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# **Information Literacy for Graduate and Postgraduate Students: Experiences from the University of Konstanz**

## **The University of Konstanz**

Institutional conditions sometimes explain the success or failure of a project. The University of Konstanz is a young and relatively open-minded university that was founded in 1966. It employs approximately 1,140 staff, of which 174 are professors. It concentrates on humanities, social sciences and sciences, but medicine and engineering are not taught here. In October it was nominated as one of the nine German elite universities – which means status and money in the first place. The library is a one-track open shelves library with a home-made shelf classification for approximately two million volumes. The acquisition budget is about 3.5 million €. The library has 96 staff, of which 9 are subject librarians. For five years we have offered a broad range of curriculum-integrated credit courses in Information Literacy for undergraduate students.

## **The framework: The Informationskompetenz II project**

While we have been offering Information Literacy courses for undergraduate students since the very beginning of the Bologna process implementation at the University of Konstanz in the year 2002, we recognized the needs of graduate and postgraduate students and researchers not until some years later. In 2006 we started the Informationskompetenz II project with financial support from the German Research Foundation, the DFG. The project period will end at the end of 2007.

The overall aims of the whole project were (a) to analyze graduate information competencies, (b) to reflect on their special needs in Information

Literacy and (c) to find appropriate ways to inform and teach them. I will give you an overview of these three main aims.

### **The need: Graduate information competencies**

We can confirm the level and the diversity of the findings of advanced student's Information Literacy, too. Our findings rely on two quantitative surveys we conducted in the years 2006 and 2007 (Kohl-Frey, 2006 and in print; Hätscher, Kersting & Kohl-Frey, 2007). One of the results was that about three quarters of the advanced students and researchers mostly use general search engines when looking for current research results. That means: Google is the main source of academic information retrieval. When we asked them – only in the first survey I mentioned, where we concentrated on graduate and postgraduate students – for an Information Literacy self-assessment, the answers directed us to the following:

They lack competencies in the more sophisticated functions of search instruments (optional search parameters like truncation, index search, etc., the export of data and the initializing of alerting services). The use of bibliographic management software, which was also mentioned, seems to fit very properly into this whole field of advanced searching, exporting and managing references, and staying up to date.

The publishing and storing of papers, especially on an institutional repository (like KOPS, the Konstanz Online Publication System), was an important item, too. For two years, the library has been particularly active in promoting this form of academic publishing as the “green way” of the Open Access movement. One-on-one support is already provided, but with the results of the self-assessment, workshops should also be considered.

Lack of familiarity with the use of audio-visual equipment (video digitalization, film cutting, preparation of audio-visual teaching material etc.), however, is expected to be the need of a very specific target group, such as media scientists or historians, working with that sort of material.

Besides this Information Literacy self-assessment, the survey points to at least one more lack of competence: the above-mentioned result that most of the interviewees use general search engines for searching current research results.

Furthermore, within the project we had the unique opportunity to conduct a series of qualitative expert interview in Germany, China, the US and the UK. Most of the experts' statements confirmed the empirical findings, that there is a need for improving the Information Literacy skills of this focus group.

### **The approach: Different methods?**

From the 2006 survey we also learned that advanced users can be reached in very different ways. When we asked "How do you want to be advised by the library?", the answers were varying very strongly: Most of them had a preference for informal consulting (60% e-mail, 53% reference desk, tutorials 32%), but a certain part wants to be advised in more formal arrangements (Courses 23%, fixed appointments 24%).

This fits very much with the qualitative data we collected with the expert interviews: There is a certain willingness to take part in library courses, but advanced users are more interested in spontaneous one-on-one consulting with a librarian than group arrangements and they are more interested than undergraduate students.

If one takes into consideration the rich literature on adult learning (e.g. Malcolm Knowles, *The adult learner*, which was published this year in German for the first time with the title: *Lebenslanges Lernen*, Lifelong learning), this means a confirmation of their relevant hypotheses: Advanced learners already have rich experiences in a certain field and therefore they want to learn self-directed from the starting point of their concrete question. That leads to a different approach in workshops or seminars, where the librarian has to be much more a moderator, a consultant or (to use Knowles' term) a facilitator than a teacher in the sense of classical pedagogy. And that must lead to an extension of the one-on-one consulting activities of the librarians as well.

### **The measures: What did we do?**

Following the results of our research we have implemented Information Literacy support for advanced users in different ways. As you all know, this

depends sometimes very strong on institutional conditions that are positive in one case and rather negative in another.

First of all, we increased the number of free workshops for advanced users. Especially since the campus-wide introduction of RefWorks as a web-based bibliographic management tool – which is accompanied by Bibliographix, a German tool for desktop installation – the demand for introductory sessions from doctoral student groups from a wide variety of subject areas is significantly high. In the meantime, there are approximately 400 users subscribed as RefWorks users. We are using these introductory sessions as “Trojan horses”, too, as we have learned from Manchester Metropolitan University (see the paper of Harrison & Jones in this volume) and other institutions to sneak probably unknown information sources into the attention of the participants.

Besides these free workshops (that means not curriculum-integrated), we tried to anchor our resources into the new curricula of master and doctoral studies. From the winter term 2006/07 on there has been an obligatory course in Information Literacy for political science students (which is the subject I am responsible for at the library). The evaluation of this first course was very positive and in the winter term 2007/08 the second round took place, with slight modifications of the study plan, compared with last year. Additional courses for master students in psychology and in sports science will start in 2008, other courses are discussed right now with the relevant departments.

The third way is what I call the simulation of a graduate school. As there are no such schools at German universities until now where libraries could integrate their services, they have to look for similar institutions at their university. At Konstanz we have found the Centre for junior research fellows (Zentrum für den wissenschaftlichen Nachwuchs, ZWN) as such an institutional simulation. The ZWN is an interdisciplinary research environment for post-doc researchers and their working groups, with which we are cooperating since last year. We organized two workshops – dealing with bibliographic management and open access publishing – after we had an intensive discussion with the members of ZWN about their habits and problems in information searching, processing and publishing.

Besides this we enlarged the consulting capacity of subject librarians, who were already responsible for the contacts between the library and the academic departments before. Especially for the ZWN we now offer special

welcome datings for new members to get in contact as early as possible with the advanced user.

Within the next few months, the ZWN will be upgraded into a broader “Zukunftskolleg”, a future centre, to attract excellent fellows from all over the world. This was one of the core issues of the universities future concept that succeeded in the German elite contest. Therefore we will try to intensify the connections with this institution to deliver excellent services for an excellent target group.

### **The future: What are we going to do?**

Beyond the already mentioned teaching and consulting activities, we have some more plans to reach other target groups and to cover further topics.

First of all, while more formalized doctoral programs have been in development only for a few months at our university, we don't have any experiences with this target group. But there is a place for key qualification modules as credit courses within the already developed study plans (e.g. in history or political science, and other departments will follow, we suppose). Therefore, we will offer an Information Literacy module for doctoral students from summer term 2008 on. This will consist of a generic part, which covers topics like search strategies, bibliographic management tools, open access publishing or plagiarism. A second part in smaller, subject-specific groups will cover the relevant information sources of the certain disciplines, and the doctoral students will get consultation from their responsible subject librarian. We hope to offer an attractive (for the user) and efficient (for the library) course for this challenging clientele.

Secondly, we want to broaden the graduate school simulation with the integration of further institutions like the very new doctorate schools of the so-called cluster of excellence (again, funded by DFG), which is a new research area, focusing on the cultural foundations of integration. Five already existing “Graduiertenkollegs”, i.e. graduate centers, are possible partners in improving the Information Literacy services for advanced users, too.

Additionally, from this winter term on we offer a campus-wide access to the ISI Web of science, which was a long-enduring wish of many academic

departments. Workshops in using this product will be the next topic of workshops for advanced users.

As I showed you, we have analyzed the Information Literacy level and the specific needs of advanced users, and we have already tested some possible ways and methods to reach them, to teach and consult them. The next step will be to establish and to consolidate this program within the library and the university. Besides this, we recognize the need for some sort of technical help, because the human resources capacity of the librarians is restricted. Therefore a follow-up project is in the making which focuses on technical assistance for advanced users in improving their Information Literacy, which will cover aspects of personalization (“my library”) and Web2.0, too.

## Conclusion

What have we learned? From our point of view, during the project period we have learned a lot about advanced customer’s needs, about their level of Information Literacy and about methods and measures to reach and to teach them. Or: Consult them. Or: Facilitate their learning. And we have raised the librarians’ awareness of this target group, which was an important step, too. We have succeeded in integrating Information Literacy into master and doctoral curricula, in building relations with graduate institutions, and in embedding the library as the information competence centre within the university.

## References

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