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The Grey Journal
An International Journal on Grey Literature

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About TGJ
The Grey Journal is a flagship journal for the grey literature community. It crosses continents, disciplines, and sectors both public and private. The Grey Journal not only deals with the topic of grey literature but also is itself a document type that is classified as grey literature. It is akin to other grey serial publications, such as conference proceedings, reports, working papers, etcetera.
The Grey Journal is geared to Colleges and Schools of Library and Information Studies, as well as, information professionals, who produce, publish, process, manage, disseminate, and use grey literature e.g. researchers, editors, librarians, documentalists, archivists, journalists, intermediaries, etc.
Grey Literature is defined as "information produced on all levels of government, academics, business and industry in electronic and print formats not controlled by commercial publishing *i.e. where publishing is not the primary activity of the producing body.*" (Luxembourg 1997; expanded in New York, 2004)

About *GreyNet*
The Grey Literature Network Service was founded in 1993. The goal of GreyNet is to facilitate dialog, research, and communication between persons and organizations in the field of grey literature. GreyNet further seeks to identify and distribute information on and about grey literature in networked environments. Its main activities include the International Conference Series on Grey Literature, the creation and maintenance of web-based resources, a moderated Listserv, The Grey Journal, etc.

Contents
"GREY AREAS IN EDUCATION"

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Results of an online survey carried out last year by GreyNet show that a near 70% of the 104 respondents concur that grey literature constitutes a field within information studies. In fact, 30% of the respondents are actively engaged in teaching and/or research on grey literature. In 1997, the Third International Conference on Grey Literature incorporated as one of its themes 'curriculum development'. A direct outcome was the redefinition grey literature, which gave new direction to this field of information. At the Seventh International Conference on Grey Literature, 'curriculum development' will again appear on the conference program. Here new teaching initiatives involving grey content will be addressed. In some aspects, this issue may be seen as a prelude to GL7.

In this issue of TGJ, attention is given to grey literature as it is produced and used in and for predominantly academic environments. The first article by ***Gelfand*** looks at among other things developments in the textbook market and beyond to the blogosphere. This is then followed by two examples of grey literature in higher education, one by ***Kairamo*** at the Helsinki University of Technology and the other by ***Wittenberg*** at Columbia University. The two succeeding articles deal with the results of empirical studies. The first by ***Bourasseau*** *and* ***Dumas*** was carried out among teachers and researchers at the Engineering College in Nantes. And, the second by ***Sulouff [et al]*** carried out among subject librarians at the University of Rochester. Here, the respondents' expectations and their subsequent experience with grey literature in print and electronic formats are exposed. In a final article by ***Farace*** *and* ***Frantzen***, the work of four information professionals is reviewed. Their work, which spanned four decades, has left a lasting impact and contribution to this now recognized field of information.

With this third issue of TGJ the first volume of our flagship journal for grey literature is complete. A sincere word of thanks to the editors, authors, and organizations, whose contributions in content, review, and advertising have provided a steady course for this pilot undertaking. Readers, stay with us as we chart the next volume of The Grey Journal.

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What's new in Grey Literature? Everything from the textbook market to the blogosphere

Julia Gelfand (United States)

Abstract
Thanks to a variety of search engines and the advent of eScholarship, grey literature is both ahead of the curve as well as trailing. In the academic sphere the majority of new and different applications is in the textbook market. Also, till recently, the blogosphere was not part of the literary, political, scientific landscape. Today, it is right, front and center of all forms of debate and giving way to new community forums. Blogging as an activity and as a product shares many of the same attributes of the origins of grey literature.

Introduction
When searching for articles about grey literature or examples of grey literature one needs to exercise caution and always adapt the spelling for all forms of grey, meaning gray as well as grey. The continent of North America still seems to think of "grey" only in the aging sense and use "gray" for all things of or pertaining to color. I, like many colleagues around the globe observe both a greater volume of grey information/literature content and also a decline, as it is more ubiquitous with ePublishing and online content. Thanks to a variety of search engines and the advent of eScholarship, grey literature is both ahead of the curve as well as trailing. When one considers the new forms of grey literature, one is looking at a new mode of publication and communication. A more interactive paradigm is appearing and collections of resources that have common attributes are more easily traceable and useful. The publication, GreySource[1] provides a list of document types but does not specify formats. Assuming that more of this important content is being produced in or migrating to an electronic format, it has a home base of its origin and a compiler as well as the power of full-text searching that can retrieve it by a variety of search parameters. Thus, we must still determine if it is grey. The early definition of grey literature, suggests that it applies to content that is difficult to identify and process for library and archival collections. Less than a year ago, the definition was revised to reflect the increasing electronic formats and the source of origin, "Information produced on all levels of government, academics, business and industry in electronic and print formats not controlled by commercial publishing i.e. where publishing is not the primary activity of the producing body."[2]

Today, the greater interest in grey literature is likely due to increased awareness of how to process a variety of electronic content, some that is acquired and licensed, some that is free and readily available to those who discover it on the Internet. The major contributions of this latter category are content now finding their homes in institutional repository (IR), both academic and corporate. The repository is being birthed and maturing at a fast pace at nearly every institution and thanks again to search engines who are promoting their wares.

The Textbook Market
Traditional scholarly publishing has changed greatly. In the academic sphere the majority of new and different applications is in the textbook market. A range of experiences in distance education with course-packs, eBooks, eReserves, and the use of the course management systems, instructors' personal webspaces and integrated media have all dictated that new forms of learning, reading and publishing are actively being used. Grey literature can describe all the products of these interfaces and experiences and can be increasingly complicated due to copyright and needed permissions. Today, instruction and curriculum resources are mainstream examples of grey literature as they are widely shared and ownership of the content both intellectually and as products can be debated. Private institutions such as Harvard and MIT are making course syllabi and content freely available on the net.

Another example of bygone grey literature is the dissertation. With the electronic thesis/dissertation movement well seasoned and very universal, the once proprietary

University Microforms now owned by ProQuest is just one method of obtaining a dissertation, and probably the more dependable method for older content, pre-1994 in any format unless one can locate a copy at the British Library in Boston Spa, or the library where the degree was granted is still in the business of loaning a copy.

A couple of years ago, we predicted that government agencies at all levels would be issuing more grey literature and considering ways to package that. However, that has not been the case universally. More government information is being funneled into commercially distributed content that has to be acquired via third party access instead of direct distribution by original sources. Access to this information is not as readily or freely available, retained and archived according to library principles. Difficulties lie with changing information technologies and associated costs. Different strategies are being tested to determine ways that additional access can be offered.

The Blogosphere

Web-based utilities inform users of information more quickly and we see blogs, webcasts, RSS feeds, and the formation of new online communities. I urge us to think of this as a form of grey literature that until several years ago did not exist. The blogosphere was not part of the literary, political, scientific landscape. Today, I argue it is right, front and center of all forms of debate and giving way to new community forums. Blogging as an activity and as a product shares many of the same attributes of the origins of grey literature. It suffers from the same dilemmas about how to track, cite, search, archive and retain for the future. Interestingly, even the authorship has similar qualities for early contributors to grey literature were not very well known but often the more junior members of research teams, the younger, creative, technology savvy and inclined colleagues who spent the time to publish in this way and promote the product. Blogs can be characterized as being written by a younger generation of committed folks, usually ordinary people who want to encourage participation and see value in the personal communication and expression of the blog. As someone who was unsure of whether blogs would survive in the world of eMail and an already polluted marketplace of webpages, I am now confident that it has a huge future. We are seeing anthropologists and sociologists studying blogging practices and trying to learn why people are attracted to this medium. There is some speculation on this point but I believe it is premature to draw any conclusions as the landscape is constantly changing. One thing is for sure, that in times of crisis and catastrophe, the blog has a critical role and was able to be created and relied upon as a valuable tool right away with virtually no costs associated with it - one "only needs a computer, Internet access and an opinion."

In conclusion, we have many new forms of grey literature but as blogs proliferate at an incredible rate, global figures indicate that blogs are the fastest growing segment on the web. Like with the challenges of early grey literature in waiting for the big engines of Google, Yahoo and MSN to search and include GL, we wonder when better access to the 12+ million blogs will be available. Until then, it is a wait and see game, but I imagine that it will be just a matter of months before something major and competitive is announced. The "knotty conundrum" to overcome in blending blogs into other web search techniques is not an easy thing, but we remain optimistic and wait for future issues of Business Week to deliver the news that it is now commercially viable to do this. We know it is and just stay patient waiting for this new aspect of adding some order to our otherwise discombobulated lives where information overload is going at full throttle.

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[1] GreySource, A selection of web-based resources in grey literature http://www.greynet.org/pages/3/

[2] Schöpfel, J. [et al.] (2005), Citation Analysis and Grey Literature: Stakeholders in the Grey Circuit. – In: GL6 Conference Proceedings: Work on Grey in Progress. – Amsterdam : TextRelease, 2005, p. 60.

The moving border of tacit and explicit knowledge in e-Learning: Use and Production of Information and Knowledge in Technical University Education *

Anna-Kaarina Kairamo (Finland)

Abstract
In this paper, the electronic information and knowledge created within a context of a course is approached by analysing two case study courses. The Finnish context of the university education is first outlined briefly. Approaches to learning resources are reusability and course components. The two case studies are a series of courses of energy engineering and environmental protection, and a programming course. The courses were developed in different department cultural context and circumstances, which are described. When the focus of course material creation is on methods, the reusable material might be related to resources meant to help the student.

Introduction
One of the often mentioned benefits of e-Learning is the externalisation of the content and process of the courses, which can support reuse of material across courses. Yet most of the course management systems financially available for higher education organisations do not support ideas of knowledge transfer or learning organisation and content remains blocked to one course.

Libraries, information services and commercial organisations provide access to electronic materials. However, these possibilities do not seem to be widely used in higher education. There may be several reasons for this: complicated procedures of intellectual property rights, attitudinal and cultural barriers and even teachers' inadequate skills in searching the electronic information and knowledge. One fundamental reason might be that strict externalisation is not regarded as fruitful in knowledge transfer, or that the externalisation effort considered huge compared to the short lifetime of the information and knowledge. Also the available technology in the organisation may be hard to use or may not support the ideas of the teacher.

The OECD report on Knowledge Management in the Learning Society (2000, 12) claims that we have not yet reached a stage where we can systematically apply knowledge to the production of knowledge. Although higher education knowledge is highly codified, there is much tacit knowledge in teachers' know-how (Ibid 31).

Do we really know what is happening in grass-roots level of ICT enhanced higher education? What kind of information and knowledge is available for the whole community of a course, which includes instructors and students? What kind of information and knowledge is produced by the instructors and is there any knowledge used as a resource, created by the student? What kind of external resources are used? What is the potential reusability of the information and knowledge produced for the course? These are the main questions of this paper.

In the following, the national context of the university education is first outlined briefly, before going to the approaches to learning resources. The method of case study is then introduced and the cases described briefly. Finally, the first results of the study are presented and discussed.

Context: Network-based education as a goal for university sector in Finland
The Finnish 'Development plan for education and university research for the period 1999-2004' states the following about university education:

* First published in the GL5 Conference Proceedings, January 2004

In university education, the aim will be large-scale pedagogical renewal towards student-centred teaching methods. The development of teaching and learning will especially capitalise on network-based and open learning and distance learning.

As a result of the 'Information Strategy for Education and Research 2000-2004', the Finnish universities established in January 2001 a consortium of the Finnish Virtual University. Although FVU's role is not to provide academic education itself, the vision of FVU reflects the national network-based education policy for universities, agreed by the consortium representatives mainly consisting of university leaders:

By the year 2005, high-quality, ethically and economically sustainable modes of operation in network-based education and research will be in widespread use in Finnish universities.

The basic mission of Finnish universities is to carry out research and provide education based on it. The basic principles in university education are the freedom of research and university autonomy. For example, the strategies for the case organisation Helsinki University of Technology (HUT) do not state explicitly how widespread the network-based education at HUT should be. Thus it leaves, in tradition of autonomy, the concrete goal setting of the extent and form of use of the network to the departments, laboratories and teachers. The underlying interest of this study is get further information on what kind of models of e-learning solutions and knowledge creation in the context of higher education emerge in this kind of organisation.

HUT profile in change process

In her research, Fisser (2001) constructs four possible profiles of universities that relate to the change process of using new forms of ICT in education. The profiles differ, according to the reason of the change (social vs. economic) and the experienced environmental context (uncertainty vs. interconnected):

- Profile 1: Supporting learners in a changing world
- Profile 2: Developing expertise in the institution
- Profile 3: Surviving in a competitive world
- Profile 4: Evolving to a cost-effective approach in education

HUT was one of the four case study universities of the research. Among the observations made of HUT in the research were the following: The primary motive to use ICT in education was social. The new forms of ICT have not brought a major change in the way education is offered and supported. ICT has been implemented in education on a voluntary basis. The suitable profiles of HUT were 1 'supporting learners in changing world' and 2 'developing expertise in the university' with the majority of the respondents in profile 1 (Fisser 2001, 148).

Approaches to learning resources

Digital learning material, one special form of grey literature

The Fourth International Conference on Grey Literature defined grey literature as information produced on all levels of organisations in electronic and print formats not controlled by commercial publishing. The rapid increase of use of ICT in education in all forms from distance education to ICT supported traditional teaching has increased the amount of networked information and knowledge in university sector. Most of this information is not commercial, and thus can be regarded as grey literature.

In this study I will focus on digital material produced within higher education courses.

Reusability of learning resources

Reusability of learning resources is widely discussed area in education field (e.g. Littlejohn 2003, 2). The concept of learning object (LO) is in the core of this discussion. Koper (2001) defines learning object as any entity, digital or non-digital, that can be used or referenced during technology-supported learning. This is also the definition of the IEEE Learning Object Metadata standard. There are a number of attempts to narrow the scope of the definition. As Conole (2002, 10-11) points out, there are several unresolved issues in the learning object approach, such as degree of granularity. There seems to be mutual understanding that a reusable object is much

smaller than a course. In general, the smaller the unit, the greater the possibility that it will be reused. On the other hand, larger object may include e.g. activities, and constructing the course from greater elements may save teacher's time. (Littlejohn, 2003, 4).

The most common, but often an implicit idea of a learning object is that it includes content and/or method (Koper 2001, 4-5). The empiric experience from engineering education field supports this analysis.

Bates et al. (2003) point out, that despite the rapid expansion of digital materials, it is often difficult to find materials of the desired quality or level to fit the planned teaching. Also the size and structure of the available material might not be appropriate for the purpose.

Course components

There are many approaches to structure the course activities. Collis and Moonen (2001, 20-21) analyse a course in terms of components, each related to pedagogical activities involved. In the following their structure is modified for the purposes of this study, so that the digital information and knowledge of the analysed courses can be categorised:

Course organisation
- course information
- adminstration: record keeping, student marks
- general planning for the course

Lectures and other forms of instructor-led sessions
- lecture material, highlights etc.

Self study, assignments
- readings
- activities and assignments
- practical excercises

Major assignment (project work, essay, product, case study etc.)
Testing and examination
Guidance, mentoring
- guides, tips, etc.
- communication

The categories that might be potential for reusable digital resource are italicised in the list.

e-Learning in Helsinki University of Technology – Two cases

Gathering data for cases

The data for the two cases now in focus was gathered by interviews and process simulations sessions within the Helmi research project, which studies the innovations of the e-learning processes (Smeds 2003). The interviews and process simulation sessions made it possible to understand deeply the process of designing and implementing the courses and learning material within the context of different cultures and traditions of two HUT departments. In Helmi project, the process to be simulated is first analysed, modeled and visualized on the basis of the interviews. The simulation session is a facilitated semi-structured group discussion. The common memory of the group participating is a process map, projected on the wall of the simulation room. (Smeds et al. 2001, 173–174.) The aim of the session is to create a shared understanding of the process among the participants, who are the key persons of the process.

After the simulation sessions, the next step of the research will be a second round of analysis of the data collected from the case studies and the simulations. On the basis of further literature review and this analysis, 10 further cases will be chosen for further research.

Case 1: Energy engineering and environmental protection courses

An e-learning project within the laboratory specialised in energy engineering and environmental protection began in 2001. The purpose of this e-learning project is to explore how ICT could be implemented for the education offered by the laboratory. The research case was a series of three courses offered mainly for students who have studied at least three years. The number of participants of courses varied between 12 and 20. The learning material produced during the project was awarded as the material of the year 2002 in the university.

In parallel with applying ICT in the education, new pedagogical ideas were applied, such as problem based learning sessions and giving credit points from assignments, instead of only valuing the performance of the student in examination. The project team wanted to test their new ideas with the technology. Already in the beginning of the project, the exploitation of the hardware and software provided by the IT centre of the university was felt too slow and restricted process. It was also not possible to use any interactive elements. The solution was to make the laboratory as independent as possible of the services of the main university. A temporary solution for this was to choose for course process use a course management system (CMS). The basic reason was to provide a common easy-to-use tool for a group of instructors and a shared workspace for students. The course management tool was abandoned after two years for several reasons: too high expenses, little added value compared to open web page system for a small course, the creation of the laboratory's publishing process on its own server, and the students preferences to use email for communication instead of the tools of the system.

Case 2: Computer programming course

The case laboratory is specialised in information processing science, and it is responsible for the basic education of computer programming for all students of HUT. The research case is an introductory computer programming course meant for all students at HUT. The participants are mainly second or third year students. Every year around 300 students complete the course.

The current mode of the course is a result of an evolutionary process during the last ten years. The pedagogical idea behind of the course structure is that the only way to learn programming is practicing. Using ICT tools is thus natural; it is a content of the course. The challenge of the case course is the large number of students. The solution to this is to make the process of studying and the process of teaching and guidance as explicit and strict as possible. The course web site consists of tens of pages of information and hundreds of pages of learning material on the web. All this is accessible for all, only the software system used for accessing and submitting exercises is password secured. The staff includes the responsible teacher and assistant and around 20 part time assisting students. The community of these instructors works virtually: they meet twice during the half-year course, before the course start and after it has finished.

First results

The digital information available for the whole community of the case courses (instructors and students) is categorised in table 1 using a modified model of Collis and Moonen (2001). The information available only for instructors, such as exercise products of the students, is not of interest, since the underlying assumption is that this private information has no potential for reusability for training. The producer of the information is marked in bold in the table if it is someone else than the instructors.

Table 1: Digital material components of the case course. The materials of the case courses potentially reusable are italized.

Digital information component	**Case 1: energy engineering and environmental protection courses**	**Case 2: programming course**
Course organisation • course brochure	Basic information on time, place, requirements	Detailed information on the course arrangements, goals, teaching methods, course staff, creditation of components of the course, and course communication
• administration: record keeping, student marks	Results of the assignments Final marks	Results of the assignments Final marks
• general planning and running of the course		Detailed instructions for assistants
Guidance, mentoring • tips, etc. • communication	Announcements during the course	FAQ (Frequently asked questions) **Instructors:** answering questions in the news discussion group **Students:** answering each others' questions in the news discussion group
Lectures and other forms of instructor-led sessions: lecture material, highlights etc.	*Lecture slides*	*Lecture material*
Self study, assignments • readings, obligatory	**Instructors:** Information on paper based reading, and where it can be reached *E-book available on www, cd-rom and printed* *Translation on part of a paper based book* **Students:** *Group assignment reports* **External resources:** E-book on cd-rom	Information on paper based reading
• readings, voluntary	*Equation collection*	**Instructors:** *Handouts of the course* *Information on additional resources, like books, web links* **External resources:** Web resources linked from the course site Guides and tips for programming
assignments, practical exercises, other activities	***Exercises and model answers***	
Major assignment: project work, essay, product, case study etc	*Group assignment instructions and background material*	Project assignment instructions
Testing and examination	*Pre-test*	*Previous examination questions* *Tips for examination*

The categories shown in table 1 can be clustered into those including content information, and those including method type of information, using the idea of learning object described in chapter 'Reusability of learning resources'. Method information includes categories of course organisation and guidance. The rest of the categories may be considered as content type of information. This classification is only rough and

mainly clustering in its type: each category may include both content and method information. In case 1, the content type of information was published as pdf-files and in case 2 programming course they were html-pages included in the web entity of the course and following the layout of it.

The information on the case courses differ in their completeness. In case 2 the student can find every detail of necessary information on web. In energy engineering and environmental protection courses case the web includes some basic information on the course arrangements. The focus of case 1 is clearly on publishing e-books and some support materials on web, thus on producing content type of information. In case 2 the focus is on computer based exercises and logistics and use of special tailored tool. In this case electronic information is highly method-type in its nature and thus may be more bounded to one course context.

Interesting question is the role of information that the students create during the course. In case 1 the written assignments acted as readings for the course. In case 2 the students acted openly and network-based as peer-supporters in newsgroup open for all. External digital resource of the case 1 is e-book developed by the partner university and in case 2 information behind links.

In case 1, the key enablers of the development process were the previous experiences of the instructors on implementing ICT in training and high technical skills of the key person of the project. A positive and encouraging culture for testing new ideas was also critical success factor. The active partnership with a foreign university within the field of education encouraged staff's endeavours. The key obstacle during the process turned out to be the strict rules of the IT centre of the university. The structures of published information are nowadays based mainly on the ideas of the laboratory, which might vary from the structures of the neighbour laboratories, not to mention other departments. The production system is vulnerable to a certain extent in such a small laboratory, since it is highly dependent on the skills of one person.

Within the department of case 2, ICT in education is not a tool, it is part of culture. As a result for solving the problem of a enormous amount of participants, the course is a very well organised and documented with all possible help for the student in written form on web.
The course process resembles 'lubricated' machine, where the role of each actor is well-defined and strictly rule-governed: the responsible teacher, the assistants and the students. The structure of electronic information has developed in an evolutionary process. The web site of the course is partly cumulative and partly consists of detailed information that has to be updated for each round of the course.

Further research

In this paper, the electronic information and knowledge created within a context of a course was approached by analysing two case study courses. In the context of the university, where the application of ICT in education is not centrally directed, different structures and content types emerge and the accuracy and extent of information and knowledge vary. There is also room for innovative solutions. In these case courses, potentially reusable digital resources may be content type of materials like e-books, information on additional resources including links, pieces of readings, and possibly student assignment reports. When the focus of course material creation is on methods, the reusable material might be related to resources meant to help the student.

Lots of questions remain unanswered on this phase of the study, and thus are worth for further examination: To what extent do the instructors search for possible external resources and why do they include or leave out materials in their course? How are the already produced resources of the courses reused in other contexts? How do the granularity and independence of the information object enable reusability? What are the criteria of the instructors for quality of information? To what extent is electronic scientific information used in courses and how?

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http://www.virtuaaliyliopisto.fi/arkisto/FVU-strategy.pdf

Designing Digital Libraries for Teaching

Kate Wittenberg (United States)

Abstract
At the Electronic Publishing Initiative at Columbia (EPIC)[1] we are exploring the relationship between teaching resources and digital library content in creating the next phase of electronic resources for faculty and students. In developing our electronic publications over the past several years, we have focused primarily on aggregating high quality content, with a particular focus on grey literature and its uses in both research and teaching, and building the tools and functionality needed to make that content useful to specific user groups. This process has involved understanding patterns of research and teaching, as well as evolving user needs in specific disciplines—mirroring, in many ways, traditional publishing activities, but using the digital environment and the opportunities it offers for innovative design and functionality. This article deals with one such initiative.

Introduction
Our work at EPIC is taking a more innovative and experimental turn, and is focusing increasingly on the complex relationship between the "closed" world of the classroom and teaching tools, and the "open" world of the Web. How do we create digital resources that allow faculty to develop and use teaching tools that are embedded within a rich digital library environment? Can we allow students to explore freely the vast array of research tools available through the Web, while still providing an appropriate level of guidance concerning how to select and evaluate the sources that they find?

The vast amount of information now available can be either a benefit or an obstacle to effective research and teaching, depending on how successfully we address the challenge of making this information meaningful to users with diverse experience and needs. One of our current projects has focused on exploring this question of how to find the right balance between directed and unfiltered presentation of digital content for students and faculty. As we move into the final phase of this project, it is useful to consider what has been achieved, and what next steps are possible as a result of the work we have completed. Here I will describe the major accomplishments of this project and discuss ways in which we can build on this work to develop other digital resources that can connect and enhance teaching and research in higher education.

The DART Project
This project, Digital Anthropology Resources for Teaching (DART)[2] is exploring the potential of digital resources for the teaching of undergraduate anthropology. The project is also investigating digital-library technologies that will allow for the flexible delivery and customized use of these resources in an "open" web environment. Columbia University and the London School of Economics (LSE)[3] are partners in this project. At Columbia, DART is a collaboration among the Department of Anthropology, the Electronic Publishing Initiative at Columbia (EPIC), and Academic Information Systems (AcIS)[4]. At LSE, the Department of Anthropology and the Centre for Learning Technology have participated in the project. Drawing on the collective skills and existing infrastructures of these institutions and organizations, DART's goal is to initiate a meaningful and sustainable transformation of undergraduate education as well as create new models of digital resources that connect research and teaching materials.

The project began in February 2003 with a series of conversations among the Electronic Publishing Initiative at Columbia (EPIC), the Chairs of the Columbia and LSE Anthropology departments, and the Centre for Learning Technology at LSE. This group collaborated on writing a funding proposal to the National Science Foundation (Columbia) and the Joint Information Systems Committee (LSE) for a project designed to explore new models for the use of digital resources at our institutions.

Columbia and LSE received grants to create resources that integrate online teaching tools with digital library materials. Over the course of the project we have been able to build a digital library teaching environment and to test the usefulness of this resource

in both the LSE and Columbia settings. We began by developing resources for classes taught by the post-doctoral Fellows hired for this program, and moved on to our most recent project, which is a site for a new class on Muslim societies taught by the Anthropology department Chair. In each of these sites, we have combined teaching materials designed for the specific class being taught with digital library content that is useful for research and teaching about larger topics such as South Asian culture, the ethnographic approach, and Muslim societies.

The project has a number of goals. First, it aims to help undergraduate students gain insight into the way in which anthropologists conduct research and draw conclusions. More broadly however, the project's mission is to improve the information literacy of undergraduate students through the guided use of digital resources. We have asked the following questions in shaping the project's agenda: How can students explore freely the vast array of research tools available through the Web, while still having an appropriate level of guidance concerning how to select and evaluate the sources that they find? How do we make information meaningful to users with diverse skills, experience, and needs? How do we find the right balance between "directed" and "open" presentation of web-based digital library materials in educational resources? In exploring these questions, we have developed new editorial and design models that have permitted us to build a new kind of resource for use by faculty and students. We are now in the process of exploring organizational and business models that will allow us to sustain the project over the long term.

One of the most interesting and promising aspects of the project has been the successful involvement of both junior and senior scholars, and the close collaboration with electronic publishing and technology staff both within and across the two institutions. Both teams have benefited greatly from the complementary skills and perspectives of the participants, and the model of pairing a senior faculty member with a senior manager in the electronic publishing (Columbia) or digital teaching (LSE) organization is a model that we would like to expand to development of resources in other fields. The understanding of the subject and how to teach it brought by the faculty member, combined with the understanding of editorial development, new models of design and functionality for digital resources, creates a powerful and effective team for building a new generation of educational materials for a new generation of students and faculty.

The Use of Grey Literature

This project has raised some interesting and important issues involving the use of grey literature in both teaching and research. The teaching and research materials we have included in this resource often represent scholars' thinking at its earliest stage. For example, we have a content section that contains notes written by an anthropologist while in the field, made available with images and other information about the subject and region, as well as the published ethnographies written from these field notes.

These materials allow students to understand the process of conducting anthropological research as well as see how this "raw" material is later transformed into a published ethnography. One of the assignments in this class is to write a research paper using the digital library materials provided on the site. We also included content that benefits significantly from the addition of discipline-appropriate tools and functionality, such as maps that we pair with accompanying background notes and explanation written by the Research Fellows teaching the course. Finally, we provide links to digital library materials created by other institutions that add context and provide background information to the content contained in the classroom resources.

This material is quite different from traditional publications such as journal articles and monographs, and it often has different editorial requirements such as frequent updating and different forms of peer review. It is also often not easily available to scholars, students, or libraries, as it falls outside of the categories of traditional publishing. In a positive sense, the development of this project has caused us to re-think the categories of traditional print publications as we develop content in response to scholars' research, teaching, and publishing needs. We have also re-thought the role of the publishing organization that develops this new kind of resource, working very closely with the scholars who are teaching and writing on the subjects. We have found that as a publisher we have taken on more of a role of a research center that

works closely with faculty to create new models for digital library content and lead innovation.

Project Findings

In the course of developing this project, we have already discovered much that is new in terms of content creation, design, functionality, and what type of organization is able to develop this new kind of hybrid teaching/research resource. First, there must be interest and initiative from faculty, librarians, or publishers at the institution. Second, the project managers must employ some form of peer review that is appropriate to the content (for example, while it may not be practical or appropriate to send out teaching materials to readers for formal reports, you might have an advisory board of faculty with expertise in several key areas related to the resource's content examine the teaching materials before they are included). In addition, the project must have access to someone with expertise in copyright and permissions management, to insure that the content being used is cleared for rights when appropriate. There must be high quality web development and design used in order for the resource to be attractive and useful to both faculty and students. Finally, the resource must have a means by which it can be sustained at a high quality so that scholars and their students can come to rely on it for their research, teaching, and learning. We will continue to explore this new area of content development and dissemination in this subject as well as in other fields and will report back to the community as this work progresses.

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A study of teachers and researchers practices with digital documents, grey or not *

Céline Bourasseau and Cédric Dumas (France)

Abstract
Large-scale consumers of information such as lecturers and researchers have nowadays widely adopted the digital document. These professionals cannot suffice with disaggregate data but instead need full text documents. These documents include the research production of their colleagues and the teaching resources designed both within and outside their institution – be they commercially published or not. The main source of information for these professionals is the Internet, which has become a victim of its own success. If lecturers and researchers claim to have gained better information accessibility, thanks to the Web, they still must account for the time needed to examine the results obtained. Moreover, many of these net-users still camp with difficulties in information retrieval, where all too often their results are unsuccessful or unsatisfactory. University lecturers and researchers at an Engineering College in Nantes on the West coast of France base this paper on a survey that examines the use of and performance with digital documents. The study was conducted during the year 2003 with about 70 persons from various fields and disciplines including physics, computer science, sociology, etc. This study looks at the lecturer-researcher in the capacity of information seeker and reveals a rather sedentary and autonomous figure, one who first relies on the resources offered by his/her own computer. Even though they are partly unsatisfied, they claim no time to waste on improving their information search skills. New tools bringing relevant, rich, and reliable scientific information and documentation are of interest to them. Certainly, if this would help them capture that which would otherwise have been neglected when only classical search techniques are applied. However, these tools must be simple to use, fast, and available where and when needed. This study is part of a user-centered design approach in the construction of an open archive platform, planned to create institutional repositories that will be managed by librarians in their respective institutions. Using this tool, the authors would be able to store, convert (XML), fully index, perpetuate, valorize, and distribute their digital documents. For those using, managing and/or developing such platforms, the results of this study could be used in understanding lecturers and researchers behavior and expectations. Likewise, through the use of statistics derived from this study, it is a first step in weighing our convictions and formulating questions on future digital library users.

Introduction
A digital library platform, CASTOR (CApitalization & STORage) [1] was developed three years ago. Our work takes a user centered design approach to build an open-archive platform and plans to create institutional repositories managed by librarians in their respective institutions. With this system, authors are able to store, convert (XML), fully index, manage, perpetuate, as well as valorize and distribute their digital documents. Since we couldn't find experimental users with this type of system in our institution, the user centered design approach has instead focused on a study of users information environment. Even if we have a strong knowledge of digital library use [2] [3], including local (French) studies [4][5], we still need to capture the practices and the vision of future users in a platform development cycle, reflecting local knowledge. The main objectives of the survey were to:

- Understand the documentary practice of lecturers and researchers (for better usability)
- Take a census of user needs (for adapted services)
- Evaluate the future users ability to adopt the digital library system (to provide better information and formation of this new service)

This survey has involved those researching and/or teaching at the Ecole Des Mines de Nantes: professors, associate professors, PhD students, research engineers, etc. These lecturers and researchers are divided into five departments: Automatic control and

* Adapted from a paper first published in the GL6 Conference Proceedings, January 2005

industrial engineering, Energetic and environmental engineering, Computer science, Subatomic physics and associated technologies, and the Human and social sciences.

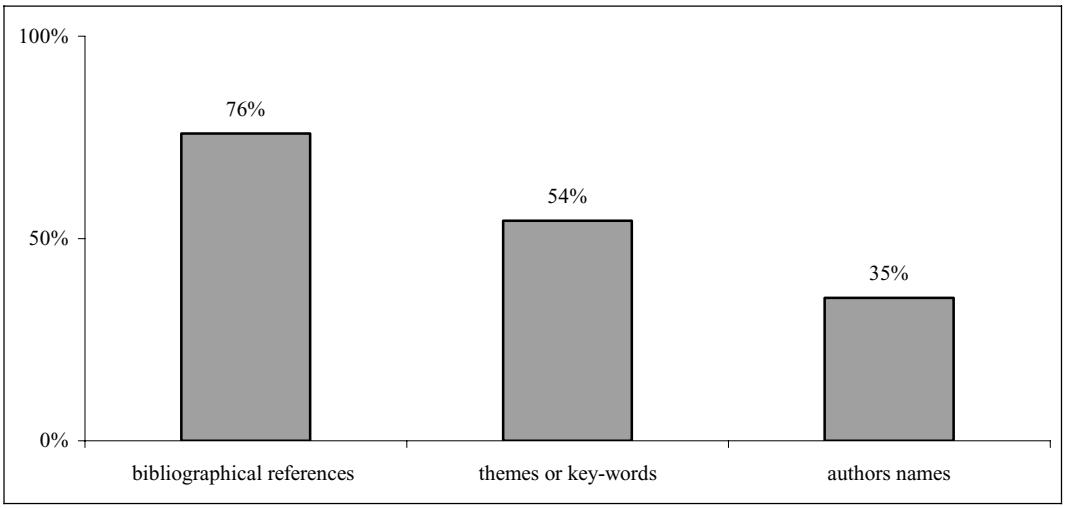
Data were collected through an interview in order to coincide with the interviewed persons' meaning of the concepts used. This became all the more useful since the interviewed sample barely knew the vocabulary used by librarians. The meaning of words, now in vogue, remains unappreciated for example by ICT or the meaning of a word can be different according to the interlocutor for example in a digital library. The first part of the interview was a questionnaire [6] allowing for open answers about documentary practices. The second part was a semi-directed conversation dealing with information expectations and needs of lecturers and researchers. Seventy-eight lecturers and researchers were met, which represents half of those at the Ecole Des Mines de Nantes. This sample consisted of volunteers who were available for the survey. There was no preliminary defined panel.
The survey was designed and carried out in order to enable a double reading of the results both qualitative and quantitative. Data coming from the questionnaire were converted in percentages thanks to a simple statistical handling, either directly when the questions inferred short answers corresponding to the choice of an alternative, or indirectly after a thematic regrouping of the ideas expressed. This last method was also used to analyse the conversations.

The lecturers and researchers documentary practices

Q .1 The beginning of information retrieval

The information retrieval first aims at recovering full text documents, generally scientific articles. For 47 percent of the lecturers and researchers, searching for information means searching for documents. The remaining 53 percent expect either a document or an item of information, for example a mathematical constant.

Figure 1: The starting points of information retrieval

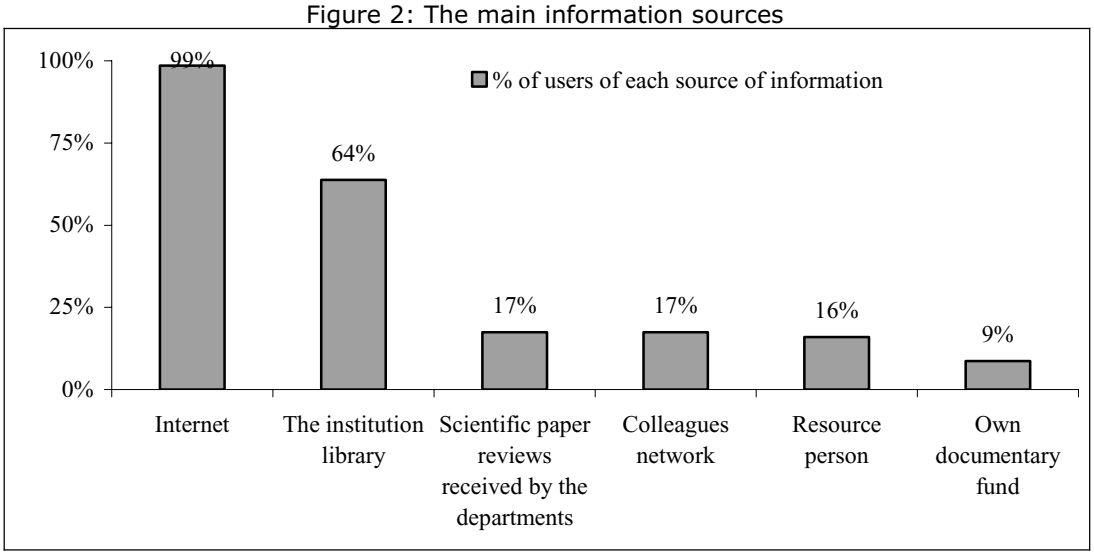


Percentage of lecturers and researchers starting their search by using name(s) of author(s), theme(s) or keyword(s), bibliographical reference(s)

The three elements listed in figure 1 are often used successively. First, the lecturer and researcher searches broadly starting with some topics or keywords; then, when the subject is delineated, they know which authors write on the topic/theme they are interested in and draw some new hints from the bibliographical references found in the selected documents.

Q .2 The information sources

Figure 2: The main information sources



As figure 2 indicates, every lecturer and researcher uses Internet. More than 20 percent of them even only use Internet with little exception. Others use more a variety of sources.

Figure 3: Internet sources of information

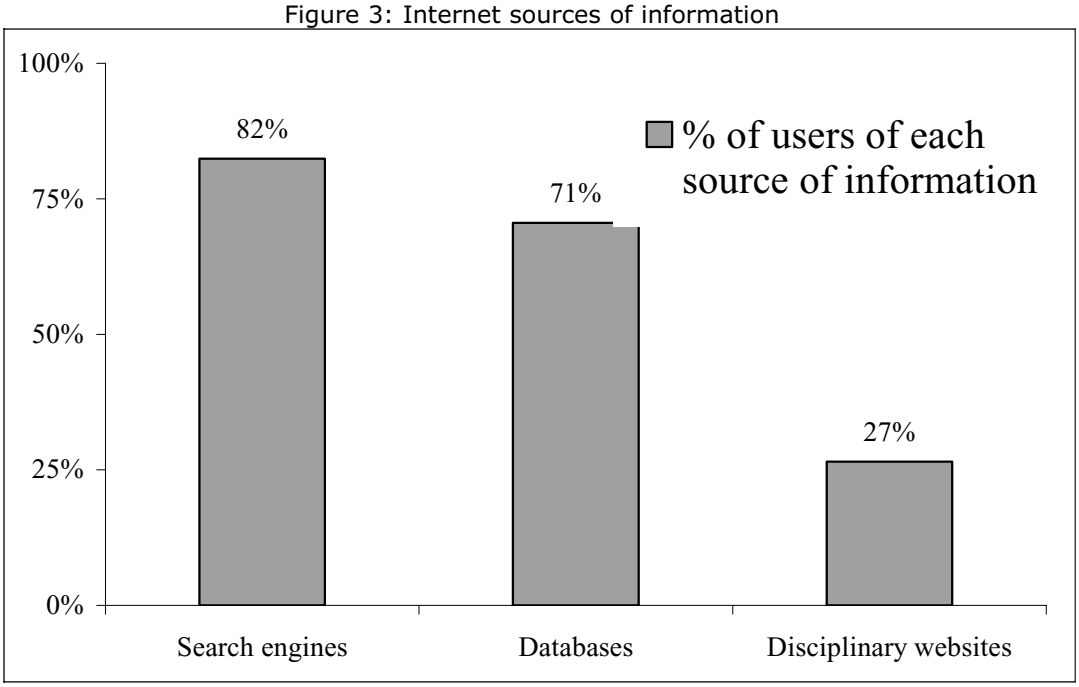


Figure 3 gives details on the main ways to access information available on Internet:

- By way of search engines, usually generic, Google leads;
- Through databases containing bibliographical references and/or full text documents (with a preference for full text documents) appreciated for the ergonomics of their search interfaces;
- Through disciplinary websites (scientific review, university, institute, or research team websites etc.), especially for grey literature.

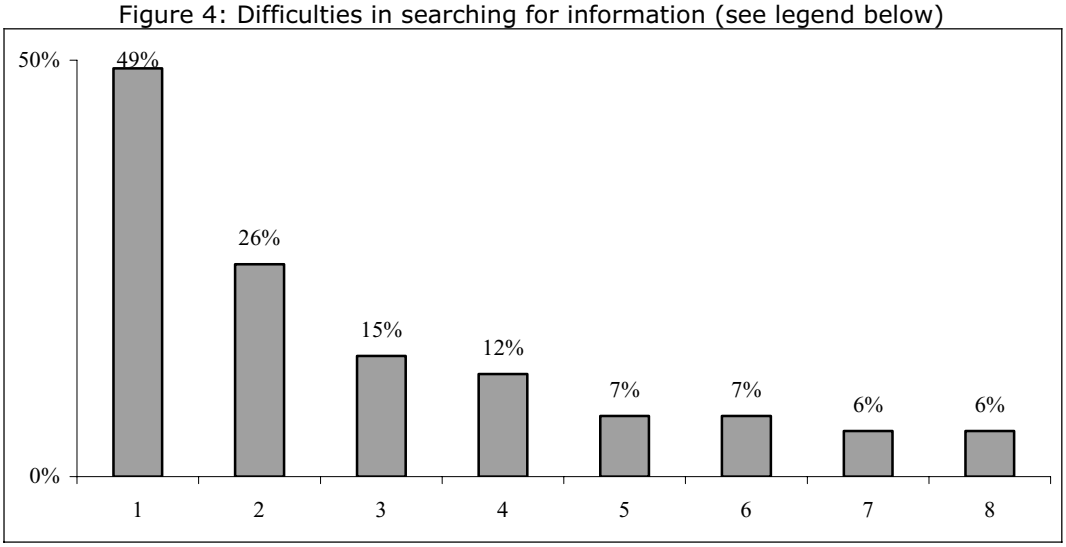
Printed resources are still important (figure 2). Lecturers and researchers appreciate printed resources within the Ecole Des Mines de Nantes library. This is further supplemented by department subscriptions. A colleague's network enables one to get hold of a document, whereas the resource person is used to track down for example

the name of an author, review, website address, etc.). Not to forget of course bibliographical references. The lecturers and researchers personal documentary base is not extremely developed. Several of them admit that they prefer searching again on Internet for a document that they already printed rather than trying to find it in their office.

Q.3 Problems with information retrieval

Eighty percent of the interviewees have difficulties in their search for information. Figure 4 provides a list of problems encountered and their distribution. These difficulties add to the inherent problems linked with information searching. It's not always easy for a person to define exactly what he/she wants and then formulate the appropriate queries.

Figure 4: Difficulties in searching for information (see legend below)



1. The lecturer and researcher doesn't find what he/she wants
2. There are too many answers in the midst of which relevant information is drowned
3. The lecturer and researcher lack method in information searching
4. It takes a long time to search for information
5. The lecturer and researcher encounter a lot of technical problems in accessing the Internet, downloading documents, etc.
6. Problems begin when the lecturer and researcher want full text documents
7. It's difficult to find older documents
8. The lecturer and researcher must constantly adapt his/her query according to each website depending on its structure, the search engine operation, etc.

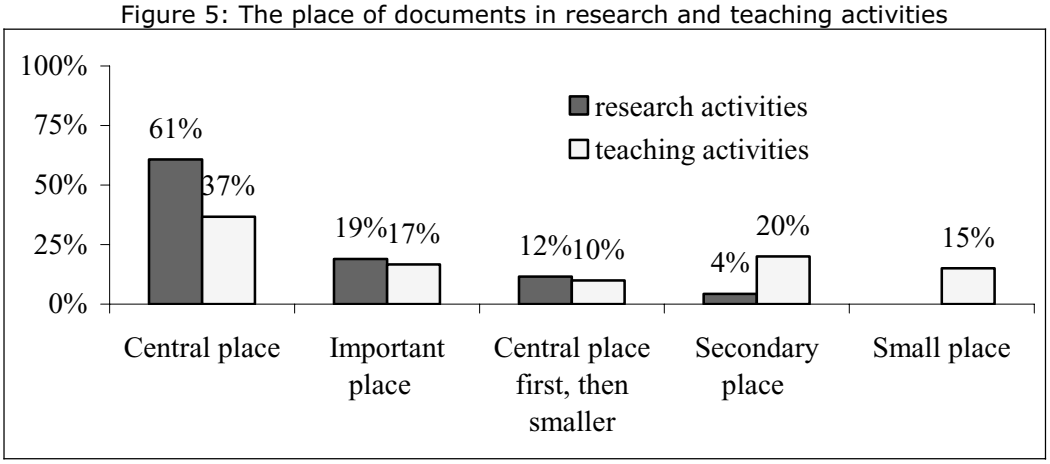
The two main problems of the search for information, noise and silence, often correspond to two successive stages. First, one obtains too many hits. And then, when the search is reduced one is left with no or only a few results. These results pose a problem of interpretation *« When there is no answer, how is one sure that there are actually no results? », « How is one sure not to have missed a piece of information? », « How does one select information without loosing other relevant information? »*.

The interviewed lecturers and researchers often experience a lack of method while searching for information. Their knowledge is mostly empirical, and gives them the feeling of "managing" rather than really knowing how to search. Paradoxically, they admit not even attempting to ask for assistance.

The advent of Internet has induced contrasting effects. On the one hand, we have better access to information, while on the other hand; there is a waste of time to read through all the hits displayed by the generic search engines. Moreover, the increase in information supply also means an increasing number of different interfaces one has to deal with. This continual overflow of information hides the eternal problems of access to full text or older documents irrelevant of their age – be it few years or decades old. Finally, Internet considerably exacerbates the dependence on technical issues.

Q.4 The importance of documents in research and teaching activities

Figure 5: The place of documents in research and teaching activities



According to the majority of lecturers and researchers, documents found after information retrieval has been carried out still occupy a main activity. Many of them think they are central. Others « only » rank them as having an important place. That is, where a document is only part of the research or teaching activity, but is not central. Some lecturers and researchers think that a document's importance first stands central and later becomes smaller. Indeed, at the beginning of research, even at the time that a lecture is produced, it is necessary to carry out a state of the art followed by the personal contribution of the researcher, which then takes priority. Documentary retrieval evolves from awareness to a timely search for information.
Only a few lecturers and researchers rank the document as having a small place in their activities. This group consists especially of tutors, often PhD students. In fact, in this case, the lecturer performs the greater part of the information retrieval.
Generally, documents seem to be less important in teaching activities than in research activities. Several explanations can be proposed. For example, the subject taught is most often familiar to professors, and the knowledge transmitted evolves less quickly than in research areas.

Let's now try to appreciate the place of the digital document, which is simply defined as that which is displayed on a computer screen. The digital document is generally used in research and generally as often in teaching activities.

Q.5 What type of documents do researchers and lecturers use?

Figure 6: Types of documents used, regardless of their medium

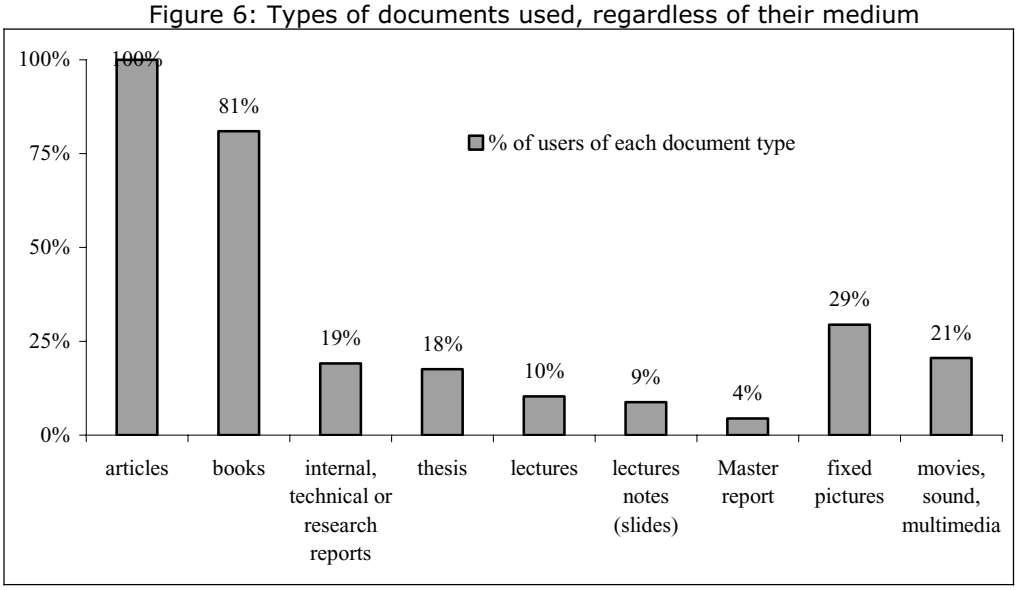
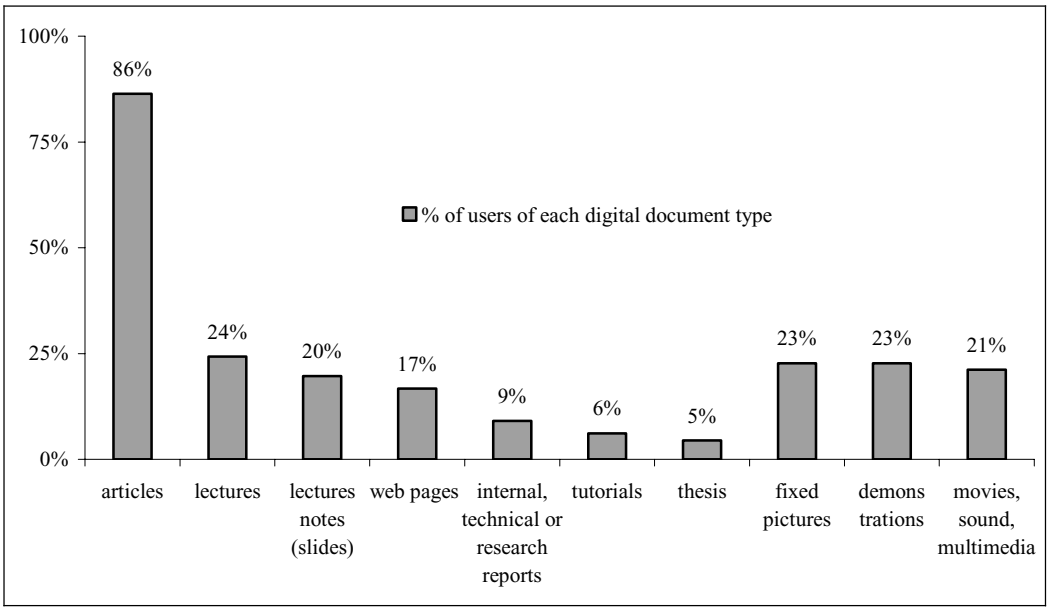


Figure 7: Types of digital documents used



Regardless of the document medium in (figure 6) or specifically with digital documents in (figure 7), journal articles are by far the most used type of document. As a general rule, these are scientific articles, sometimes popular-science publications.
A comparison of figure 6 and 7 shows that digital reports and theses are less often used than reports and theses. You may have noticed that digital books and master reports are missing in the graphics. The relatively small number of digital versions of these documents is perhaps a possible explanation for this? On the contrary, the more significant number of lectures and lecture notes in digital versions reflects the amount of pedagogical resources available on Internet. At last, we are now encountering some specific digital types of documents e.g. WebPages, tutorials, simulations, and demonstrations (with short programs like java applets). Multimedia remains important, however, it consists mainly of video material.
Closer observation of the distribution of the different types of documents used between research and teaching shows that:

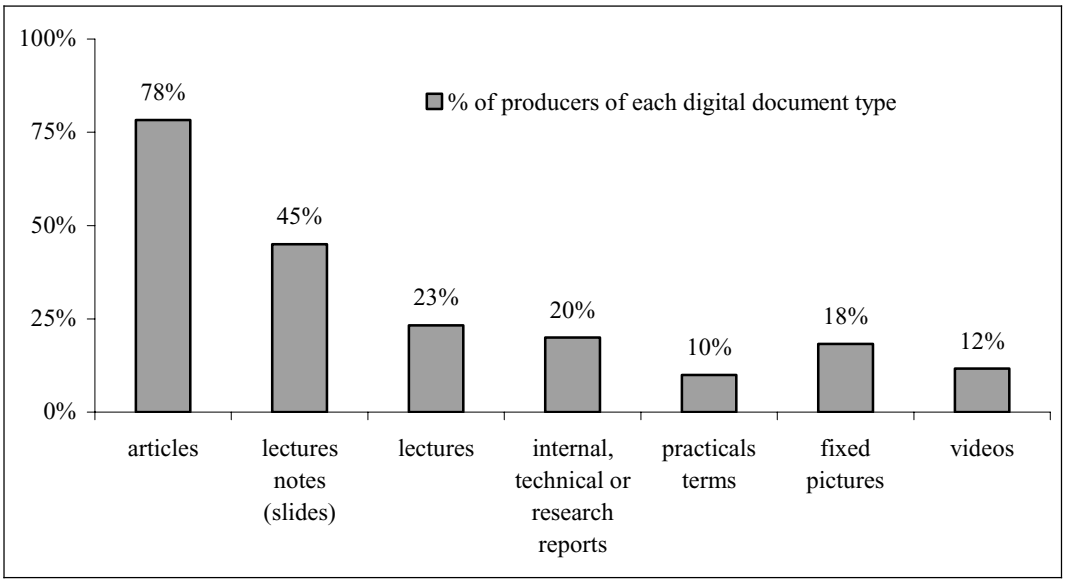
- In doing research, lecturers and researchers first use articles, which are then followed far behind by books and eventually theses and reports.
- On the other hand, while teaching they first use books followed then far behind by scientific or popular-science articles, and then lectures and lecture notes.

When restricted to digital documents, similar analysis shows that articles form the overwhelming majority of research resources; however, for teaching purposes, lecturers and researchers use (in following order): lectures, lectures notes, articles and tutorials.

Q.6 What types of documents do researchers and lecturers produce?

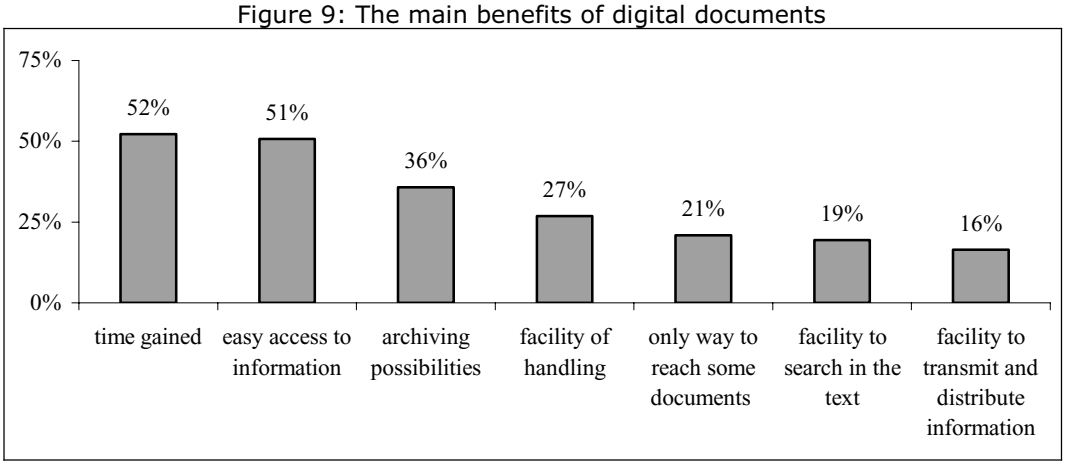
The production of digital documents was widespread among the lecturers and researchers interviewed. However, these documents are still distributed by means of the paper. On the other hand, digital documents are not specifically designed for digital distribution. For example, scientific articles have the same form whatever the medium. As a general rule, when the document is distributed in digital medium, a person other than the author does it. This can be for a number of reasons either because he hasn't his own personal website or because an editor is assigned to distribute documents. Figure 8 details the types of digital documents produced and their range of distribution.

Figure 8: Types of digital documents produced



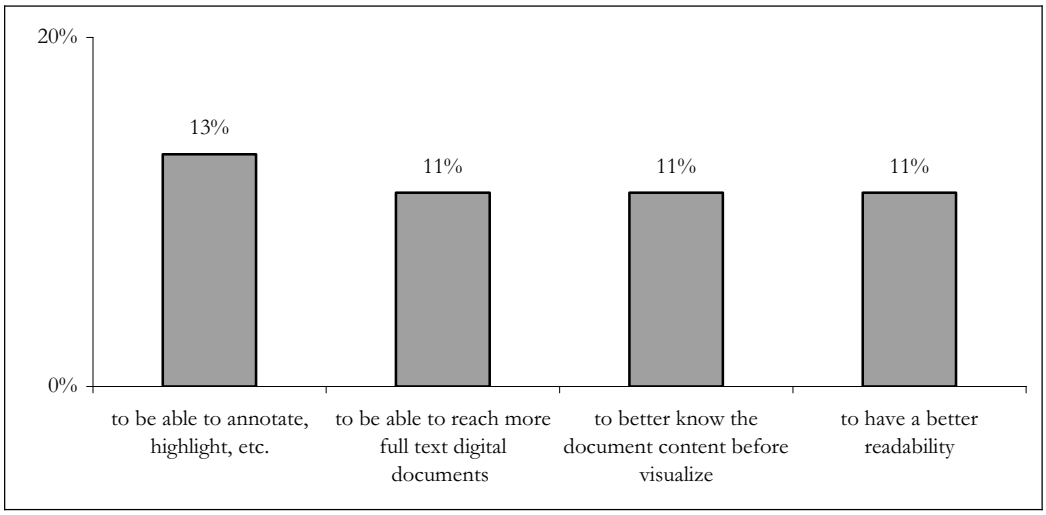
Q.7 Benefits and drawbacks of digital documents for lecturers and researchers

Figure 9: The main benefits of digital documents



According to lecturers and researchers, the first benefit of a digital document is time gained. Information and documents are quickly accessible with little effort and the lecturer and researcher is able to estimate the relevance of the results obtained faster than with printed documents. The second benefit is the ease in accessing digital information. Taking into account the difficulties encountered while searching for information, this may seem relative. According to lecturers and researchers, ease implies "the ability to reach a mass of very diverse information with only a few clicks of the mouse". The archiving possibilities are then the third benefit. In fact, a digitally stored document needs physically less space than the same document in print. Moreover, it seems easier not only to organize a digital repository using files but also to search in such a repository. The facility of digital document handling is likewise appreciated. It's easy to get abstracts, modify them, or even extract pictures, diagrams etc. and insert them elsewhere.

Figure 10: The main problems with digital documents



The first problem according to those interviewed is the near impossibility to annotate, or highlight. This doesn't mean that they would want this possibility to be implemented, however, it only means that paper is irreplaceable. Lecturers and researchers would like to become more familiar with the document content before visualizing the full text i.e. know its content level either for novice/advanced, popular science/research, etc. They would also like to have a summary, some keywords, and other meta-information (specifying the origin of the document, a film's duration, the size of a file to be downloaded, etc.). Many lecturers and researchers also want better readability. Reading from a screen still remains uncomfortable.

Synthesis

Nowadays, Internet has become a key-element in the lecturer and researcher's information environment. "*It's a window at the fingertip enabling one to know what researchers are doing everywhere in the world*". Digital technologies enable one to find information quickly, to communicate it, transmit it, or distribute documents easily, without leaving the office or workstation. So the lecturer and researcher have focused on the resources offered mainly via the computer.

At the same time, their perception of the role of the institutional library seems to have become more vague, even if they still often use library services. On the one hand, Internet creates a dazzling effect, which partly prevents one from distinguishing other information sources. On the other hand, lecturers and researchers have become upset when librarians, having to cope with Internet, seek to provide them with autonomous ways of searching for information. Nowadays, it's not always clear for lecturers and researchers that some digital resources might only be available thanks to the efforts of institutional libraries. Also, it seems that there is a persistent problem i.e. a lack of training in information retrieval. Lecturers and researchers have limited practice and skills in the Web's potential.

Finally, lecturers and researchers seem somewhat superceded by digital medium success. They find a lot of information on the Internet and receive a lot of information, but they then have to face relevance and reliability issues. Time gained in finding information is partly lost in selecting the results. However, while they are partly unsatisfied, the ratio between the benefits and inconveniences remain a point of interest. Lecturers and researchers are not yet ready or prepared to allocate time for training in the search for information.

Lecturers and researchers documentary expectations and needs

The second part of the interview, examines semi-directed conversations. Where we find that lecturers and researchers first and foremost want to reach more digital resources. This means easy and quick access to scientific information and full-text documents by means of targeted tools, which deliver reliable information and limit the time spent in selecting from among the results.

Lecturers and researchers want to easily be able to find research documents, especially those produced in their institute « *even inside one's own laboratory, the work of colleagues may not necessarily be known* ». This holds for theses, internal and

research reports, as well as articles. This is then followed by documents produced by students involved in a research team (e.g. research reports, training course reports, etc.), where attention is paid to quality and reliability. Lecturers and researchers also mention documents of a didactic nature, especially those of their own institute. These include lectures and other documents intended for students. This is then followed by work in part or whole by the students themselves. Finally, bibliographies, first hand reports, some numeric data, data-processing code blocks, etc. are considered of value. Many of these resources are currently difficult to acquire outside the direct vicinity of the author.

Those interviewed also think that it is important to emphasize information access within one's own institute. This risks being overlooked, because documents may be scattered or lost. At the same time, it's necessary to ensure long-term access to such resources. However, a system with functionalities that are able to meet such expectations will have to fulfill certain conditions. Ease of use is a priority: « *even with less functionalities, the simpler the better* », « *the more keys, the less visitors* ». The content must not only be rich and relevant but also structured in a clear and appropriate way. The interface must be user-friendly, quick and easy to reach. Based on these points, lecturers and researchers think that an institutional project for a digital library of grey literature is a positive step in the right direction.

The survey conducted at the Ecole des Mines de Nantes also highlighted two potential obstacles to an optimum deployment of the project inside the institute. On the one hand, lecturers and researchers partly ignore their rights associated with the distribution of their documents. In the context of open access movement, it seems necessary to increase the author's awareness of possibilities that are available. While, on the other hand, the lecturer and researcher's attitude may appear inconsistent. As users, they want to get at more full text resources. While as authors, they are reticent to allow broad access to their documentary production.

Communication with lecturers and researchers on this project will have to heed these aspects and prove that the digital library answers the expectations they had expressed. The platform specifications have also been built according to the survey results.

Direct implications for digital library platform design

When the project began, we had three main hypotheses:

- First, we focused on the ability to manage documents produced by students, lecturers, or researchers. We did not limit ourselves only to long-established academic documents such as PhD Theses.
- Second, librarians and their view of library were placed at the center of the digital library design. The main implications result in: advanced bibliographic description of documents, domain structured collections controlled by librarians, and configurable workflow for document submission ending with a librarian's validation (controlled keywords, collections, etc).
- Third, we applied a user centered design approach to this study as well as to its prototyping and evaluation in an effort to arrive at clear and simple user interface.

Beyond this, much of results from the study were used directly in the design of the digital library platform. Other results were taken into consideration in refining the user's own representation, which we used to guide our choices. Some of them corresponded to well-known patterns of user behavior already depicted by our librarians in the early stages of the prototype and which were confirmed by real figures inferred by the questionnaire results. However, some results appear as new information related to user practices and expectations.

Conclusion

This study has had a great impact on the development of the platform. Since its release in November 2004, we have started evaluation tests with librarians and users to measure the performance and the quality of the interface and its other related services. This survey, dealing with lecturers and researchers documentary practices at the Ecole des Mines de Nantes enabled us to uncover a portrait of a rather sedentary and solitary information seeker, who is primarily focused on resources available on his/her own computer. Documents, especially grey literature, play a main role in one's research or teaching activities. Partly unsatisfied, this information seeker is aware of

some of the problems, namely that of being overwhelmed with information and the lack of method in their search for information. However, the ratio between the benefits and the inconveniences of the current situation still balances positive. Thus, lecturers and researchers are seen as ready takers of intuitive tools but not as ready to spend more time in improving their methods and skills in information retrieval.

Acknowledgements
We would like to thank the *Pays de La Loire Council* and the French Ministry of Research for supporting this project.

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Learning about Grey Literature by Interviewing Subject Librarians *

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(United States)

Abstract
During the 2003-2004 academic year, library staff at the University of Rochester studied how faculty members find, use, and produce grey literature to do their scholarly work. We formed a research team that included an anthropologist, librarians, a graphic designer, computer scientist, programmer, and cataloger, and we learned the methods of work-practice study[1]. With funding from the Institute of Museum and Library Services (IMLS), we then interviewed twenty-five faculty members in art and art history, economics, modern languages, linguistics, physics, and political science with the hope that what we learned would be useful in designing additions or modifications to our institutional repository[2].

As we conducted and analyzed the interviews resulting from this study, we discovered that some important questions about grey literature still remained. What exactly constitutes grey literature for Rochester's faculty in today's digital world? To what extent do our faculty members create and use grey literature, and might that material be deposited in our institutional repository? We also knew that the information gained from the departments studied under the aegis of the grant was necessarily limited, and we were interested in somehow expanding the reach of the study. We wanted to know which types of grey literature are most prevalent in all the disciplines and departments on our campus, not just the ones represented in our study. Could we tap into the expertise of subject librarians who work with faculty to inform our understanding of the grey literature used in other academic departments? Ultimately, we hoped that what we discovered would be useful in providing support to faculty who wished to make their grey literature available via our institutional repository. To learn more, the five subject librarians who were part of the larger research team – the authors of this paper – interviewed all of the River Campus Libraries subject librarians on the topic of grey literature.

Getting Started
To begin, the five of us questioned each other about our own faculty members' use of grey literature to ensure that we were asking the right questions and to get a sense of how best to conduct the interviews. Interviewing subject librarians was important for several reasons. In our larger study, it was difficult to ask faculty some of the most basic questions regarding grey literature. Grey literature is not a term used by most faculty members. In addition, we found that faculty research, even within the same department, tends to be narrowly focused, making it a cumbersome and unrealistic task to get a general sense of the variety and range of grey literature from faculty members only. By contrast, our librarian colleagues were readily accessible to us, already had some familiarity with grey literature and with our project, and were enthusiastic about exploring the topic with us.

While most librarians are familiar with the term grey literature, we discovered that there was much that subject librarians did *not* know about grey literature, especially in disciplines other than their own. We all found it useful to pool our knowledge and make cross-disciplinary comparisons.

For consistency's sake, we provided a standard definition at the beginning of each interview. We defined grey literature as, "that which is produced by government, academics, business, and industries, both in print and electronic formats, but which is not controlled by commercial publishing interests and where publishing is not the primary activity of the organization."[3]

* First published in *College & Research Libraries News* 66, no. 7 (2005)

In each interview we asked the same three questions:

- Do you know of materials in your area that would fall into the grey literature category?
- Do you get requests from faculty for grey literature? If so, what do they request?
- Has your interaction with grey literature changed within the past few years? If so, what do you think caused these changes?

Participation in the interviews was entirely voluntary. There were no "right" or "wrong" answers. We simply wanted to know what subject librarians thought was important grey literature for their departments. Each interview was tape-recorded and lasted for thirty minutes or less. After each interview, the grey literature team prepared a written summary and asked the librarian we had interviewed to review the summary for any corrections or omissions, which were then incorporated into the final summary. Altogether, we interviewed 20 subject librarians who are responsible for 25 disciplines.

In addition to interviewing subject librarians, we met with staff in the Interlibrary Loan Department to ask about the grey literature requests they receive from faculty members. These discussions were also a rich source of information.

What We Learned

Faculty members and graduate students in all disciplines use a number of types of grey literature. The most prevalent types are listed in Table 1, which shows that theses and dissertations are important to over half the departments, as are conference presentations and papers. Ten additional types of grey literature are significant to at least two departments, with datasets being important to six.

Table 1:
Grey Literature Important to Multiple University of Rochester Departments

Type of Grey Literature	**No. of Departments**
Conference presentations and papers	17
Theses and dissertations	13
Datasets	6
Technical/research reports	5
Videos	4
Teaching materials	4
Government publications	4
Preprints	3
Working papers	2
Invited talks	2
Miscellaneous materials to supplement publication	2
Audio	2

At the other end of the spectrum are those types of grey literature that are significant to only one department seen listed in Table 2. A wide variety of subject areas is represented here including the linguists' dictionaries and grammars, the psychologists' tests, and the engineers' patents and standards.

Table 2:
Grey Literature Unique to a Single University of Rochester Department

Type of Grey Literature	**Department**
Dictionaries and grammars	Linguistics
Tests	Psychology
Association papers	Anthropology/Sociology
Images	Art/Art History
Theatre and dance programs	Dance
Research proposals	Chemistry
Patents	Engineering
Standards	Engineering

While these same results would not be found at all institutions, the patterns seen here can provide insight into another institution's academic context. In our study, for example, theses and dissertations are of prime importance to departments offering doctoral programs. At other institutions, one might find sociologists with a strong research interest in datasets and historians who rely on images.
In addition to learning more about the range and types of grey literature used, we discovered that rather than working through their subject librarian, patrons often go directly to our Interlibrary Loan Department to obtain "grey" materials. For example, we learned that Interlibrary Loan fills more and more requests for media such as DVDs, VHS and audio files. Also, many Interlibrary Loan requests result in Internet links that can be passed on directly to requestors, and not surprisingly, Google is used by the Interlibrary Loan Department as a means of finding esoteric items. What is obvious is that one cannot make easy assumptions about grey literature. It takes on different forms in different departmental settings. For institutions supporting digital repositories, the lesson is threefold:

- To achieve campus-wide acceptance, repositories need to accommodate a variety of types of grey literatures
- Interest in various types of materials may be unique to a discipline or have a large cross-disciplinary audience
- Subject specialist librarians are an important source of expertise about grey literature.

Table 3 represents the distillation of all the discussions with our subject librarians and shows the major types of grey literature used by the departments at the University of Rochester. Putting information into this tabular form was useful in a number of ways:
- Common themes become apparent. For example, theses and dissertations are, as mentioned above, almost universal types of grey literature.
- Specialized and unusual types of material also stand out. Who would have thought that foreign government publications were so significant to the modern languages department?
- To be honest, for the subject librarians, compiling all the information into this extensive chart was gratifying.

Table 3:
Types of Grey Literature Associated with Departments/Disciplines

Department or Discipline	**Ranking[4]**	**Most Common Types of GL[5]**
Art and Art History	1	*Images* *Conference papers* *Theses and dissertations* *Videos* Archival material
Astronomy	3	*Theses and dissertations* Astrophysical Data System materials *NASA reports, data* Astronomical data catalogs
Biology	3	*Conference presentations and papers* Sequence databases
Brain and Cognitive Sciences	2	*Invited research talks* *Videos* Cogprints Sign Language Bibliography
Business	2	*Working papers* *Theses and dissertations* Datasets
Chemistry	2	*Research proposals and grant applications* *Conference presentations and papers*
Computer Science	1	*Technical reports* *Conference proceedings* Preprints Some datasets

Dance	1	*Videos of university and guest dance performances* *Theatre and dance programs*
Economics	1	*Working papers* *Theses and dissertations* Business school papers Datasets
Education	1	*Conference proceedings* *Research reports* *Theses and dissertations* *Teaching materials* Curriculum guides Psychological tests
English	3	*Conference papers* *Invited talks* *Teaching materials* Bibliographies Unpublished studies and interviews
Engineering	2	*Patents* *Standards* *Conference proceedings* *Technical reports* *Theses and dissertations* US Gov tech reports (EPA, DOE, etc) Corporate tech reports (HP, IBM, Microsoft)
History	2	*Conference papers* *Theses and dissertations* Government documents
Laboratory for Laser Energetics	3	*Technical reports* *Conference papers* *Datasets* *Theses and dissertations* *Preprints and eprints* Annual reports Bulletins and newsletters House journals, manuals, and technical specifications and standards Bibliographies
Linguistics	1	*Dictionaries and grammars* *Audio and data to supplement published work* *Conference papers*
Mathematics and Statistics	3	*Preprints* *Datasets*
Modern Languages and Cultures	2	*Conference papers* *Theses and dissertations* Government and international publications Association publications
Music	1	*Conference papers* *Theses and dissertations* *Video and audio of performances* Musical society newsletters and bulletins
Optics	3	*Supplements to published work* Company and lab reports. (both in-house and published) Military standards
Philosophy	3	*Conference papers* *Theses and dissertations* *Teaching materials*

Physics	3	*Theses and dissertations* ArXiv, SLAC, CERN eprints Government documents Reports and data from NASA, NIST, and national labs
Political Science	1	*Working papers* *Datasets* Policy briefs Think tank, institute, and non-profit newsletters, reports, and statistics Government documents
Psychology	2	*Conference papers* *Tests* *Datasets* *Theses and dissertations*
Religion and Classics	1	*Conference papers* *Theses* *Teaching materials* Church papers Archival materials
Sociology and Anthropology	3	*Association papers* *Conference presentations* *Materials to supplement publications* *Theses and dissertations*
Women's Studies	2	*Conference papers* Newsletters Research reports from non-profit, government, NGOs, international agencies Conference proceedings
Writing Program	3	*Curricular materials* *Conference papers* ERIC materials

Since subject librarians do not fill many direct requests for grey literature, they tend to believe that they are not very knowledgeable about it. On the contrary, we find that subject librarians have a depth of knowledge about the grey literature used in their own disciplines that is extensive, hard won, and valuable. This knowledge was easily increased by the sharing that occurred as part of the interviewing and debriefing processes.

Lastly, and of most importance for one of our immediate goals, it gives us a guide to the principal types of material we may expect the various disciplines to deposit into DSpace, our institutional repository.

Implications for Institutional Repositories

Our institution has recently implemented an institutional repository, so one of our primary interests in conducting the study was to identify the departments and disciplines that are most likely to be early contributors. In this regard, we paid special attention to the copyright issues associated with each type of material and with what we know of the culture of each discipline. We asked, for example, whether a given discipline was known for sharing, perhaps by putting its results on the web as soon as possible, or for playing it "close to the chest" until the results can be formally published. Based on these considerations, we identified the departments to approach first in soliciting material for our institutional repository. These departments represent disciplines in which grey literature is not currently easy to locate and retrieve. Our expectation is that this targeted, high-probability-of-success approach will give our institutional repository a strong start that only gains momentum in the months and years to come.

We have gained a better understanding of how our faculty members acquire information on their own and thus a better sense of how to support faculty both in

bringing outside literature into the university, and in disseminating the grey literature produced within the university by our own scholars. The interview process provided us with an opportunity to learn more about our colleagues, the departments they support, and the grey literature that is typical in other disciplines. We have a greater appreciation of the huge range of materials and formats covered by grey literature, the overlap of this literature among some disciplines and the relative importance of grey literature to all our disciplines. Most importantly, we know how we, as librarians, can help our institutional repository to become an even better instrument for archiving and disseminating grey literature.

Acknowledgements
We wish to thank our subject librarians, the Interlibrary Loan staff, Katie Clark, Nancy Foster and Susan Gibbons for their contributions to this article.

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[4] Ranking refers to the likelihood that the department is a good source of submissions to our university's digital repository. Departments with a #1 ranking are the ones that we plan to approach first.

[5] Types of grey literature that appear in italics are those that are most likely to be submitted by our own faculty into our university's digital repository.

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A Review of Four Information Professionals - Their Work and Impact on the Field of Grey Literature *

Dominic J. Farace and Jerry Frantzen (Netherlands)

Abstract
When one addresses education in an area of study, certainly in higher education, the ideas of early theorists and practitioners in a field, as well as their core contributions are resourced and referenced. This scholastic procedure provides common ground on which a student, colleague, or instructor can further explain and elaborate on a scientific or technical field. When the field is information science and the area is grey literature, four information professionals whose careers spanned the last four decades of the 20th Century can be considered required reading. They are Vilma Alberani (Italy), Peter Auger (United Kingdom), Ulrich Wattenberg (Germany/Japan), and Andrei Zemskov (Russia). They are the vanguard of the grey literature community. For the readers who are familiar with these persons or for those who are unfamiliar, we invite you to (re) acquaint yourself with the direction and force, which guided their work in this field of information and which has had a formative impact in shaping the grey landscape.

Introduction
In December 1993, the First International Conference on Grey Literature entitled "Weinberg Report 2000"[1] was convened in Amsterdam, Netherlands. A special tribute was paid to Alvin M. Weinberg, who in the early 60's chaired President Kennedy's Science Advisory Committee and produced the famous report "Science, Government, and Information: the Responsibility of the Technical Community and the Government in the Transfer of Information"[2]. Along similar lines - a decade later - a special tribute was paid at the Fifth International Conference on Grey Literature to four information professionals, who have had long careers in information, who themselves attended and presented papers at the First International Conference on Grey Literature (GL'93), and who have made lasting contributions to specific areas in the field of grey literature. The four are Vilma Alberani (Italy), Peter Auger (United Kingdom), Ulrich Wattenberg (Germany/Japan), and Andrei Zemskov (Russia). In the summer of 2003, each of the four authors were contacted via GreyNet's office and asked to provide bibliographic, autobiographic and other human-interest reference material in an effort to gather firsthand information for this article and its presentation.

Grey Matters in the World of Four Information Professionals
In the **1960's** these four individuals were starting their careers in the field of information and science. It was a time when the sky was the limit, but it was also a period when the awareness of unchecked and excessive expansion began to emerge. Great challenges offset by (un) known consequences required the skills and foresight of professionals in designing and facilitating information and knowledge transfer between and among the sectors of business, academics, and government. In mid-1970, Peter Auger completed his first publication, which would eventually move on to a 4th edition[3]. This grey primer was initially titled *Use of Reports Literature*[4], revised to *Information Sources in Grey Literature*[5] in its 2nd and consecutive editions. In early 1980, Vilma Alberani was appointed Director of the Editorial Services at the Italian National Institute of Health (ISS), where she was able to influence both national and European information policy for the benefit of grey. In early 1990, Ulrich Wattenberg returned after two decades of service in Japan to the synthesis of his work and that of GMDs initiative to harvest Japanese STI making it available to the West and the rest of the world. This culminated in his edited oeuvre *Japanese Information in Science, Technology and Commerce*[6]. And, in the first years of 21st Century, Andrei Zemskov, stands in the forefront of open source archives, initiating a Russian-German Project to establish a digital archive of Russian mathematical publications titled RusDML[7].

* Adapted from a paper first published in the GL5 Conference Proceedings, January 2004

Alberani, *the European*

"Grey Literature is not dependent on the means of distribution and circulation."

Vilma Alberani is perhaps the one person most responsible for organizing a national program in and for grey literature in which collection development, processing, diffusion on the one hand were balanced by reflection, authorship, and dialogue on the other. Alberani's concerns with the implementation of ISO standards for Report and Theses presentations, Report numbers/codes[8], were among the topics at the National Conferences, which she organized in 1992[9], 1996[10], and 1999[11]. Throughout her career, Alberani has (co) authored some eighty articles and fifteen books and is responsible for the editing of about 250 reports. The turning point in her +40 year career, which started in 1958, came however in 1978 with her invited attendance to the York Seminar.
On 13-14 December 1978, thirty participants from European Member States met in York, United Kingdom to discuss ways of improving access to and bibliographic coverage of non-commercial published materials[12]. This meeting was organised by the EEC and hosted by British Library. Among the accomplishments of this seminar were the establishment of EAGLE, the European Association for Grey Literature Exploitation, which lived to celebrate its 25th Anniversary, and the SIGLE-database (System for Information on Grey Literature in Europe), which is today online available via STN International.
Alberani returned to Rome after the York Seminar to implement and develop standards for grey literature that would be used not only by ISS, but also by the Italian National Research Council (CNR) and the Italian Library Association (AIB) – in essence in every national center in Italy. No doubt these efforts were responsible for her earning in 1993, lifelong Honourable Membership in the Italian Library Association (AIB). Alberani's work in grey literature did not end with her official retirement in 2000, but has instead led her to concentrate on information and knowledge transfer to colleagues just starting out and others long working in the field. Within the AIB, she has organised some courses on grey literature and continues to maintain active e-dialog.

Auger, *the Encyclopedist*

"Today, grey literature is that which fails to appear in paper format."

Peter Auger started out with Lucas Industries in 1958 moving up through various departments, while envisioning a mosaic of grey literature collections and services well beyond Lucas. In fact his published work in 1975 and its later revised editions provided the first 'roadmap of grey literature systems and services'. His words of preface echo throughout each new and revised edition[13]: "In literature, color coding in the literal sense is nothing new" – white papers (official documents), green papers (proposed government policy), blue books (official reports), black books (e.g. from the national treasury, red data books (lists of endangered species) all of which are grey – i.e. not controlled by commercial publishing.

The first chapters of each edition spelled out the ABC-&-D of grey **A**cquisition, **B**ibliographic control, **C**ollection development & **D**istribution. This then followed by a roadmap for the various branches of science and information, namely Aerospace (e.g. ESA, NASA); Life sciences (e.g. Caricom, Agris, Biosis); Business and Economics (e.g. IMF, WB, UNCTAD); Education (e.g. Eudised, Unesco, ERIC); Energy (e.g. DOE, ERA, IAEA, INIS); Science and Technology (e.g. CORDIS, DTIC, NTIS, VNTIC), all familiar organizations and agencies to the global grey literature community. In 1988, Auger left Lucas Industries to establish his own information consultancy, and has since retired in 1997.

Wattenberg, *the Ethnologist*

"Industry shows interest in Japanese grey literature when it is free-of-charge, exclusive, and well translated."

Ulrich Wattenberg received his Doctors degree in natural science in 1972 and was granted a four-year scholarship to Tokyo University by the German Academic Exchange Service (DAAD), where he studied Japanese and did research on silicon. It was there that he became aware of the richness of Japanese Scientific and Technical Information. As it might appear, Wattenberg was being primed in a field of specialization for which an infrastructure was to be custom built. The name of the organization would change throughout his further quarter of a century stay in Japan, where he worked in the liaison office of IDW (Instituut fur Dokumentationswesen) a department of the Max Planck Society, later to become GID, then GMD, Gesellschaft fur Mathematik und Datenverarbeitung), today known as GMD First.

While names changed, the human resource, Ulrich Wattenberg remained constant, until his return to the home office in Berlin in 1993. In that year, JICST, now JST (Japan Science and Technology Agency) held membership on the GL'93 Program Committee; and was instrumental in his response to the conference call-for-papers. During the final decade of his information career, Wattenberg was confronted with a more formidable change than that of a name. The earlier investment principle, which also applied to grey literature, where there would be "first costs then benefits" was replaced by other principles to which grey literature would have difficulty in adjusting. Industry was calling for exclusivity, value added and tailor made information. Upon his retirement in 2002, Ulrich was not as yet convinced that internet search engines, while providing valuable grey literature would be able to completely replace the contacts and links of the information professional - for him a prerequisite to grey literature acquisition and diffusion.

Zemskov, the Envoy

"Information specialists can benefit from an electronic depository of grey full-text documents…"

In 1965, Andrei Zemskov received his PhD in Low Temperature Plasma Physics from the Moscow Institute of Technical Physics. In that same year, he began as scientist, moved to senior scientist later to become Supervisor of the Plasma Physics and High Energy Accelerator Program at the Kurchatov Atomic Energy Institute in Moscow. Zemskov was also politically active in the CPSU, first as secretary of a local, later to First Secretary of the Moscow Regional Office. In 1990, just months after the fall of the Berlin Wall, Andrei Zemskov was appointed Director of the Russian National Public Library for Science and Technology (NPLS&T) a position that he still holds today. His work at NPLS&T and his professional and personal interest led him to explore the free access of information, grey literature[14], and compact disc technology.

Andrei Zemskov is in more than a way a bridge from soviet closed society to a democratic open one, where information is free to access, where there are no checkpoints and walled borders on the electronic highway. Zemskov's affinity with grey may have been his break with red? He is author of more than 90 publications in physics and Library and Information Studies (LIS). A number of which deal with grey literature and which carry the term explicitly in the title. He served on the editorial advisory Board for IJGL (International Journal on Grey Literature), the forerunner of TGJ (The Grey Journal) and is currently Chief Editor of SciTech Libraries Journal. He has membership on a number national and international Committees such as IFLA, IATUL, ILIAC, and the former FID, etc. No doubt, this is not the first time that Zemskov has been honored for his achievements. He is the recipient of national and international recognition for Merit, Leadership, and Friendship of which the Who's Who in the World[15] will attest.

Closing Remarks

Grey Literature is a field, which has attracted and drawn information professionals from the many branches of science in both public and private sectors. The four individuals presented in this article are representative of the thousands, who are supported in part or whole by their respective organizations in the work of grey literature. At the Seventh International Conference on Grey Literature (GL7), which will be hosted by INIST-CNRS in Nancy, a Roundtable dealing with "Curriculum Development and Research on Grey Literature" will aim to bring together delegates and participants with vested interests in education. Thanks to the work of the four information professionals covered in this article, common ground has been defined.

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Open Access to Grey Resources

INIST-CNRS
Nancy, France
5-6 December 2005

SEVENTH INTERNATIONAL CONFERENCE ON GREY LITERATURE

CONFERENCE PROGRAM AND SCHEDULE

Monday, 5 December 2005

ARRIVALS, REGISTRATIONS ***9:00 - 10:00***

OPENING SESSION **10:00-11:00**
Chair: J. Schöpfel, Institut de l'Information Scientifique et Technique, INIST/CNRS - France

Welcome, Opening

Inaugural Address
Dr. Laurent Romary, Centre National de Recherche Scientifique, CNRS - France

Rejoinder: Italian initiatives on Open Access Maria Castriotta, ISPESL; Rosa Di Cesare, Daniela Luzi, and Roberta Ruggieri IRPPS/CNR - Italy

MORNING BREAK ***11:00 -11:30***

SESSION ONE **11:30 -13:00**
Chair: D. Luzi, National Research Council, CNR/IRPPS - Italy

Grey in the R&D Process
K.G. Jeffery, CCLRC – Rutherford Appleton Laboratory - United Kingdom
A. Asserson, University of Bergen, UiB - Norway

Assisting scientists to make their research results world wide free available: An experience begun in the 90's
S. Biagioni, Institute of Information Science and Technologies, ISTI/CNR – Italy

Grey Literature: Problems and Prospects for Collection Development in E-environment
M. Natarajan, National Institute of Science Communication and Information Resources, NISCAIR - India

LUNCH ***13:00 –14:00***

PANEL ONE **14:00 -15:30**
Chair: D. Cutler, Office of Scientific & Technical Information OSTI/DOE – United States

Repositories, Tools for NGOs Involved in Public Health Activities in Developing Countries
J. Crowe, Information International Associates, IIa - United States

A Survey of Open Access Barriers to Scientific Information: Providing an Appropriate Pattern for Scientific Communication in Iran
M. Ghane, Regional library of Science and Technology, RLST – Iran

Open Access to Grey resources: Opportunities and challenges in India
M. Tripathi and H.N. Prasad, Banaras Hindu University, India

Science and Technology Grey Literature Management: A Case Study
V. Lellis, C. da Silva, M. Guimarães and H. Cristovão, Instituto Nacional de Tecnologia, INT - Brazil

AFTERNOON BREAK ***15:30 - 16:00***

ROUNDTABLES 16:00 - 17:30

RECEPTION ***18:30 – 19:30***

Tribute: Yizkor Books as Holocaust Grey Literature
Prof. Gretta E. Siegel, Portland State University, USA

Roundtable 1	Roundtable 2	Roundtable 3	Roundtable 4
Curriculum Development and R&D	**Theses and Dissertations**	**Repositories and Collections of GL**	**Quality Assessment of Grey Literature**
Facilitator: J. Gelfand, UCI – USA	*Facilitator:* C. Stock, INIST – FR	*Facilitators:* K. Jeffery, CCLRC – UK G. Siegel, PSU – USA	*Facilitator:* P. De Castro, ISS – IT
Discussion Papers:	***Discussion Papers:***	***Discussion Papers:***	***Discussion Papers:***
J. Gelfand, USA D. Farace, et al., NL/FR D. White, et al., USA	I. de Torres, et al., ES D. Boudia et al., FR J. Vijayakumar, et al., Antigua/India J. Cuvillier, FR S. Grésillaud, FR	P. Pagano, et al., IT S. Lambert, et al., UK F. Sarmento, et al., PT H. Hwang, et al., KR Ramos-Lum, et al., USA F. Jones, et al., USA P. Erwin, USA	P. De Castro, et al., IT M. Weber, CH C. de Blaaij, NL C. Boukacem, et al., FR J. Schöpfel, FR

Tuesday, 6 December 2005

REGISTRATION DESK OPEN ***9:00 - 9:30***

SESSION TWO **9:30-11:00**

Chair: Anne Asserson, University of Bergen, UiB - Norway

Towards a Continuum of Scholarship: The Eventual Collapse of the Distinction Between Grey and non-Grey Literature?
M.A. Banks, New York University School of Medicine, NYU - United States

International Nuclear Information System: 35 years of successful international co-operation
T. Atieh, A. Tolstenkov and R. Workman, International Atomic Energy Agency, IAEA – Austria

Populating Institutional Repositories – The Experience of the University of Minho
E. Rodrigues, Â. Miranda, A. A. Baptista, I. Pinto Ramos and F. Sarmento, UMINHO - Portugal

MORNING BREAK ***11:00 -11:30***

PANEL TWO **11:30 -13:00**

Chair: A.K. Boekhorst, Universities of Amsterdam and Pretoria, Netherlands/South Africa

J-STAGE: System for Publishing and Linking Electronic Journals
M. Wada, Japan Science and Technology Agency, JST - Japan

Sorting out the mess: How OECD re-published 1000 working papers properly
T. Green, Organisation for Economic Co-operation and Development, OECD – France

PsyDok: Electronic Full text Archive for Psychological Documents
U. Herb, Saarland University and State Library, Germany

LARA – Open Access to Scientific and Technical Reports
C. Stock and E. Rocklin, Institut de l'Information Scientifique et Technique, INIST - France

LUNCH ***13:00-14:00***

ROUNDTABLES **14:00 - 15:30**

AFTERNOON BREAK ***15:30 -16:00***

CLOSING SESSION **16:00 –17:00**

Chair: D.J. Farace, Grey Literature Network Service, GreyNet - Netherlands

Reports from the Roundtable Facilitators
Julia Gelfand, Christiane Stock, Keith G. Jeffery, Gretta E. Siegel, and Paola De Castro

Conference Evaluation
Dr. Dominic J.Farace,
Program and Conference Director

Farewell
Dr. Joachim Schöpfel,
GL7 Host and Sponsor

GL7 Discussion Papers

ROUNDTABLE 1: CURRICULUM DEVELOPMENT AND RESEARCH ON GREY LITERATURE

Facilitator: J. Gelfand, University of California, Irvine, UCI – United States

Challenges for Collections in New Collaborative Teaching and Learning Environments: Does Grey Literature Fill a Void? *J. Gelfand, UCI – USA*

Access to Grey Content: An Analysis of Grey Literature based on Citation and Survey Data *D.J. Farace, J. Frantzen, and A.K. Boekhorst – Netherlands; J. Schöpfel and C. Stock – France*

Grey literature, peer review, and the interdisciplinary study of school and community violence: Sorting what's best for human development *D.L. White and Susan R. Driscoll, GWU – USA*

ROUNDTABLE 2: THESES AND DISSERTATIONS

Facilitator: C. Stock, Institut de l'Information Scientifique et Technique, INIST - France

The accessibility to doctoral theses in Spain: A political change and a reconsidering of its nature *I. de Torres Ramirez, University of Granada; M. Ayuso-García, University of Murcia - Spain*

TEF: Metadata for French dissertations *D. Boudia and R.M. Gómez de Regil, Institut National des Sciences Appliquées de Lyon – France*

Introducing Electronic Theses and Dissertations in Universities: An Indian Perspective *J.K. Vijayakumar, American University of Antigua; T.A.V. Murthy and M.T.M. Khan – India*

Indexing grey resources: considering the usual behaviour of library users and the use of Dublin Core metadata using a database of specialised vocabulary *J. Cuvillier, LABCIS – France*

An innovative concept to disseminate scientific communications *S. Grésillaud, INIST-CNRS - France*

ROUNDTABLE 3: REPOSITORIES AND COLLECTIONS OF GREY LITERATURE

Facilitators: K.G. Jeffery, CCLRC – Rutherford Appleton Laboratory - United Kingdom
G.E. Siegel, Portland State University, PSU – United States

Managing OA Multimedia Multi-type Digital Documents in the OpenDLib Digital Library Management System *P. Pagano and D. Castelli, Istituto di Scienza e Tecnologie dell'Informazione, Italy*

Grey Literature, Institutional Repositories, and the Organisational Context *S. Lambert, B. Matthews and C. Jones, CCLRC, Rutherford Appleton Laboratory - United Kingdom*

Use behavior of an institutional repository: A study focusing on the research community of the Department of Information Systems *F. Sarmento, A.A. Baptista and I. Ramos, U. of Minho – Portugal*

Patterns of Research Output produced by Scholarly Communities in South Korea *H. Hwang, H. Choi, and T. Seo, Korean Institute of S&T Information; S. Lee, Pusan National University, South Korea*

Entering Grey Waters: Challenges and Solutions of Providing Access to Non-traditional literature in an Aquarium's library *M. Ramos-Lum and S. Vogel, Cabrillo Marine Aquarium – USA*

Yizkor Books as Holocaust Grey Literature *F. Jones, New York Public Library; G.E. Siegel, PSU - USA*

Building a Digital Commons for Cyber Security Resources *P. Erwin, Institute for Information Infrastructure Protection/Dartmouth College, USA*

ROUNDTABLE 4: QUALITY ASSESSMENT OF GREY LITERATURE

Facilitator: P. De Castro, Istituto Superiore di Sanità, ISS - Italy

Uniform requirements also for Grey literature? Proposal for the adoption of a "Nancy style" *P. De Castro and S. Salinetti, ISS – Italy*

Grey Literature in Public Administration: An Example of a Specific Quality Assessment System *M. Weber, SFOPH – Switzerland*

Public funded research and Open Access: Perspectives and policies *C. de Blaaij, Library of Zeeland, ZEBI – Netherlands*

Access and document supply: a comparative study of grey literature *C. Boukacem, University of Lyon; J. Schöpfel, INIST – France*

MetaGrey Europe, A Proposal in the aftermath of EAGLE-SIGLE *J. Schöpfel, INIST – France*

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Julia Gelfand has been a librarian with the University of California, Irvine Libraries since 1981. She has been tracking the grey literature movement since the late 1980s and has participated in all of the previous GL conferences and has published and presented widely on different topics in grey literature. Her particular interests are in scholarly communications, electronic publishing, collection development, bibliography of science and technology, and she thinks that with more emphasis on networking and digital libraries, Grey Literature has a very interesting future. Gelfand is currently the chair of the IFLA Science & Technology Section and vice-chair/chair-elect of the ALA ACRL Science & Technology Section. Email: jgelfand@uci.edu

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Contents