Polimnia project: issues and problems about realising a deposit of theses at the University of Parma

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Abstract

The international professional literature indicates that the introduction of electronic theses and dissertations (ETDs) can be a long, challenging and sometimes frustrating process. Those responsible for steering through such a change need to promote organisational adjustments and persuade university authorities, faculty, students, administrative staff and librarians. Among other factors, the success of the transition depends on a number of local aspects, such as the institutional culture and attitude towards students' research outputs, and the effectiveness of existing procedures for the management, cataloguing and provision of dissertations. An increasing number of universities in Italy has launched initiatives in the area of EDTs, whose main purpose seems to be that of improving access to dissertations' content, enhancing scholarly communication, and populating open archives and institutional repositories. However, at present there is still little information available about the specific challenges that have been faced, the issues raised, the strategies applied and the impact of these initiatives on the local and national academic context. The aim of this paper is to discuss the preliminary results of the University of Parma project for the introduction of electronic dissertations. The project started from an in-depth analysis of the local context and followed a pragmatic approach, with the purpose of minimising resistance and satisfying the needs of all stakeholders. The data gathered from a pilot experience at the Faculty of Humanities made it possible to study, although at a small scale, attitudes and experiences of undergraduate students and supervisors towards the electronic submission of dissertations. The project's objectives, release policies and implementation steps will be described, with a reflection upon the positive outcomes but also upon the problems that will have to be faced in the next future.

1 Introduction

A limited but increasing number of academic libraries in Italy is actively engaged in the area of electronic theses and dissertations (ETDs). As in other countries, the transition towards e-theses tends to be included in the broad movement of Open Access (Greig, 2005; Ayris et al., 2005; Suber, 2006). In Italy, ETDs initiatives have increased after the 2004 Messina conference "Gli atenei italiani per l'Open Access", where most Italian rectors subscribed the Berlin declaration on Open Access to Knowledge in the Science and Humanities. In 2006, the Commission for academic libraries of the Association of Rectors of Italian Universities (CRUI) has created a working group on Open Access, which is articulated in 5 sub-groups: International, Theses, Research evaluation, Electronic journals, and Berlin V. The sub-group on theses appears at the moment one of the most lively and active teams, particularly in debating the national legal framework for doctoral-level theses. Dissemination of students research is the result of a process involving different key groups – students, academic staff, university administrators, librarians, administrative and technical staff – and requires mediation, co-operation and integration (Bevan, 2005; Greig, 2005; Lippincott, 2006; MacColl, 2002; Surrat, 2005). If, how Tammaro (2007) states, digital repositories aim to support the transition of academic institutions toward digital universities, introducing an e-dissertation repository may be a step in this process. However, such a transition may be difficult to achieve when organisations are not oriented to integration and innovation. Several factors may hinder the process, such as the organisational culture and the body of regulations, both at a national and local level (Greig, 2005; MacColl, 2002; Surrat, 2005). At present, little information is available about e-theses projects undertaken in Italian universities, and the range of issues that are addressed. This paper aims to discuss the work relating to e-theses at the University of Parma (UP), analyses the local priorities and concerns addressed to achieve a cultural change, and evaluates the preliminary results.

2 Background information

Some background information about the University of Parma may be useful in order to understand the beginning of the project. The UP is one of the most ancient Italian Universities and is classified among the medium size academic institutions. The teaching activity is organised in ten faculties. Around 5,000 dissertations from 1st and 2nd cycle programmes and 190 PhD theses are discussed each year. Only a few of the Master programmes include a final dissertation. 1st and 2nd cycle dissertations are administered at the faculty level and regulations may be different from one faculty to another. While it is always requested to submit three printed copies to the Registry, only two regulations mention an additional copy for the libraries. PhD theses are administered at the university level. Candidates are requested to submit three copies to the Registry, but none of them is for deposit in the library. Two printed copies are sent to the national libraries in Florence and in Rome for preservation, cataloguing and inclusion in a specific annual supplement of the Italian National Bibliography. Access to theses in the National libraries is restricted, since reproduction, loans and inter-library loans are not allowed. Like many other Italian public universities, UP too is organised in separate units, hierarchically connected under the co-ordination of senior managers. Responsibilities and functions are well defined, and relationships among staff are basically linear and vertical. The organisational culture is focused on rules and procedures, and does not seem to facilitate team working, flexibility, and integration.

3 DspaceUnipr at the Faculty of Humanities

The first move towards e-dissertations started in 2004 at the Faculty of Humanities, with the development of the institutional repository (IR) DspaceUnipr for archiving and distributing a range of different materials: learning resources, dissertations, research papers, conference proceedings and primary resources. A team of three persons – a researcher of the Library and Information studies department, a departmental librarian, and a member of the IT staff – was responsible for the project, with representatives of students and academic staff co-operating as submitters on a volutary basis. The evaluation of this small scale experience indicated that dissertations were among the most suitable materials to start a university-based repository. Most supervisors involved or questioned about e-dissertations showed a positive attitude to dissemination of good quality students outputs, in particular the ones not intended for formal publication. The students invited to submit their works generally agreed with motivation and sometimes enthousiasm, in particular if encouraged by their supervisors. Since the deposited dissertations were unpublished materials, open access availability did not generate opposition or perplexities like other materials being investigated by the project. In Spring 2006, the results of this experience were discussed by the Libraries' Committee, which is the policy making body of the UP libraries. The committee encouraged the library system to broaden the DSpace service to all faculties, beginning from e-dissertations.

4 Current dissertation management at UP

From a pilot programme within a single faculty to a University-based programme the step was big. The initial move started with an analysis of the current provision of dissertations in the UP libraries. Since most faculties' regulations did not mention the deposit of copies in the libraries, the service was supposed to be very deceiving. Anectodal evidence also suggested that student research was largely invisible and underused as information resource. To gather information, in September 2006 an e-mail questionnaire was sent to 30 librarians, heads of faculty or departmental libraries. The questions related to the practices in use for collecting, cataloguing and providing access to dissertations. All librarians responded. As the findings

revealed, only half of the libraries are dealing with student work. Most of them are in the scientific, technical and medical disciplines. Apart from two cases, dissertations are voluntarily submitted on the basis of an informal agreement, but most librarians feel that the collection is far from complete. First cycle dissertations are the works most commonly collected, while doctoral-level theses are available only in five libraries. Students generally submit a printed copy, but three libraries accept also CD-ROMs. The main method for recording student work is the list of titles, printed or accessible through the library Web site. Cataloguing dissertations in the OPAC is a practice only in one case. Finally, dissertations are usually put in closed access stacks and are subject to restriction of access. As the finding proved, the UP library system does provide ineffective services to users as regards student research. Moreover, the local cultural landscape seems oriented to consider student dissertation more as a requirement for the degree than as an information resource, suitable to be collected and distributed. Not only undergraduate level dissertations are underestimated, but also research theses. This analysis offered good reasons to promote change. Beyond the encouragement from the Libraries' Committee, a far broader support should come from university managers and academic teaching committees.

5 Key groups priorities and concerns about electronic theses

5.1 Methodology

The librarian responsible for DspaceUnipr was asked to draft a proposal about the e-dissertation project. The DspaceUnipr team had already defined some key points for the establishment of a dissertations repository: to maximise visibility of quality works, to store dissertations collections alongside other research materials, to attemp integration with other library resources, to develop a user oriented architecture. In orgder to discuss administrative and cultural issues, it was felt that trying to create a large task force of representatives from the various groups involved in dissertation management would have introduced a quite unusual practice, perhaps unwelcome to many individuals. Then, it was decided to follow an approach more respondent to the lines of communication within the organisation. An initial draft of the Polimnia project formed the basis for individual talks with senior managers, academic and administrative staff. Information from students and librarians were collected through two surveys. This preliminary work was made in liason with the Library system co-ordinator and the other members of the DspaceUnipr team. To guide the discussion with key administrators and relevant academic staff, an appendix was added to the project, with a description of possible options and policies already adopted in universities. Positive aspects and constraints, and expected implications for regulations and administrative procedures were summarised for the following options:

- To archive both undegratuate-level and graduate-level works, or

- to archive the best undergraduate-level alongside graduate-level works, or

- to archive only graduate-level works.

- To ask students to submit their works voluntarily, or

- to require a mandatory submission combined with an embargo period to assure students about the possibility to exploit their work, or

- to require a mandatory submission combined with an embargo period plus unlimited restricted access to assure students about the possibility to exploit their work.

5.2 Senior managers

The Polimnia project was well received by key administrators. The main issues seemed related to the limited expenses of the project, the expected increase in efficiency, and the adoption of good practices in operation in other universities. A common held view was that including undergraduate-level dissertations, or simply a selection of the best ones, would not be a sustainable solution, because of the quantity of materials to take into account. Quite surprisingly, changing institutional regulations was not seen as a major problem, especially if limited to doctoral-level theses.

5.3 Admistrative staff

Discussion with the Registry staff began rather early and led to positive results, since the head of the graduate students unit agreed to co-operate in defining a suitable workflow process for e-theses. The Registry staff seemed to be interested in e-theses, since this would improve efficiency and decrease bureaucracy. However, they required that a wide consensus should be formally gained by all the levels of the organisation, that all regulations should be consequently changed, and that the forms completed by students and supervisors should continue to be printed-based.

5.4 Academic staff

Deans and Rector's delegates liked the idea of creating a repository of students outputs, but were strongly oriented to include just high quality works. Undergraduate-level dissertations were considered not worthy of enhanced visibility. The introduction of a quality-based selection of dissertations was refused, because of the impacts on the work of supevisors and commissions. They pointed out the necessity to protect student interests as regards publishability and patent application, but with quite different positions according to the various disciplines. For instance, in Physics the results of very innovative student researches are published before the submission of the thesis, while in the Humanities the best students works are often published in books long after the graduation. Embargo policies and restricted access are perceived as a priority in Medicine too.

5.5 Students

A survey was carried out on a small group of 24 distance students, who completed their Master course in Information studies between 2004 and 2005, and had been invited to load their e-dissertation in DSpaceUnipr. Students were individually contacted by e-mail in October 2006 and asked to answer a set of questions about their experience of the repository. A total of 17 students responded, six having submitted their dissertation and eleven having not done it. Students who archived their works stated that they wanted to give visibility to their work. Two of them had been encouraged by their supervisors. Two more mentioned the wish to contribute to the Open Access movement. Lack of time, other existing priorities and technical difficulties were reported by five students as the main reasons for declining inclusion. Interestingly, all five students had published articles from their research. One student had declined inclusion since the research contained confidential information. Three more did not consider their work as worthy of dissemination. Of the students who loaded their dissertation, only one stated that she had published articles from it. Since her publisher warned that materials available through a digital repository would be considered as 'prior publication' she delayed the submission of her work in the IR. Possible plagiarism of open access works was considered a problem for two students. Two more asked for usage reports to know the number of downloadings of their dissertation. Although the group of students

investigated was rather small, a number of sensitive issues were found. For instance, the mandatory submission seemed to be the most suitable policy to gather content. The IR may be an effective service to capture and disseminate student research, especially the one not publicised through formal publication. However, students who intend to publish their works may have a minor interest in Open access availability. If the project team wants that students perceive the dissertation repository as a benefit, it must concentrate on guides and help services, both on the technical aspects and on the issues related to intellectual property rights.

5.4 Librarians

The questionnarie sent to head librarians in September 2006 included three open questions to explore their opinions about the establishment of a dissertation repository. Most respondents seemed interested in this development. Of most importance to them was the opportunity to enhance visibility of students works, improve the level of services provided to students, have uniformity in regulations, and saving storage space. However, they were doubtful that this innovation could be positively received by the academic staff. Changing rules and having these approved in the ten faculties was perceived as a major obstacle. Part of the librarians mentioned their lack of skills in dissertation management. Other were concerned about the expected increased work for the staff.

6. Polimnia objectives and release policies

As a result of the discussion and investigation, in December 2006 a final version of the Polimnia project, focused on archiving and distributing only research dissertations, was produced and discussed in the UP Libraries committee. It was then presented to the Rector and in April 2007 submitted to the University Senate, which approved it in May.

6.1 Objectives

The Polimnia project is aimed to achieve the following outcomes:

- To enhance and increase availability of doctoral-level theses and Master research dissertations;

- To offer students the opportunity to widely distribute their research in electronic form;

- To improve access to materials which are currently difficult to find and use, but are valuable contributions to scientific research.

6.2 Release policies

At least in a first phase, only PhD and Master dissertations will be made publicly available. Submission of full-text and metadata will be mandatory. The regulations of PhD and research Master programmes will be modified to include the new requirement.

6.3 Timeframe

To protect intellectual property rights and prevent negative consequences of online availability, candidates will be allowed to ask an embargo period from six months to three years. During that period, only metadata and abstract of withdrawn materials will be freely available. Exceptionally, it will be possible for the candidate to obtain permanent restriction to outside users, but only for particular reasons and with the tutor's approval.

6.4 Workflow

The submission and management process is intended to involve students, supervisors, Registry and library staff. It will be based on electronic procedures as well as on printed forms and documents. PhD candidates will upload their theses in DSpaceUnipr between the 1st and 31th of January of each year. Supervisors will certify uniformity of electronic and printed copies and approve embargo options. Librarians will control and amend metadata, and set up the embargo period if requested. At first, electronic submission will substitute only one of the three printed copies due to the Registry. But one could expect that a change in national regulations will soon make possible to submit electronic copies to the National libraries.

6.5 Project implementation

The implementation of the project has just begun. Key to this phase is the recruitment of library and Registry staff to create a working group for the Polimnia project, and the organisation of staff training activities. In the next months the working group will be involved in promoting the new service among students, academic staff and PhD commissions, in preparing forms, instructions and guides to deliver through the Web, in configurating collections and metadata set, implementing integration with the OPAC, and in studying the inclusion of copyright issues in the information literacy programmes for graduate students. After a pilot phase to test the workflow process and the system infrastructure, the first e-theses will be archived as from January 2008.

7 Conclusions

Understanding the cultural and organisational issues is one of the main requirements in order to target appropriate advocacy work and obtain support from the key groups involved in dissertation management (Copeland et al., 2005). In the context of the Italian public academic institutions, the approach followed by the UP DSpace team seems to have produced some initial positive results. Information was collected to provide evidence of the local gap in student research management and provision. The best practices applied by other universities were considered. Discussion with relevant groups about sensitive issues followed an approach near to the communication lines of the organisation. In order to maximise acceptance of the proposal, it was decided to take into account the suggestions and concerns raised during the discussion, even if this led to a release policy that was more restrictive than the initial one. It was felt that changing institutional regulations is less difficult when mainly adding contents never taken into account before, than when changing well-established procedures. A cultural landscape not particularly keen in appreciating student research may not be a stambling block. Some problems do remain, however. At least in a first phase, only research theses will be archived, while good undergraduate-level works will remain invisible and underestimated. This choice is of course positive in terms of sustainability of the project, but a solution should be found to manage and provide access the other printed dissertations. Other critical issues are still open. Only in a more advanced phase it will be possible to evaluate if librarians will

be successfully involved and motivated, if the workflow process will effectively integrate the different responsibilities and units, and the service accepted by the broad community of users.

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