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Difficulties and new Approaches in User Education in Germany

Benno Homann
University Library of Heidelberg
Heidelberg , Germany

Abstract:

Already in the seventies of the last century German libraries discovered user education as a new area of responsibilities. First promising activities at the end of the seventies were not continued because of a the lack of staff and organizational conditions.
Since the beginning of the nineties especially greater academic libraries renewed activities in that field. Because of the difficulties users had in the use of CD-ROM databases and OPACs they offered courses in the handling of these new electronic information systems. During the last years pedagogical problems arose because of the amount and the complexity of knowledge and skills which have to be taught in the single lessons. These difficulties have lead to new approaches in user education by considering the concepts information literacy, curriculum theory and student centered learning methods.

1. Introduction

The German libraries are today in a process of fundamental change initiated by the electronic information and communication technologies. Many of them are worried by this development considering it as a fundamental threat to the future of libraries. They are impressed by old conceptions of libraries emphasizing the importance of the stock of books. They do not recognize the new promising perspectives for libraries offered by this change. Libraries can become information centers of fundamental importance in the modern information society. They can take on new important responsibilities in the formation of the information society.

One of the new responsibilities will be the extension of user education and the development of libraries as learning centers. By this libraries can become institutions of fundamental importance in the process of building up information and media competence in society. They can help to compensate the deficiencies of graduates of German highschools and universities stated by experts of economy and education in the context of a research project on electronic specialized information.[1] Libraries have the necessary experience in using information systems and in teaching. However they need to give this field of tasks more attention and develop the existing approaches in a systematic matter.

In the first part of my lecture I will give an overview of the first promising but nevertheless unsuccessful activities in user education and the pragmatic renewal. In the second part I will outline the new initiatives towards more efficient user education and their perspectives.

2. Unsuccessful activities and pragmatic new beginning

A reorientation towards user expectations and user services took place in German libraries as a result of democratic movements and educational reforms in the seventies. Fundamental results were the opening of former closed stacks and the expansion of reading room capacities. In particularly users got direct access to up-to-date literature. These new and easier possibilities of using the information offer of the library were accompanied by new demands on the users. They needed new additional knowledge and skills in retrieving the increasing amount of literature in the open stacks of the library and in using the reference information, especially the catalogues, in an efficient way. Because of these new requirements big academic libraries in Germany began to offer courses for library users.

After having made some experience it was obvious that apart from the existing expert knowledge librarians need additional pedagogical qualifications and better organizational conditions to ensure efficient courses. Recommendations in that direction were developed in a project at the end of the seventies. The results were very promising and can already be used in our nowadays situation as can be seen by the following shorted demands of the final report[2] :
- Integration of library courses into regular teaching acitivities of universities
- Increase of pedagogical qualification of the teaching librarians
- Differentiation of courses according to information needs
- Planning, coordination and realization of courses according to learning targets
- Sequential graduation within and between courses according to results of the psychology of learning
- Improvement of independent and self-regulated learning
- Increase of activating teaching and learning methods
- Using of new teaching media
- Evaluation of teaching programs

Only a few of these demands and proposals i.e. a model of user courses for newcomers [3] were realized. There had not been enough resources and initiatives for a systematic and sustainable development of teaching tasks in German libraries.
During the eighties the activities in the field of user education were reduced in nearly all libraries. The main reasons for this negative development were:
- Focus of innovation activities on rationalization of library administration especially in electronic cataloguing
- Missing staff resources for systematic further development of teaching activities
- Considerable neglect of expectations and perspectives of users especially on forming and providing information concepts
- Missing adult education courses for those willing to take on pedagogical tasks
- Low prestige of education and teaching in society and politics

New initiatives and activities came into existence at the beginning of the nineties as a reaction to the increasing need demand on help during the introduction of new electronic information systems like OPAC and bibliographic databases on CD-ROM. Contrary to predictions of some computer and information scientists the new information systems, which at first sight seemed to handle easy, led to a remarkable increase in tuition activities by the reference librarians.

Factors strengthening these developments were a new attractiveness of the libraries and the increase of expectations concerning the individual support for persons seeking information. The attractiveness was a result of newly established electronic information services combined with a flexible access by the newly installed PC workplaces. An indicator of this was the frequency some reference databases were used while the printed version had often been covered by a lot of dust because they had been used. The complexity of the electronic information systems, especially their potential of information and retrieval possibilities, led to an increase in expectations. While users in the age of printed information had been satisfied by getting a single hint which bibliographic resource to consult they now expected an exhaustive introduction in the handling and functions of the information systems. If systems were too complicated, it was the reference librarians who performed search. The library users were happy and the librarians were stressed. Time for advising and supporting increased in a drastic manner.

This development was the main reason for the expansion of user education. The courses were offered as a reaction and can be characterized as pragmatic and object orientated. They were pragmatic because they were not integrated in a pedagogical concept with broad educational targets. They were object orientated because their focus was on transmitting the skills to handle one particular information system i.e. an OPAC or a database. Often the course structure was derived from the handbook of the producer. The courses, being repeated in certain intervals, were self-contained entities of 1 or 2 hours without any relation to other courses in methodology or content.

The most important advantage of the pragmatic user education were the relative low level of expenditure in persons and organization that has to be invested for planing and realizing the courses. Handbooks offer a very good orientation.

Disadvantages of this approach became obvious very soon as the number of information systems offered by libraries increased rapidly. The increasing number of information systems and the frequent changes of the user interfaces led to exceeding demands on user education, which libraries were unable to satisfy.

Additional disadvantages of this pragmatic approach were the low motivation potential and the missing possibilities of a didactic coordination between the different courses. The dominant orientation towards technical skills at handling the information systems offers few possibilities of building up relations to realistic situations of everyday life and demands of individuals. Thus there was no high level of motivation.
The focus on specific information systems prevents the teaching of complex capabilities. For the teaching of these capabilities several courses are required based on top of one another. The courses will tend to redundancies and an overload in contents, because i.e. all functions of Medline will be treated in a course of 2 hours.
These disadvantages have a negative impact on the image of the user education of libraries.

For these reasons new activities at the end of the nineties were started intending the improvement of user education in German libraries.

3. New systematic approaches in user education

Common characteristics of the new activities are the orientation towards new pedagogic concepts and foreign developments. In the following we will deal with this before we will outline two new approaches and perspectives.

3.1. Impact factors of new teaching concepts
New teaching approaches in German library teaching activities are influenced by the following factors
- curriculum theory
- Anglo-American models of information literacy
- activating and learner centered teaching/learning methods
- online-learning methods and techniques

The curriculum concepts, substantially developed in the US in the seventies, offer ideal instruments for a change in perspective and for restructuring the courses of user education. The primary reference point for structuring the courses according to this concept were no longer the information systems but the participants of courses with their qualifications and interests. The contents of the courses are related to the learning targets in a functional way; additionally methodological and media-technical aspects are considered for optimizing the learning process. The concrete realization is to be seen as an iterative process characterized as an ideal combination of the different factors. For example the criteria for reducing the content had to be derived from the sequences of learning targets and changes in the composition of the group of participants. In relation to the concrete object of databases this would mean that details of a research instrument will not be treated in an introductory course. A lot of teaching activities, especially in big academic libraries, are now based on small curricula and learning targets.

The Anglo-American models of information literacy are of significant relevance for extending the content and methodology of the new approaches in German user education. Especially the models "Six Big Skills" by Eisenberg/Berkowitz and "Information Search Process" by Kuhltau, differing widely from one another[4], have been of great importance because they stimulate a differentiated perspective of individual information processes and by this of the functional relation of information objects of libraries. The models facilitate a structuring of the content based on psychology of learning and qualify of the importance of information objectives offered by libraries. Additionally they offer new ways of coordinating library teaching activities with regular courses of the different faculties. The models offer a common perspective and an integrating instrument for sharing the contents between the different teaching actors and coordinating them. – The importance of these models in Germany is primarily restricted to planning activities and less obvious in practical courses.

Activating and learning-centered methods, developed in recent years from results of the psychology of learning, have a great influence on the methodological performance of library courses. The essential characteristic of these methods is the provision of creative and research orientated possibilities of learning. The participants of courses should determine and control their process of learning as far as possible on their own. Although this was accepted in principle by teaching activities in German libraries a lot of compromises had to be made because of the unfavorable conditions of realization.

Online-learning as a new methodology and platform for teaching knowledge and skills is a factor of rapidly growing importance in teaching activities of German libraries. The user of this kind of library courses should have the opportunity to get the intended competencies in a flexible and self-directed way by using the learning systems. The development of a such a learning system necessitates a lot of work for making a thorough didactic analysis, for a detailed methodological planning and for getting the requested technical competencies and equipments. – Because of these high demands only a few simple results are produced by teaching activities of German libraries.

3.2. The modular teaching approach

The modular teaching approach was developed at the University library of Heidelberg as the result of a lot of experience and learning in the nineties[5]. The main characteristics of the present teaching activities are:

- Small teaching units (1-2 hours)
- Teaching modules integrated by a curriculum
- Complementary online-tutorials
- DYMIK as a model of information literacy which provides a base for developing and reflecting the teaching activities

The small teaching units are necessary because of the staff and organizational conditions at the University of Heidelberg. Only three persons belong to the department of user educations and adult education for librarians. Additional support can be got by staff of the reference department. As the courses of the library are not integrated in the curriculum of the faculties the participation is optional. As students will thus only spent a short time on the learning opportunities we offer courses as small packages. In spite of this optionality in 2000 our 316 courses were visited by 2342 students which is a remarkable result – probably the best result of German libraries.

The courses can be seen as teaching modules connected to one another by a small curriculum. The competencies and learning targets of information literacy are distributed between the courses which are differing in their focal points such as "introduction to library building and services" or "finding information by using catalogues". The different taxonomies with their possibilities of differentiation of learning targets according to abstraction (e.g. broad and precise targets) or levels (e.g. knowing or understanding) are of fundamental importance. They are the facilitating basis for the didactic reduction of the content and hierarchical sequencing of novice and expert courses. We now offer 4 basic courses with complementary contents in library, catalogue, internet and databases. To get all the fundamental capacities dealt with in the four courses one has to spent 6 hours in total. In the expert courses concerned with using specialized information efficiently participants are expected to have already acquired the fundamental competencies.

The courses at university library of Heidelberg are completed by Online-Tutorials concerning the building with its conventional services and the catalogue. The important benefits of these tutorials are their flexibility in time and location. They can be used from every workplace with internet-connection.
In the last year we attained high usage statistics of the online-tutorials. Especially the "virtual tour" through the library was called up 5430 times. We assume that this will take some of the load off the courses offered by libarians. We intend to extend our activities in this field and we are considering an integration in the new e-learning activities of the university of Heidelberg.

An additional element of the approach was the development of the "Dynamic Model of Information Literacy" (DYMIK). It is based on the Anglo-American models of information literacy and was adapted to our special requirements and can be seen in the graphic below.
This model has become a factor of fundamental importance for the teaching activities at the University of Heidelberg. The most important aspect is the visualization of the information process by reducing the complexity to a visible degree, necessary for using it as a didactical and methodological instrument. It facilitates the coordination of teaching activities with faculties, the reflection of the information process as a teaching object, the functional structuring of the large number of information systems offered by libraries and the importance of methodological competencies for efficient use of information. The model differs from the former Anglo-American models by emphasizing the dynamic aspects represented in the circle structure, by focusing on human action with its emotional and rational components and last but not least by using the German language as a fundamental condition to enhance the profile of librarians in the discussion of building up the information society.

Dynamisches Modell der Informationskompetenz = Dynamic Model of Information Literacy (DYMIK)
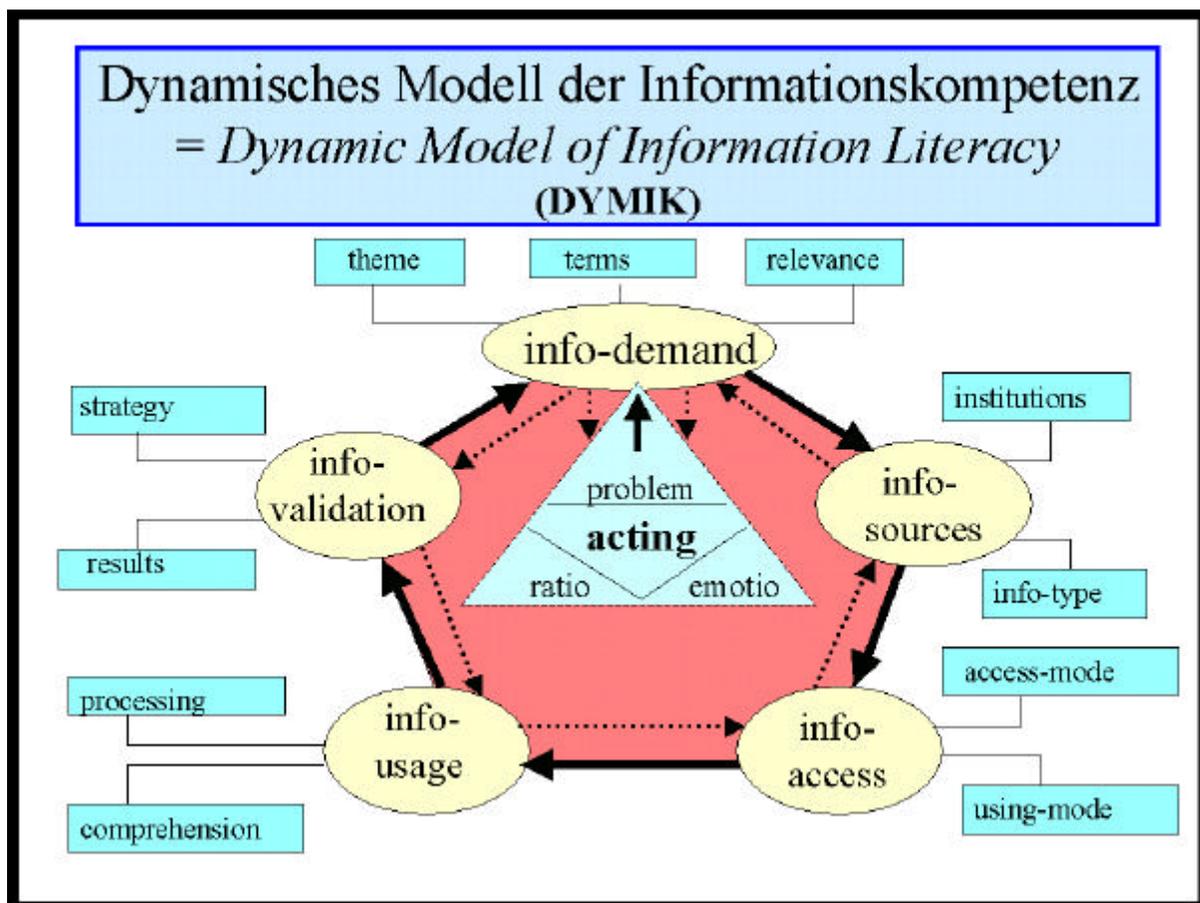
3.3 The project orientated approach

The project oriented approach was developed in the last few years at the department of library and information at Hamburg University of Applied Sciences (Fachhochschule)[6].

The main characteristic of this approach is the use of individual thematic problems or interests as starting points to trigger processes of learning. So the learning of competencies of information literacy can be integrated with contents of other fields like economy or history. The participants of courses are not obliged to learn skills in information literacy under traditional conditions of structured teaching. The teacher takes a passive role restricting himself to assistance on demand. The participants have to be active and are mainly responsible for their strategies and their results.

By using this approach more time has to be taken in account for the teaching or learning activities. In practice one course unit is given 3 hours because the participants need time for progressing by trial and error and organizing themselves in group activities. For teaching more comprehensive contents courses of this kind may take several weeks. The different units are integrated loosely by the superordinate theme or problem.

In the context of this approach an online-tutorial "Der schlaue Det" was developed. It is an ideal complement because it gives students opportunities of acquiring missing knowledge by using the tutorial in a flexible way. The tutorial offers the users additional instruments for learning as for example questions for auto-control and communication to get in contact with the librarian as an expert of information literacy. [7]

Using this approach requires basic knowledge and some experience in the methods of moderating and activating groups. Although the learners are to be active primarily the teachers need to have a high degree of expert knowledge necessary for planning favorable learning conditions and cooperating with other experts in this field.

3.4. Prospects
Teaching activities of many libraries in Germany are now orientated towards these two approaches. Modularized concepts are now offered by a lot of university libraries and methods of activating participants are realized in nearly all teaching activities.

The experiences are ambiguous because most librarians are not qualified for taking on teaching tasks. They lack pedagogical knowledge. To compensate these deficienciescourses on planning and realizing user education were offered during the last two years. The participants got basic knowlege and experience in didactics, pedagogical methodology and psychology of learning. Additionaly regional meetings were organized to improve the exchange of experience.

As a by-product of these activities the "Arbeitsgemeinschaft Informationskompetenz" (AGIK) was founded as an informal organization. It is used as a network for the teaching librarians in Germany to exchange experiences and to build up a minimal organizational platform for common activities in the field of user education. The technical instruments are the web-site at Hamburg University of Applied Sciences and the AGIK-mailing list on an server of the University library of Heidelberg.[8]

The new activities were honored by a great success this spring: For the first time in the history of German library conferences a session on "user education" had been accepted in the main program. And participation was overwhelming. While academic librarians reported on their experiences of more comprehensive concepts the librarians from public libraries gave an overview of their teaching activities which are limited to internet courses.

Perhaps you might have got a wrong impression of the teaching activities in Germany. Although there are a lot of activities these are not the result of a systematic development but primarily the result of a lot of individual initiatives. This will not be enough for a sustainable development of user education in German libraries. What would be necessary is the institutionalized support by library organisations or library institutions. Single libraries are not able to develop appropriate didactic approaches and methods for the realization of more efficient courses and to support the implementation at other libraries. But first steps towards more efficient teaching activities are to be seen in the reforms of curricula for librarians. They are just going to integrate pedagogical competencies.

4. Summary

In Germany the conditions for improving the teaching activities of libraries have changed since a couple of years in a fundamental manner. While educational issues had been of secondary importance during the eighties and nineties now concepts to improve the quality of all kinds of education are discussed as being of fundamental importance for the future of our society.
The politicians ask for more competence in methods for efficient handling of information and the ability for lifelong learning. Librarians may can take a new role in our information society because they have the competencies. First steps in this direction have been done by approaches outlined here. The continuation and systematic expansion of these teaching activities will be a chance for German libraries. They can perform the function of learning centers in the modern information society and become the basis for the new self-determined learning approaches. I agree with Barbara MacAdam who wrote in a recent publication " librarians have probably never been in a stronger position as a profession to engage in the research necessary to meaningful solutions".[9]

[1] Further information on these deficiencies and demands of the experts can be found in the results of a research project of the German Federals Ministry of Education an Science Research at the University of Dortmund. The aim of this project is the improvment of the conditions for effective use of electronic information sytems. (see: http://www.stefi.de)

[2] Sauppe, Eberhard/Müller, Hartmut/Westermann, Rolf: Benutzerschulung in Hochschulbibliotheken: Ergebnisse einer von der Deutschen Forschungsgemeinschaft geförderten Grundlagenuntersuchung, München: Saur 1980, S. 213 ff

[3] The proposal on developing a model of user courses for newcomers was realized by a subsequent project at the City and University library of Frankfurt in 1979/80. Details, especially the interesting methods of development are published by Naumann, Ulrich: Ein Modellprogramm für die Erstbenutzerschulung, Berlin, Deutsches Bibliotheksinstitut 1982.

[4] The differences are outlined in Homann, Benno: Informationskompetenz als Grundlage für bibliothekarische Schulungskonzepte, in: Bibliotheksdienst (2000) 6, (http://www.dbi-berlin.de/dbi_pub/bd_art/bd_2000/00_06_03.htm . An overview of the different models and their practical relevance are given by Thomas, Nancy Pickering: Information Literacy and Information Skills Instruction: Applying Research to Practice in the School Library Media Center; Englewood, Col.: Libraries Unlimited , 1999

[5] More information on the structure and details of this approach can be found on the website of the University library of Heidelberg (http://www.ub.uni-heidelberg.de/allg/schulung.html) and in the following publications: Homann, Benno: Schulungen als Aufgabe einer benutzerorientierten Bibliothek, in: ZfBB 43 (1996) 6, S. 569 – 613; Homann, Benno: Informationskompetenz als Grundlage für bibliothekarische Schulungskonzepte, in: Bibliotheksdienst 34 (2000) 6, S. 968 –97 (http://www.dbi-berlin.de/dbi_pub/bd_art/bd_2000/00_06_03.htm Stand: 31.5.2000); Homann, Benno: Das Dynamische Modell der Informationskompetenz als Grundlage für bibliothekarische Schulungen, in: Knorz, Gerhard / Kuhlen, Rainer (Hrsg.): Informationskompetenz – Basiskompetenz in der Informationsgesellschaft, Konstanz: Universitätsverlag, 2000, S. 195 - 206

[6] More information on this approach can be find in Dannenberg, Detlev: Wann fangen Sie an? Das Lernsystem Informationskompetenz (LIK) als praktisches Konzept einer Teaching LibraryAusführlichere Darstellung dieses Ansatzes, in: Bibliohtheksdienst (2000) 7/8 (http://www.dbi-berlin.de/dbi_pub/bd_art/bd_2000/00_07_13.htm, Stand 1.8.2000)

[7] To get a more detailed impression look for http://www.bui.fh-hamburg.de/projekt/det/tutorial/index.html

[8] On the homepage of AGIK (http://www.bui.fh-hamburg.de/projekt/agik/index.html) further information are to be found.

[9] MacAdam, Barbara: From the Other Side of the River: Re-Conceptualizing TheEducational Mission of Libraries, in: Bahr, Alice Harrison (Ed): Future Teaching Roles for Academic Librarians, New York/London/Oxfor: Haworth Press, 2000, p. 77