only one recognised, in accordance to legislation, to admit a librarian, archivist or documentalist in public administration services. The course appeared because the old one (Librarian-Archivist Course) was considered old fashioned to answer to information challenges and to the work market needs. It was indispensable to plan a type of education oriented to enlarge the capacity of use of information systems, because the transfer of information was considered an important factor to development and the establishment and improvement of infra-structures in the area of documentation services, libraries and archives was a condition *sine qua non* to such development.

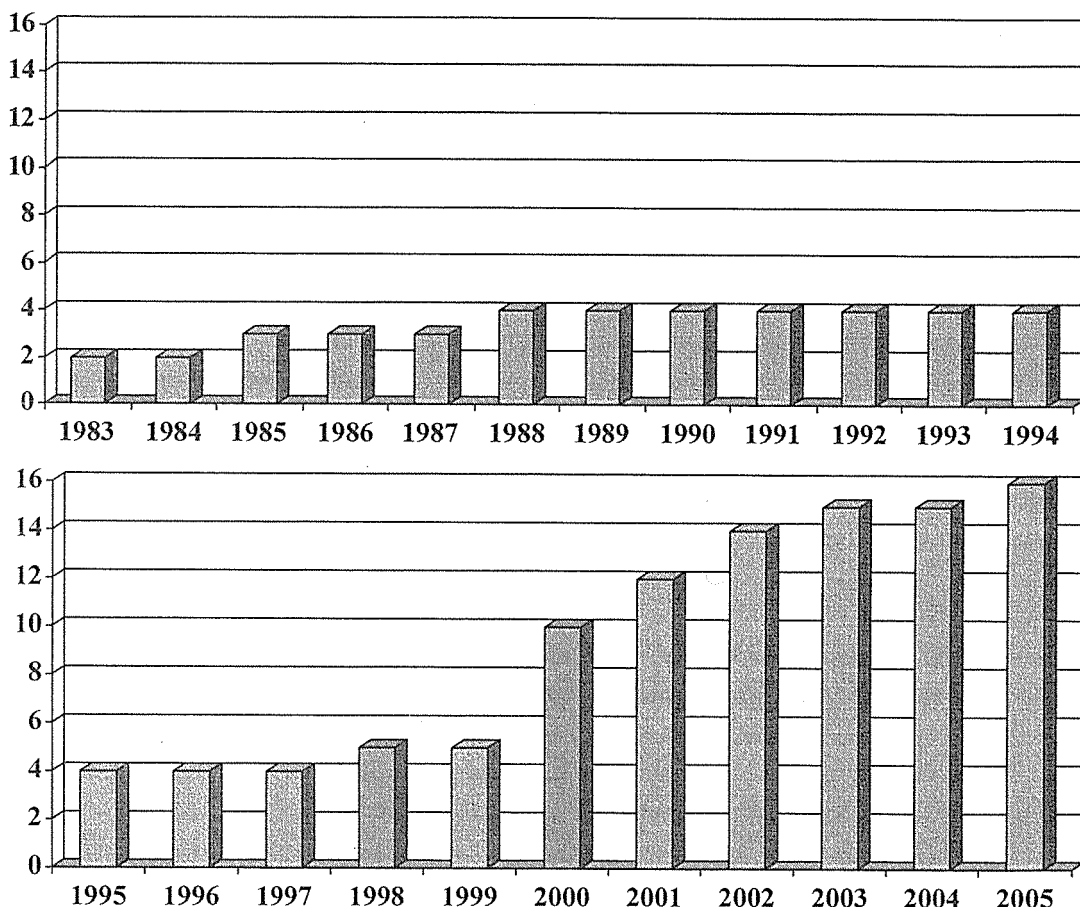
Besides a substantial change in the *curriculum*, in relation to the previous course, the Specialisation Course in Documentary Sciences introduced, also, a structural change through the separation of archivists and librarians/documentalists’ training. In fact, the Course was a post-graduated one, with two years, and in the second one there were two branches quite distinct: archives and libraries/documentation. This happened not because of scientific or theoretical reasons, but in a response to professional activities. In spite of the designation of “specialization course”, in reality, this course configures itself as an initial training, because it doesn’t suppose a previous graduation in the same area of knowledge, what reduces to a short period of time the acquisition of competences in the field of information.

In 1982 the course was created and a year later it was established in the University of Coimbra and in the University of Lisbon. In 1985 it was established in the University of Porto and after three years a private university also started to run the course. During more than one decade the situation remained stable, with four courses in activity. But after 2000, because of the university’s crisis in the area of

⁶ This Technical Training was approved by the Decree n.º 49.009, of 16th May 1969, published in: *Diário do Governo. 1.ª série*. Lisboa. 116 (16 Maio 1969) 537-538.

Humanities, the rising of this type of courses grew vertiginously, either in public or in private universities.

The graphic below shows the growth of post-graduated courses in Documentary Sciences in Portugal between 1983-2005⁷:



Although the available data don't allow knowing with certitude how many professionals are being trained, regularly, in the scope of Documentary Sciences courses, it is possible to estimate that the admission to these courses had grown to an average of fifty students/year in 1983 to about six hundred/year in 2005.

This training model, established in 1982 by a decree, started to be object of criticism some time after its beginning. The major problems were the inexistence of a progressive education model inside the University, beginning in an under graduation and finishing at PhD level, and the lack of teaching people exclusively dedicated to an academic career. In fact, only the universities of Coimbra and Porto admitted full-time teachers to the Specialization Course in Documentary Sciences. In the other universities, either public or private, the teaching has been guaranteed by professionals (librarians, archivists or documentalists), that work in the university in part-time and don't have conditions or interest to dedicate themselves to research activities.

⁷ The data about the number of courses was collected from the Associação Portuguesa de Bibliotecários, Arquivistas e Documentalistas' site: (<http://www.apbad.pt/Formacao/formacao.htm>) and complemented with some information, kindly supplied by its President, António Pina Falcão.

However, this traditional model resists strongly because it is the only one valuable for the admission in public administration information services. But it is in a deep crisis and since a few years it faces a new perspective that, slowly, becomes to impose itself...

3. An alternative and innovative model: archival training in the scope of Information Science

In 2001 arose, finally, in Portugal, an alternative training model to Specialization Course in Documentary Sciences. It presents two fundamental differences: it is an under graduated course and it put away the traditional designation "Documentary Sciences" to adopt the name Information Science, what supposes a larger and integrated perspective considering subjects of different interdisciplinary areas.

This new model has been established in University of Porto and resulted from a partnership between Faculty of Arts and Faculty of Engineering. It had as previous work a deep reflection, at theoretical and epistemological level, which resulted in a book entitled *Das "Ciências" Documentais à Ciência da Informação: ensaio epistemológico para um novo modelo curricular*⁸. In some way, this new course tried, from the beginning, to integrate itself in the spirit of Bologna Declaration, in what concerns professional profiles and competences.

It is not possible in this short paper to expose the theoretical and epistemological foundations that support what we call the new scientific-informational paradigm that integrates Archivistics as an applied area in the field of Information Science⁹. Nevertheless, in a brief and general view, we can enunciate the essential bases that support the new perspective:

- the assumption of **Information** – defined as a **structured set of mental and codified representations (significant symbols), created in a specific social context and capable of being recorded on any medium (paper, film, magnetic tape, compact disc, etc.) and, therefore, communicated in an asynchronous and multidirected way** – and not of the "document" as study and work object;
- the adoption of the quadripolar method of research, developed in the scope of Social Sciences¹⁰;

⁸ SILVA, Armando Malheiro da; RIBEIRO, Fernanda – *Das "Ciências" Documentais à Ciência da Informação : ensaio epistemológico para um novo modelo curricular*. Porto : Edições Afrontamento, 2002. 174 p. (Biblioteca das Ciências do Homem. Plural; 4). ISBN 972-36-0622-4.

⁹ About the subject it has already been produced literature in a significative quantity, such as: SILVA, Armando Malheiro da [et al.] – *Arquivística : teoria e prática de uma ciência da informação*. Porto: Edições Afrontamento, cop. 1998. ISBN 972-36-0483-3 (2ª ed.: 2002); RIBEIRO, Fernanda; FERNANDES, Maria Eugénia Matos – *Universidade do Porto : estudo orgânico-funcional : modelo de análise para fundamentar o conhecimento do Sistema de Informação Arquivo*. Colab. Rute Reimão. Porto : Reitoria da Universidade, 2001. ISBN 972-8025-12-2; RIBEIRO, Fernanda – *Archival Science and changes in the paradigm. Archival Science : international journal on recorded information*. Dordrecht [etc.]. ISSN 1389-0166. 1:3 (2001) 295-310; SILVA, Armando Malheiro da; RIBEIRO, Fernanda – *Das "Ciências" Documentais à Ciência da Informação... (op. cit.)*; RIBEIRO, Fernanda – *Archival education in consonance with a scientific-informational paradigm*. In *Essays in honour of Michael Cook*. Ed. by Margaret Procter and Caroline Williams. Liverpool : University of Liverpool, Liverpool University Centre for Archival Studies, 2003. p. 46-62. ISBN 0-947608-21-4; FERNANDES, Daniela Teixeira – *Pedra a pedra : estudo sistémico de um arquivo empresarial*. Lisboa : Gabinete de Estudos a&b, 2004. ISBN 972-98827-2-X.

¹⁰ See: DE BRUYNE, Paul [et al.] – *Dynamique de la recherche en sciences sociales de pôles de la pratique méthodologique*. Paris : PUF, 1974. The methodological proposes of these authors were further developed: LESSARD-HÉBERT, Michelle [et al.] – *Investigação qualitativa: fundamentos e práticas*. Lisboa : Instituto Piaget, 1994. ISBN 972-9295-75-1.

- and the preference by Systemic Theory¹¹, as a reference and an interpretative tool for any scientific study, will it be theoretical or practical.

According to the theoretical presuppositions, the *curriculum* design aims, at first, to abolish the artificial separation between archives and libraries that is traditional in the Portuguese training. An integrated view is fully assumed and, for example, the technical procedures of information's representation (such as description or classification) are not transmitted separately, as distinct subjects, either they are used in archives or libraries, or in any other information system.

The unitary perspective also aims synthesise the so called Information Systems (technological systems devoted to the storage and retrieval of information), that are increasingly being implemented inside organisations in general. In such a perspective, subjects related to theory and research methods, systems analysis, technical procedures for organising and representing information and related to storage and retrieval, along with informational behaviour and seeking constitute, naturally, the core curriculum. These core subjects are complemented by a set of subjects devoted to the applied components of Information Science, as they are related to the different kind of information systems (archives, libraries or technological information systems).

This core *curriculum* is, obviously, open to interdisciplinary approaches, including subjects from other knowledge fields (some of them obligatory and some other optional), in a complement to the main scientific area. Just to illustrate the *curriculum's* organisation (see Appendix), let us see its main interdisciplinary components:

- from the broad area of human and social sciences come the history of administration and institutions, history of cultural practices and the instrumental support of palaeography; epistemology and logic; linguistics, languages and techniques of communication; sociological aspects of organisations;
- from computer science, there are network studies, computer systems, databases, multimedia technology and operating software;
- management and administration sciences contribute with several subjects such as management, accounting, decision support systems, administrative law and information law;
- physics and chemistry contribute to the study of the media, in matters as preservation and conservation;
- cognitive sciences, such as psychology, also integrate the curriculum.

The innovative training model, established by the University of Porto in 2001, is, little by little, inspiring other schools in order to the creation of similar under graduated courses, in spite of they don't adopt the designation "Information Science".

Since its beginning, the Information Science Course recorded a large number of applications, what, at the moment, is not much usual in the Faculty of Arts' courses. In fact, the technological component, given in the Faculty of Engineering, is a factor that justifies such numbers.

¹¹ About the Systemic Theory and Thinking it is very useful the reading of: MELLA, Piero – *Dai Sistemi al pensiero sistemico : per capire i sistemi e pensare con i sistemi*. Milano : Franco Angeli, 1997. ISBN 88-464-0336-3.

The following table illustrates the evolution of the demand and the clear predominance of women:

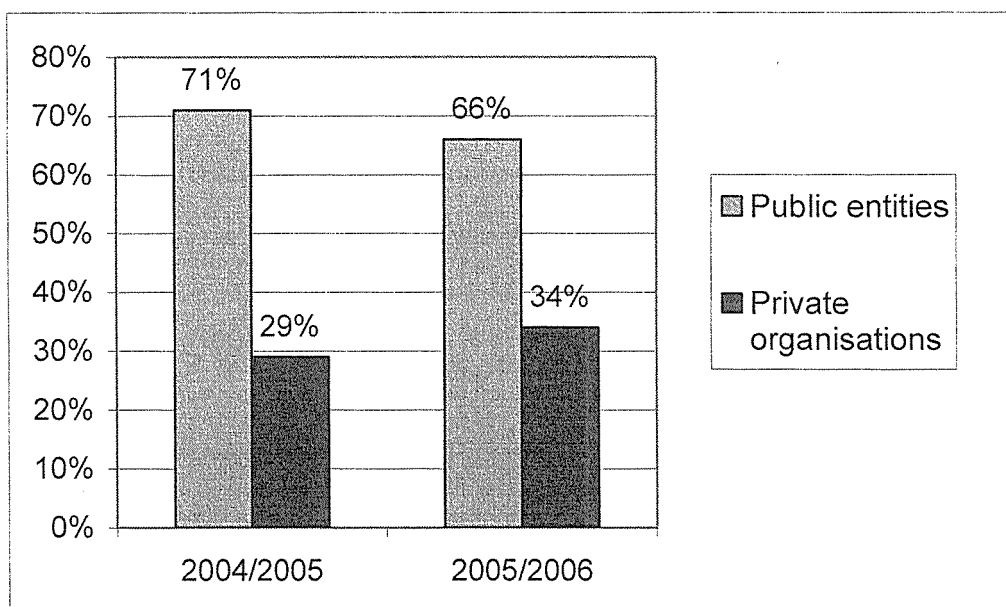
Year	Applications in 1 st phase (1 st choice) women	Applications in 2 nd phase (1 st choice) Women	Accepted in 1 st phase (1 st choice) women	Accepted in 2 nd phase (1 st choice) women
2001	571 (84) 383	149 (39) 95	30 (8) 23	10 (4) 7
2002	413 (55) 274	114 (24) 78	30 (13) 20	5 (2) 5
2003	360 (52) 253	158 (39) 108	40 (14) 32	9 (5) 6
2004	345 (42) 218	93 (21) 58	40 (19) 27	15 (9) 9
2005	436 (61) 291	104 (25) 62	40 (19) 31	16 (6) 13

In 2005 entered the work's market the first graduates – a group of seventeen young people. They finished the “practicum” at the end of August and the great majority of them received work proposals from the organisations where they've done such “practicum”. The manifestation of interest from several entities, either public or private, in receiving students for the “practicum” also constitutes an indication about the potential interest of the work's market in this kind of professionals with new profiles and new competences.

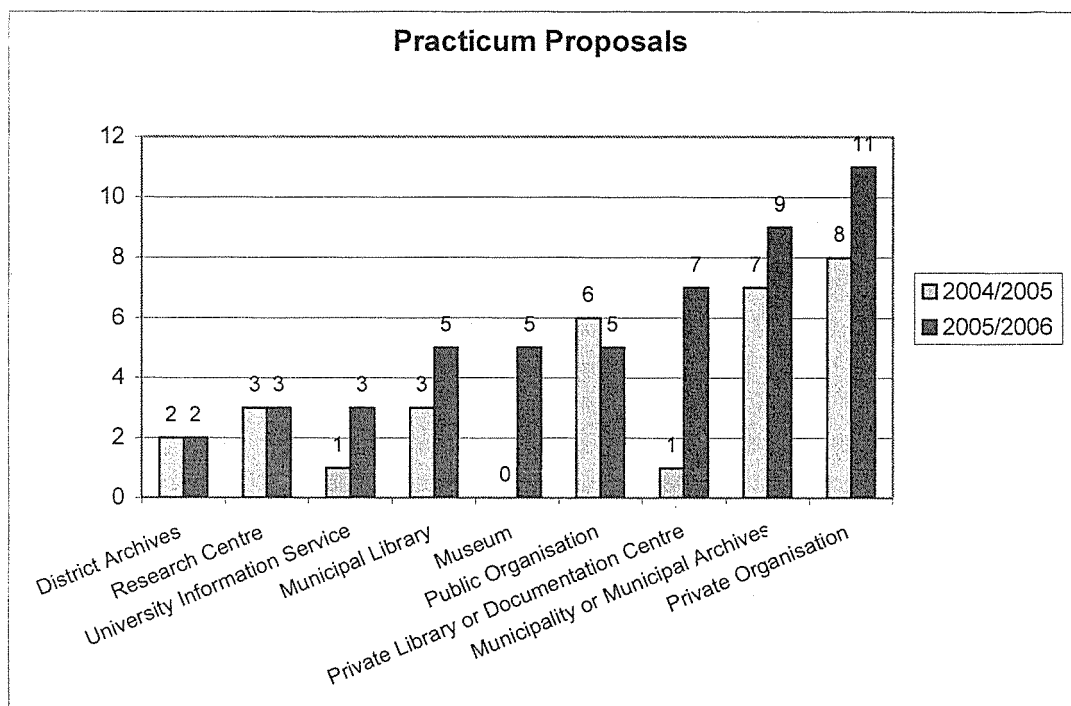
The graphics below shows the interest of different entities and organisations in receiving students for the practicum, since the beginning of the course:

UNDER GRADUATED COURSE IN INFORMATION SCIENCE – University of Porto

Practicum proposals in 2004/2005 and 2005/2006



**Comparison of proposals for the practicum in 2004/2005 and 2005/2006
(Libraries, Archives, Documentation Centres, Museums and other Organisations)**



This data don't allow reaching definitive conclusions, but they show that there is, with no doubts, a real job opportunity, in Portugal, for information professionals. They also enable us to conclude that the new competences developed in the innovative training model – Information Science Course – answer to the organisations' needs.

Other conclusions could be extracted if we had a job observatory in this professional area, in order to understand the relationship between the courses and the market and the society. That kind of observatory would also be important for the universities, because it could help the courses curricular design, having in view a better adjustment to the social reality in which the graduates are going to develop their activity. The challenge is spread forward...

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APPENDIX

UNDER GRADUATED DEGREE IN INFORMATION SCIENCE delivered jointly by the Faculty of Arts and the Faculty of Engineering of the University of Porto (Portugal)

Curriculum

Core areas:

- Information Systems (ISIST)
- Information Organisation and Processing (IOP)
- Information Services (ISERV)

Complementary areas:

- Management Sciences (MS)
- Human and Social Sciences (HSC)
- Computer Science (CS)

1st Year

1 st semester	Scien- tific area	ECTS ^{1,2}	2 nd semester	Scien- tific area	ECTS
Basic Informatics	CS	6	Communication and Compu- ter Systems	CS	6
Logics	HSC	5	Communication Techniques	HSC	6
History of Culture I	HSC	8	History of Culture II	HSC	8
Methodology of Research	HSC	5	Linguistics	HSC	5
Management Grounds	MS	6	Sociology of Organisations	HSC	5

2nd Year

1 st semester	Scien- tific area	ECTS	2 nd semester	Scien- tific area	ECTS
Theory and Methodology of Information Science	ISIST	8	Information Organisation and Representation I	IOP	6
Information Management	ISERV	6	Informational Behaviour	ISERV	5
Archives and Libraries Systems	ISIST	5	Palaeography	HSC	6
History of Public Adminis- tration I	HSC	5	History of Public Adminis- tration II	HSC	5
Information for the Internet	CS	6	Administrative Law	MS	8

¹² European Credits Transfer System.

3rd Year

1 st semester	Scientific area	ECTS	2 nd semester	Scientific area	ECTS
Information Storage and Retrieval I	IOP	6	Information Storage and Retrieval II	IOP	6
Information Systems Analysis I	ISIST	6	Information Systems Analysis II	ISIST	6
Information Organisation and Representation II	IOP	6	Information Services Management	ISERV	6
Information Sources and Reference Services	ISERV	6	Support Decision Systems	MS	6
Option		6	Option		6

4th Year

1 st semester	Scientific area	ECTS	2 nd semester	Scientific area	ECTS
Information Law	MS	8	Practicum		28
Information Society	HSC	5	Seminar		2
Digital Archives and Libraries	ISERV	6			
Cultural and Educational Activities	HSC	5			
Option		6			

Recommended options:

Accounting (MS)
 Cataloguing of Ancient Books (IOP)
 Codicology (HSC)
 Databases (CS)
 History of the Book (HSC)
 History of Religious Institutions (HSC)
 Latin (HSC)
 Multimedia Technology (CS)
 Preservation and Conservation (ISERV)
 Public Libraries (ISERV)
 School Libraries (ISERV)
 Technical English (HSC)