### BETWEEN THEORETICAL FRAMEWORKS AND PRACTICE: INFORMATION LITERACY AT BAYREUTH UNIVERSITY LIBRARY

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#### **Abstract**

In 2015 the new "Reference Framework Information Literacy" ("Referenzrahmen Infornationskompetenz") for German libraries was published. It serves as a scale for assessing the information literacy of an individual. Moreover, it provides a standard against which the quality of the efforts of libraries regarding information literacy can be measured.

Bayreuth University Library's educational programme covers a broad range of the skills and competencies laid out in the Reference Framework. It serves as a yardstick to design and evaluate courses and workshops for a variety of clientele, from secondary school pupils to students and doctoral candidates.

Keywords: university library, information literacy, standard

#### 1. Introduction

In 2015 the "Reference Framework Information Literacy" ("Referenzrahmen Informationskompetenz") [1] was introduced for libraries in Germany to provide them with a structure for their efforts in conveying information literacy to their patrons. The framework defines flexible thresholds rather than fixed standards for what constitutes information literacy. The following article details the relevance of the Reference Framework for a medium-sized German university in the context of its courses and workshops.

# 2. The institutional framework: Bayreuth University Library

The University of Bayreuth was founded in the mid-1970s and is therefore a relatively new institution within the German university landscape. From the beginning, its research has focused on natural sciences, law and economic studies. It also has an interdisciplinary focus area, which attracts academics from all around the world: African Studies. For the academic year 2015/16, ca. 13,500 students were enrolled in Bayreuth, with almost 6,000 of them at the faculty for law and economics. [2] These

numbers make the University of Bayreuth a medium-sized German campus university.

From the very beginning, the University Library was an integral part of the university's infrastructure. Its main objective as one of the central service institutions was then, and still is, to ensure that researchers and students have readily access to the materials and information which they require for their daily work. This is also reflected by the design of the campus: Its developers included a library in each of the five original faculty buildings or, as in the case of the Central Library building, made sure it is no more than a few metres away. The five different libraries on campus, which make up Bayreuth University Library, are with five minutes walking distance from one another.

Currently, Bayreuth University Library has about 80 employees. The team within the University Library who are responsible for conveying information literacy is called *Teaching Library*. As of spring 2017, it consists of 15 people from different departments of the library:

- 4 collection specialists
- 6 information librarians
- 2 interlibrary loan specialists
- 1 acquisition librarian
- 1 cataloguing librarian
- 1 digital librarian

There is no specifically designated room for our courses in neither of the libraries. A multipurpose room is being used. This allows us to arrange the seating according to the needs of the group we are catering for. There is a selection of desks and chairs which can be set out in a variety of ways, depending on the number of participants and the format of the event. Additionally, there are we seven laptops available which can be used by participants who do not bring their own electronic devices.

# 3. The political framework: A very short history of information literacy in Germany

Before the German "Reference Framework Information Literacy" was devised in the 2010s, the Deutscher Bibliotheksverband (German Library Association) defined five standards for information literacy in university students in 2009 [3]. They identified the competences which libraries should convey in their courses and workshops. These standards were based on the 2000 ACRL (Association of College and Research Libraries) "Standards of Information Literacy" by the American Library Association (ALA), which were rescinded in 2016 [4].

- 1. The information literate student determines the nature and extent of the information needed.
- 2. The information literate student accesses needed information effectively and efficiently.
- 3. The information literate student evaluates information and its sources critically and incorporates selected information into his or her knowledge base and value system.

- 4. The information literate student, individually or as a member of a group, uses information effectively to accomplish a specific purpose.
- 5. The information literate student understands many of the economic, legal, and social issues surrounding the use of information and accesses and uses information ethically and legally. [5]

These standards were the five pillars upon which all efforts concerning information literacy in higher education in Germany have been built in the time from 2009 to 2015.

An appeal to the German Parliament by Bibliothek & Information Deutschland (BID; the umbrella organisation of German library and librarians' associations) in 2011 aimed to raise political support for issues concerning media and information literacy. BID advocated employing the experience of libraries in the field to create an information literate society which is ready to take on the challenges of the Information Age.

In 2012 the German Rectors' Conference (Hochschulrektorenkonferenz) formulated recommendations on how universities and other institutions of higher education should position themselves in the Digital Age: "Hochschule im digitalen Zeitalter: Informationskompetenz neu begreifen – Prozesse anders steuern" ("Institutions of higher education in the Digital Age: a new comprehension of information literacy – managing processes differently") [6]. The paper names information literacy as the key to the future of higher education and advocates its implementation and fostering across the entire organisation – from students to lectures and researchers as well as administrative staff. Libraries are explicitly named, amongst other institutions, as a major force in conveying information literacy.

All of these developments helped to create awareness for issues concerning libraries as well as information and media literacy. They also initiated a political debate about the role of libraries in society.

# 4. Theory – The 2015 Reference Framework Information Literacy

In 2015 the Reference Framework Information Literacy was published. It was a result of the events outlined above. However, it is not a legally binding document. Its implementation is not supervised by any official authority. But it is sensible to adopt it as a guideline for designing, conducting and evaluating courses on information literacy. A nationwide homogenisation will render the outcomes of their efforts regarding information literacy comparable. This also allows libraries and educators, mainly school and university teachers, to find a common vocabulary. [7]

As the standards before it, the Reference Framework serves as a checklist for the individual and his/her personal extent of information literacy, as it describes the skills and competency an information literate person possesses at each stage of their educational development. It can also serve as a tool to measure quality of the offers on information literacy by libraries and other educational institutions. [8] The Reference Framework also provides a template for libraries to formulate the learning objectives of their courses. And in turn, the outcome of these can be evaluated against the criteria in the Reference Framework.

Whereas the 2009 standards for information literacy were aimed at university students, the Reference Framework is applicable to all ages and stages of education. Life-long learning, which is fostered by the European Union in its Strategic framework – Education & Training 2020 [9], is thusly one of the objectives of the Reference Framework.

In a first step the Framework defines five competences and skills which constitute information literacy: *searching*, *evaluating*, *knowing*, *presenting*, *passing on* [10]. In a next step these are described in basic steps and criteria, which illustrate more detailed what it means to be information literate [11]:

Searching	Evaluating	Knowing	Presenting	Passing on
Formulate need	Topical	Formulate	Simplicity	Determine terms
for information	relevance	Formulate		of use
Find sources	Factual	Compara	Semantic	Mark quotations
	correctness	Compare	redundancy	
Select sources	Formal	Contextualise	Cognitive	Name sources
	correctness	Contextualise	Structuring	
Isolate	Completeness	Structure	Cognitive	Use networks
information	Completeness		conflict	
Steps	Criteria	Steps	Criteria	Steps

These steps and criteria can be used to describe information literacy in general but can also be employed to plan and describe activities offered to convey information literacy, e.g. workshops and courses provided by libraries [12].

As other areas of learning, information literacy is an evolving progress as the individual develops further and increases her/his skills and competences. Therefore, the Reference Framework defines three levels of information literacy [13]:

Level A: Basic information literacy

Level B: Independent information literacy

Level C: Sustainable information literacy

These three levels are in turn subdivided into 6 sublevels which correspond with the personal educational development of an individual human being:

Level A1: elementary school

Level A2: early secondary school education

Level B1: intermediate secondary school education

Level B2: advanced secondary school education

Level C1: higher education, professional training

Level C2: adult education/life-long learning [14]

To conclude, the Reference Framework details what each of these steps and criteria should look like on the individual levels of information literacy. This example shows the first step of skill 1, *searching*, on every level. [15]

		Determine and formulate the nature and the extent of the information needed		
С	Sustainable information literacy	C2	Find suitable search terms for a scholarly text	
		C1	Extract search terms from a scholarly text	
В	Independent	B2	Find suitable search terms for a long popular scientific text	
	information literacy	B1	Extract search terms from a short popular scientific text	
A	Basic	A2	Extract a few search terms from a journalistic text	
	information literacy	A1	Extract a few search terms from a short passage in a textbook	

# 5. Practice – The Reference Framework and the courses of Bayreuth University Library

Bayreuth University Library focuses on levels B2 (*independent information literacy*) to C2 (*sustainable information literacy*). This is simply determined by our target groups for our activities regarding information literacy. [16] Our main customers are members of the University of Bayreuth. Every year about 1,100 students as well as about 50 doctoral candidates and post docs attend our courses and workshops. Our second main group are pupils from secondary schools in the Bayreuth region. Annually, 900 to 1,300 come to Bayreuth University Library to attend introductory courses. A visit to an academic library is recommended by the curriculum for the final two school years. Primary school pupils are taken in by the public library of the city. But also library patrons from all backgrounds without any affiliation to the University come to our courses.

We regularly cooperate with other institutions on campus, such as the Centre for Academic Writing and the Graduate School. These partnerships are not only beneficial for our target groups as they can choose from a wide range of workshops and seminars. It also facilitates our work. Firstly, especially the Graduate School has a well-established connection to its target group (PhD candidates, postdocs). This allows us to rely on them for determining what topics are relevant for levels C1 and C2, *sustainable information literacy*. Our courses for University of Bayreuth Graduate School comprise topics such as bibliometry, author identification and digital publication. Secondly, the courses of our cooperation partners on campus also cover skills comprised in the Reference Framework. For instance, the workshops of the Centre for Academic Writing instruct about how to present (skill 4) and pass on (skill 5) scientific information in a valid manner. This allows the University Library to focus on other skills set out in the Reference Framework.

### 1. Example 1: Internet research for students

One of our latest developments is a workshop for students on *How to search and find scientifically valid information on the internet*. Libraries should not underestimate the important place the internet has in our students' everyday lives: "Members of generation Y, and increasingly all users, expect to find content quickly and easily. For a growing number of users, the content *must* be readily available online, or it will not

be used." [17] In order to stay relevant, libraries must support their customers in navigating the vast flood of digital information.

We designed a course around the premise: Do not think like a librarian, start your research as a student would. Thus we do not begin our course with explaining our library catalogue or databases but with looking at the most popular online search engine and how to use it efficiently. We discuss the positive and negative aspects of the World Wide Web regarding research for scientifically valid information with our students. We provide them with strategies which help identify quality publications from free online resources.

The workshop focuses on skill 2, evaluating, on level C1, sustainable information literacy. This includes the criteria of "topical relevance" as well as "accuracy and correctness in terms of facts and form" [18].

There are also elements of

- skill 1, searching: Formulating a search query in an online search engine
- skill 2, *passing on*: Aspects of copyright (Creative Commons Licenses etc.)

### 2. Example 2: Electronic publishing for PhD candidates and above

One of our most popular courses for PhD students and above is on electronic publishing. It covers Open Access publishing in general and then moves on to detail how to publish articles and dissertations online. Its final chapter introduces the services by Bayreuth University Library concerning Open Access publishing, i.e. our institutional repository *EPub Bayreuth*, which allows authors from the University of Bayreuth to make their publications available worldwide.

This workshop covers the first and second criteria of skill 5, *passing on*, on level C2, *sustainable information literacy*:

- "Determine terms of use: broader knowledge of copyright issues and the ability to define the copyright for own publications"
- "Quote sources: apply subject specific referencing rules" [19]

#### 6. Outlook:

Currently the Bayreuth *Teaching Library* team is working on a new concept for our educational programme for secondary school pupils. Skills and competences from the Reference Framework will be integrated. The new concept aims to be more flexible by providing different methodological modules which can be applied according to the pupils' level of knowledge. Originally, we had a strong focus on the first skill, *searching*, in our programme for this target group. Over time, we have noticed that teachers increasingly feel overwhelmed by the flood of information which is available online. In order to equip their pupils with skills to efficiently search the internet for quality content, we have decided to place a stronger emphasis on skill 2, *evaluating*, in our new concept.

In regard to our university clientele we will establish a comprehensive information – or rather: data – literacy scheme concerning research data management. It will concentrate on skills 4, *presenting*, and 5, *passing on*. Everyone on campus and also at partner institutions is potentially part of the target group: from students and secretaries

to PhD students and professors. Initially however, the focus will be on researchers. This programme is still in its early planning stages but will gather momentum as politicians and research funding organisations in Germany are presently very focused on all issues concerning research data management.

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