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TRAINING FOR FUTURE INFORMATION AND DOCUMENTATION PROFESSIONALS AT THE CARLOS III UNIVERSITY OF MADRID THROUGH INTERNSHIP IN LIBRARIES, ARCHIVES AND DOCUMENT CENTRES

The overall aim of this study was to determine whether the Carlos III University of Madrid’s Information and Documentation degree programme has delivered training suited to library, archive and information centre needs and to what extent such training should be restructured to rise to the challenges posed by relentless technological change. With those aims in mind, a competence matrix was applied to analyse the department’s historic series of worksite tutors’ assessments of students and the results of surveys conducted among both communities. The results attested to overall student and tutor satisfaction with the programme.

Keywords: Practicum; B.A. in Documentation and Information Science; competences; assessment; satisfaction surveys.

Introduction

This paper was inspired by the 2018 Quacquarelli Symonds (QS) ranking [1], which scored the Carlos III University of Madrid’s (UC3M) Department of Library Science and Documentation among the world’s top 50 institutions for Library & Information Management studies, specifically in position 22. One of the criteria used in the QS ranking is “Employer Reputation”. The UC3M department responsible for awarding the Information and Documentation degree works in close collaboration with information centres to ensure all candidates do their compulsory internships. Evidence of employers’ favourable opinion of the on-the-job performance of these future information and documentation professionals can be found in their yearly assessments of interns for academic years 2008/09 to 2017/2018. Analysing worksite tutors’ and students’ opinions about the university’s undergraduate programme supplements the results of the QS ranking.

Students intern in the second semester of their fourth year, after having completed their classroom training. Internships carry 18 ECTS, equivalent to 450 hours of work. Most of that time (375 hours) is spent training at a partnering organisation for three consecutive months to give students a feel for a ‘real professional experience’. The remaining 75 hours are devoted to homework designed to verify and apply academic knowledge at the worksite and to writing the end-of-term paper.

Responsibility for these internships is incumbent upon the programme director, along with one academic and one worksite tutor. Academic tutors assign students to partnering organisations, furnish support for any problems that may arise and award the final mark based on worksite tutors’ assessments and students’ end-of-term papers. Worksite tutors (all practising documentalists) supervise students in the host organisations, deliver induction training, assign the tasks to be performed and assess the results in terms of the competences to be deployed by students.
Internship partners include public, school, specialised and university libraries, documentation centres in all manner of organisations and archives. The employers chosen must be able to afford students a broad overview of the profession and ensure the performance of a wide variety of tasks. Compliance with those requisites is verified yearly and non-conforming organisations are excluded from subsequent years’ programmes.

An earlier paper described the criteria followed to implement internships and the respective verification procedures [2]. The data gathered in the first two academic years suggested favourable results. The present objective is to apply the information gathered in the interim to acquire deeper insight into worksite tutors’ and students’ opinions of the quality of these internships and the extent to which the training delivered matches employers’ needs.

That overall objective was pursued by:
1. analysing worksite tutors’ assessment of interns;
2. ascertaining students’ and tutors’ opinions of internship organisation and follow-through;
3. measuring students’ and worksite tutors’ satisfaction with the manner in which internships are conducted;
4. ascertaining students’ opinion of the extent to which their academic training enabled them to meet host organisation demands;
5. ascertaining students’ perception of the utility of the internship for their professional training;
6. determining tutors’ assessment of students’ preparedness, attitude and progress;
7. compiling tutors’ suggestions for possible improvements in the internship.

Those tasks entailed analysing worksite tutors’ assessments of students and the satisfaction surveys conducted during the internship.

**Literature review**

Internships have been routinely researched and are increasingly deemed a valuable tool for affording students a sense of professional identity, self-confidence and the capacity to adapt to and socialise in real working environments [3–5]. They play an indisputable role in curricular restructuring, opening up new lines of research and adjusting training to societal needs [6, 7]. Articles describing specific experiences have proposed criteria for organising internships and stressed the importance of matching the experience to classroom curricula [8–12, 2]. Most authors also recommend assessing programmes from different perspectives to ensure objectivity: the students themselves as well as their academic and host organisation tutors. Constant interaction among all the actors is essential to analyse the experience [13–16]. Information on employer conformity with the classroom competences acquired by students [17, 18] and of their general satisfaction with internship programmes [19–21, 16] can be applied to take appropriate measures.

The importance of external internships geared to bringing students into contact with the business world and enhancing their employability and entrepreneurship is one of the premises on which the European Higher Education Area was founded. In Spain, the introduction of internships in all university degrees has induced considerable reflection. The monographic issue on the subject published by Revista de Educación and the ‘International Symposium on Internship’ [23], which pivoted
around the commitment to internship quality and where participants from many disciplines exchanged experiences and proposals, constitute two such exercises. Nonetheless, as Di Meglio [24] notes, little empirical research has been conducted on the subject in general. That observation applies to Information and Documentation internships, where papers addressing student and tutor assessments are particularly sparse. In 2001 de Mendo et al. [25] reported high student satisfaction, while a more recent study by Pacios [26] was limited to the induction process.

**Methodology**

The UC3M degree defines five competences to be acquired by students:

a) a direct overview of how information centres work;

b) the aptitudes needed to provide the professional services characteristic of libraries, archives and documentation centres;

c) an understanding of and familiarity with the working routines involved in information retrieval, location, processing and dissemination;

d) teamworking abilities;

e) the ability to directly help users meet their information needs.

As those general notions need to be contextualised and quantified to serve as guidelines for conducting and assessing internships, they are broken down into specific and cross-curricular competences described in an earlier paper [2. P. 7].

Students’ learning was assessed in that study and the relationship between aims and results was found by applying a competence matrix designed to include the specific and cross-curricular competences for each general item, their respective indicators and features and four levels of student achievement. Competences were grouped by type of organisation involved for readier comprehension of tasks [2. P. 11–13].

Although the matrix delivered objective results, it furnished no information on students’ and worksite tutors’ degree of satisfaction with the experience. The degree of individual satisfaction is admittedly subjective but may nonetheless help detect problems and serve as a starting point for more complex assessments. All the subjects taught at the UC3M are subject to satisfaction surveys conducted at the end of each semester. As internships are poorly adapted to that timing, however, they are monitored stage by stage. Students and tutors are therefore called upon to answer three surveys dealing with qualitative and organisational issues.

The first survey targets students after the first month of the experience. They describe their satisfaction with the induction training received upon arrival, their conformity with the tasks assigned and the suitability of their knowledge to perform them on a five-point Likert scale.

Tutors answer a survey in the same time frame on their satisfaction with students’ attitudes, the knowledge brought to the job and their ability to apply it to the tasks assigned.

The second survey asks students to appraise the match between the tasks assigned and the working plan defined the utility of the internship to consolidate their initial knowledge, their integration in the working environment, the quality of their worksite tutor’s mentoring and their assessment of the utility of the follow-through survey itself. Tutors are asked whether students progress adequately, the extent to which they adapt to the tasks assigned and their integration in the unit or department. They also assess university follow-through procedures.
The third survey is conducted at the end of the experience. Students indicate their degree of satisfaction with the internship, the extent to which it helped them understand how information units work, acquire the competences needed to practise the profession and discover the opportunities inherent in their training. Tutors are asked about the number of hours devoted to tutoring students, their opinion of internship organisation and follow-through, their degree of satisfaction with the experience and students’ employability based on their knowledge and competences.

The population defined to analyse the assessment scores and satisfaction surveys comprised the 118 students who participated in internships between academic years 2011/12 and 2017/18 (Fig. 1).

Inasmuch as the university has concluded agreements with any number of libraries, documentation centres, archives and other organisations, students can choose the type of organisation where they would like to intern. Libraries were chosen by 46.61%, documentation centres by 27.00%, archives by 13.55% and other types of centres by 12.71%.

Results and conclusions

Worksite tutors in all the partnering organisations taken as a whole awarded the students high marks, with means for competence acquisition ranging from 3.61 to 3.73 on a scale of 1 to 4. The ability to assist users was the highest and the capacity to generate products and capacity to respond to inquiries the lowest scoring competence (Fig. 2).
The highest scoring cross-curricular competence was teamworking and the lowest, command of language in oral communication (Fig. 3).

![Fig. 3. Mean marks for cross-curricular competences (scale of 1 to 4)](image)

The analysis by type of organisation where internships were conducted revealed that in libraries the values ranging from 3.65 to 3.82. The highest-ranking specific competence was user assistance and the lowest value-added product generation. Command of language in oral communication and Teamworking were the cross-curricular competence with the highest mark while organisation and planning scored lowest (Fig. 4 and 5).

The mean marks awarded by documentation centres ranged from 3.44 to 3.59, with information resource analysis the specific competence assessed most, and value-added product generation least favourably. Teamworking was the cross-curricular competence most favourably assessed and the command of language in oral communication the least (Figures 4 and 5).

In archives the overall means ranged from 3.57 to 3.85, with user assistance the specific competence receiving the best mark and the ability to respond to inquiries the worst. The highest scoring cross-curricular competence was organisation and planning and the lowest the command of language in oral communication (Fig. 4 and 5).

In other types of centres where mean marks ranged from 3.70 to 3.91 the highest scoring specific competence was the value-added product generation and the lowest the ability to respond to inquiries. The cross-curricular competence assessed least favourably was organisation and planning (Fig. 4 and 5).

High values always attest to conformity with students’ capacities, whilst differences among organisations are to be expected, for their routines vary. Nonetheless, the fact that students interning in documentation centres were awarded the lowest marks suggested that their classroom training was geared more to working in libraries and archives. The findings for other types of organisations are difficult to interpret, given the heterogeneity involved. The year-to-year findings revealed substantial declines in the value-added product generation (specific competence) and the motivation to deliver quality (cross-curricular competence). On the whole, more work would appear to be needed in the value-added product generation, the motivation to delivery quality and the command of language in oral communication.
The items on the student and tutor satisfaction surveys were designed around a five-point Likert scale. Further to the results, student satisfaction with internship organisation and monitoring ranged from 4.31 to 4.90. Interns deemed programme roll-out to be very closely aligned with the training plan defined (4.90), although they scored university monitoring somewhat less favourably (4.31).

Tutors found internship organisation (4.58) and monitoring (4.56) to be appropriate. Nonetheless, some of the respondents suggested changes, including simplification of administrative tasks (2.5%), enhancing monitoring with telephone or face-to-face contact with the academic tutor (1.3%) and extending (2.5%) or shortening (1.3%) internship duration.

During the internship students had a very favourable view of the assistance received upon arrival at their place of work (4.55) and their integration with their workmates (4.51). They found that with their prior academic knowledge task assignments posed scant difficulty (1.49) while practical application consolidated that knowledge (4.15). They also believed they were acquiring a good overview of
the host organisation (4.00) and were appreciative of the support received (4.33) (Fig. 6).

Despite the fairly high marks awarded, tutors were less optimistic about students’ prior knowledge (4.08). In contrast, students’ aptitudes (4.68), adaptation of their knowledge to organisational realities (4.53), progress (4.69) and adaptation to change in the tasks assigned (4.69) were assessed highly. Tutors also reported favourably on student integration in the organisation (4.59) (Fig. 7).

Upon conclusion, students’ appraised the overall experience highly (4.55). They deemed the internship to be useful for discovering the opportunities afforded by their training (4.28), understanding how information units actually work (4.35) and acquiring new professional competences (4.26). They were very appreciative
of the assistance received during induction training (4.68) and from their worksite tutor (4.52) (Fig. 8).

![Bar chart showing student satisfaction upon conclusion of the internship (five-point Likert scale)](image)

**Fig. 8.** Student satisfaction upon conclusion of the internship (five-point Likert scale)

Tutors in turn deemed the experience to be highly satisfactory (4.83) and 94% would hire their student interns. In the remarks section, however, 82% suggested that the use of social networks and digitisation should carry heavier weight in academic training.

By way of conclusion, as other experiences from other countries shows that traditional practicums, undertaken in a physical workplace, are still a key component of LIS education [27]. The students, host institutions as employers and educational institutions viewed the experience in a very favourable light. On the whole, worksite tutors stressed students’ preparedness and deemed them apt for hire, highlighting their ability to handle workloads and adapt to worksite conditions. In contrast, they identified command of language in oral communication and organizational and planning capacities as an area where aptitudes would need to improve. Their proposals to strengthen social networking and digitisation skills were among the key inputs in the design of the new Information and Digital Management degree that has replaced the Information and Documentation programme since academic year 2017/2018.

**References**


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According to the 2018 Quacquarelli Symonds ranking, the Carlos III University of Madrid’s Department of Library Science and Documentation scores among the world’s 50 best, and more specifically holds position 22 in Library & Information Management. One of the criteria used in the ranking is “Employer Reputation”. The UC3M department, which is responsible for the Information and Documentation degree programme, maintains close working relations with employers through mandatory internships. Employers’ evaluations of the practical performance of the future information and documentation professionals tutored have been recorded yearly from academic year 2008/2009 to 2017/2018 and found to be highly favourable. Beginning in 2018/2019, the aforementioned programme was replaced by the Information and Digital Content Management degree with a curriculum adapted to new technological circumstances.

Student internships have always been a subject of research. Any number of studies analyse specific experiences and propose organisational and assessment criteria, stressing the need for a close relationship between internships and the academic programme of which they form part. The findings are useful for re-orienting academic curricula and channelling the dialogue between society and university.
In this case, the analysis of professionals’ evaluation of internship arrangements provides insight into their opinions about student training and how well the curriculum suits information unit needs. The data gathered over seven academic years also furnish information on students’ opinions of their work experience. The new programme is expected to benefit from this analysis of the strengths and weaknesses of the one that is being phased out.

The overall aim of this study was to determine whether the Information and Documentation degree programme has delivered training suited to library, archive and information centre needs and to what extent such training should be restructured to rise to the challenges posed by ceaseless technological change. The historic series of internship evaluations and surveys conducted among tutors were analysed with those aims in mind.

The Information and Documentation degree programme, which forms part of the European Higher Education Area, adopts a skills-based approach to teaching that reflects operational behaviour exhibited in ‘real’ professional contexts. Responsibility for these internships is incumbent upon the programme director and one academic and one professional tutor. In addition to choosing and assigning centres, the academic supports students and evaluates their internship performance. The professional, in turn, assigns and supervises tasks and assesses students’ aptitude in the respective skills.

Internship evaluation is based on the skills students are to acquire. The general skills expected of them include: 1) forming an overview of information centre operation; 2) performing professional tasks in the context of the assigned centre’s services; 3) understanding working routines; 4) teamwork; and 5) satisfactorily rendering user services. Those general skills are sub-divided into ten specific and six cross-sectional competences, measured in terms of indicators associated with evaluation matrices that reflect each stage of internship. Such tools provide information on student progress during the internship and their perception of the experience.

The analysis of the 7-year series showed that students assessed the experience positively. On the whole, professional tutors stressed students’ preparedness and deemed them apt for hiring, highlighting their ability to handle workloads and adapt to worksite conditions. In contrast, they identified command of language in oral communication and organizational and planning capacities as an area where aptitudes would need to improve. Their proposals to strengthen social networking and digitisation skills were among the key inputs in the design of the new Information and Digital Management degree that has replaced the Information and Documentation programme.