This paper on the relevancy of training in bibliographic control begins with a section that discusses the reasons for teaching bibliographic control, including national and universal bibliographic control, cooperation between libraries and information services, quality service to the users, and development of systems and databases. The second section summarizes current trends that may have an effect on the teaching of bibliographic control, including computerization of processes, networking and interconnection, the Internet, new developments in the field of bibliographic control, and experiential training. The third section describes competencies the bibliographer should possess, including cataloging and classification skills, analytical and critical thinking skills, computer literacy, and interpersonal skills. The fourth section proposes a curriculum and training program taking the new developments and competencies into consideration. (MES)
Bibliographic control - is the current training still relevant?

Retha (MMM) Snyman
Department of Information Science, University of Pretoria
Pretoria, South Africa
E-mail: msnyman@postino.up.ac.za

Paper

Introduction

Lor (1996) applies the metaphor of a net, as in a fishing net or a butterfly net in order to explain bibliographic control. He pictures bibliographic control as creating a finely-meshed net of bibliographies and bibliographic databases which is so comprehensive that nothing that is published can escape being recorded, located and made available for use. The aim of bibliographic control is therefore to list information sources in a systematic manner to enable people to become aware of what information is available, and where it can be located. The main bibliographic control activities involve acquiring information sources; compiling bibliographic descriptions for these sources; assigning bibliographic access points to the descriptions; subject cataloguing (which includes classification, assigning verbal subject headings, indexing and abstracting); and authority control.

The aim of this paper is to discuss the reasons for training in bibliographic control; to identify new developments and trends which may have an influence on the training in bibliographic control; to identify the competencies a bibliographer should possess; and to propose a curriculum and training programme taking the new developments and competencies into consideration.

Reasons for teaching bibliographic control
Training in bibliographic control is important for the following reasons:

**National and universal bibliographic control**

Bibliographic control on a national level provides a system which makes the identification and localising of information sources within the country's borders possible. Apart from the identification, recovery, collection and preservation of the physical items which originate in the country, the creation of bibliographic records which describe and identify the publications is very important. The publication on its own is of no value to the information community without the records indicating their existence and giving access to the content.

When looking at national bibliographic control in relation to universal control it is important, in addition to collection of items, for the national bibliographic agency to also be responsible for the creation of authority and bibliographic records for every new publication issued in accordance with accepted international standards. If all countries try to apply bibliographic control on the national level, a degree of universal bibliographic control would be possible.

**Cooperation between libraries and information services.**

It has become impossible for institutions to collect all the items to satisfy their consumers' needs because of economic restrictions and the increase in published sources of information. Cooperation occurs especially in regard to shared cataloguing and the sharing of resources. The library catalogue no longer functions only "to show what the library has" but to show what the library can obtain for the user. Therefore, the catalogue records created by a library must fit into the larger universe.

**Quality service to the users**

Nowadays, much prominence is given to delivering quality products and services. Daniel (1993:46) says that "information professionals must take greater responsibility for the quality of products and services delivered to the client" Lozano (1997:148) takes it a step further by saying "quality is not only reduced to 'what is offered' (the product or service that is supposed to have quality), but also to 'how it is offered'."

A library or information service is an industry like any other industry. The clients and end users of this service are very aware of issues concerning quality. It is therefore clear that any library that ignores bibliographic control is seriously misusing and under utilising its collection and is certainly not giving the user the service they deserve. Bibliographic control is in itself a form of quality assurance. It can be regarded as a measure that is built into the catalogue or database to ensure the quality of interaction between the user and information.

**Development of systems and databases**

Today, increased computer power makes sophisticated searches possible - for example using Boolean logic or truncation. However, the internal architecture of online systems is based on the blueprints provided by bibliographic control (Gorman 1992:694). Valuable input during the development of databases and online systems can be provided by people fully acquainted with the principles of bibliographic control.

It is therefore quite clear that teaching of bibliographic control will remain
essential in order to ensure national and universal bibliographic control, to enable information services to share resources and cataloguing records, to provide a quality service to the user, and to develop effective online systems.

Current trends which may have an effect on the teaching of bibliographic control

Computerisation of processes

The most obvious, and possibly the most important, social force affecting bibliographic control is the computerisation of library processes and technological changes. In addition to a knowledge of the cataloguing rules and codes, knowledge of a wide range of computer systems, software, online bibliographic networks is therefore essential.

Networking and interconnection

Bibliographic networks and consortiums are now a familiar part of the bibliographic landscape. With the arrival of bibliographic networks and consortiums the need for bibliographic control has increased. Previously, each library could develop its own standards for their own files whereas bibliographic networks and consortiums do not permit this variety or luxury but demand far greater comprehensiveness and standardisation of bibliographic records.

The Internet

The Internet has generated enormous excitement. Users "surf" the bibliographic universe in the hope of coming across some useful information. However, search engines are not suitable as tools for information retrieval because "Full text, keyword searching has not proved to be a replacement for fields searches of structural records, and no index has yet supplanted the catalog/surrogate record architecture" (Dillon & Jul, 1996:216).

Libraries also realise that to limit their OPACs to the library's holdings only would result in a disservice to the users who expect one stop shopping when using the library's catalogue. Therefore, many online catalogues have been expanded to include Internet sources. The integration of records describing Internet resources require a significant level of effort to bring metadata in source documents up to the standards needed for integrating these sources into existing information delivery systems (McDonnell, Koehler & Carroll, 1999:39).

New development in the field of bibliographic control.

The problems experienced with bibliographic control, especially on the international level, and the capabilities of computer technology give rise to new ideas, for example the creation of an author number or the Dublin Metadata Core Element Set.

Experiential training

Practical work and on-the-job-experience have always been considered to be an integral part of cataloguing courses. To gain cataloguing experience students are required to work a couple of weeks in the industry. Libraries and information services find it more and more difficult to participate in these programmes in
collaboration with the education and training institutions because of their own staff constraints.

These identified trends clearly have an effect on the training of students in bibliographic control and the outcomes expected from industry. Apart from the traditional knowledge and expertise it is also expected of the bibliographer to gain new knowledge and experience. Not only the students, but also those responsible for training the students, are coming under pressure.

**Competencies the bibliographer should possess**

Taking current practices and new developments into consideration, the question can be raised: What competencies should the bibliographer possess in order to execute the activities as identified at the beginning? Considering the activities, it is quite clear that bibliographic control requires certain tools, a base of detailed knowledge to utilise the tools, and a range of practical skills in order to perform the work fully.

The tools of the trade of bibliographic control are:

i. Bibliographic standards and rules
   The bibliographer should know and be able to apply bibliographic standards, whether he/she creates metadata or bibliographic data.

ii. Peers
   "No man is an island" and "Two heads are better than one" speak for themselves.

iii. The brain
   Bibliographers have to know how to think analytically, systematically and critically in order for example to analyse the subject content of a publication and to assign the correct subject heading or classification number to the publication.

iv. The computer
   This tool supports and implements the activities and ideas created by the interaction of tools (i), (ii) and (iii).

Bibliographers require the mastery of all four tools in order to do quality bibliographic work. In order to master the tools, bibliographers must have the following skills:

**Cataloguing and classification skills.**

Although some traditional library skills, such as filing and indexing have become increasingly irrelevant in computerised databases, activities such as cataloguing, classification and authority control will remain core processes, regardless of whether printed or electronic sources are organised and made accessible.

**Analytical and critical thinking skills**

Analytical and critical thinking skills are being widely acknowledged as vital to professional success in many fields. These skills will be needed to make sense of the many content types and the new electronic formats that become available.
Computer literacy

New technologies and new types of sources demand that information professionals must become experts in the use and handling of the latest technologies and interfaces for information organisation, retrieval and delivery.

Interpersonal skills

Strong interpersonal skills are required. Bibliographers do not work in isolation - they often work closely with colleagues, advise each other, and discuss work issues on a regular basis.

One can therefore conclude that apart from the traditional skills like cataloguing and classification skills, the bibliographer must also possess skills such as computer literacy in order to keep up to date with the new developments in the field of bibliographic control.

Curriculum and teaching of bibliographic control.

In the recent past much has been written about the reasons for the shortage of competent bibliographers. Library schools also came under fire for contributing to the problem of a shortage of good cataloguers. Courses in bibliographic control have also been criticised. Some of the criticisms expressed were:

- Library schools do not prepare students adequately for the work they have to do.
- Students find the contents of cataloguing courses strange and often regard it as unnecessarily complicated.
- The way in which cataloguing is taught does not correspond to the way it is done in practice.
- New developments in the field of cataloguing are not reflected in the curricula.
- Lecturers are not sufficiently competent to transfer the challenges offered by the information technology to the students.
- Time devoted to teaching cataloguing is progressively cut back to make way for other themes.
- Teaching theory of bibliographic control is neglected.
- Not enough practical work is done by students to enable them to understand the theory properly and to provide a starting point for in-service-training.
- Dull classroom presentations.

Many criticisms are found, however, few suggestions are made on the improvement of these courses. From the newly identified trends and the criticisms which were expressed, it is however clear that:

- There should be a proper theoretical background.
- Theory and practice should be well-balanced.
- Current trends, technologies, codes, formats, etc. should be reflected in training.
- Students should be taught to use their own judgement, to think critically and analytically.
- Notice should be taken of the developments in industry in order to prepare students for the real world.
- New training methods should be identified in order to make training more interesting.
- The role of the teacher should change from "content provider" to "interactive tutor" and the role of the student from "information absorber" to
"interactive participant".

In the literature a lot of emphasis is placed on the course content, but not on the methods of training. In an article by Gorman (1992:694) a well-balanced core syllabus which can serve as a base and enable students to function more effectively in more than one situation is presented. However, the time allotted for teaching the principles and activities of bibliographic control in the curriculum is often not enough to train students thoroughly in all the required skills. Time limitations in the courses make it impossible to master anything more than the basic principles and activities of bibliographic control. The challenge will therefore be to teach students thinking and decision making skills and not merely tools and techniques.

As already mentioned practical work is an integral part of cataloguing courses. However, libraries find it more and more difficult to participate in training programmes. On the other hand, students should still have the opportunity to work on real problems under real conditions. How can this be accomplished? By means of simulations, group work and case studies. Furthermore, the possibilities offered by modern technology should be utilised. Training programs presented via a mix of media and technology (printed study texts, CD-ROM, WWW, e-mail, discussion groups, computer-based training) should be considered. The unique features of the WWW and the large number of web sites with information sources are variables working together to provide a fascinating environment wherein diverse teaching and learning experiences in bibliographic control can be developed.

**Conclusion**

It is quite clear that bibliographic control and the training of students in bibliographic control will always be necessary. The suggested methods and techniques will force lecturers to become a lot more innovative. This in my opinion is vital for the effective training of students and to ensure that students will gain the required competencies in order to satisfy the needs of industry. We as teachers and trainers should accept the challenge.

**References**


NOTICE

REPRODUCTION BASIS

☒ This document is covered by a signed "Reproduction Release (Blanket) form (on file within the ERIC system), encompassing all or classes of documents from its source organization and, therefore, does not require a "Specific Document" Release form.

☐ This document is Federally-funded, or carries its own permission to reproduce, or is otherwise in the public domain and, therefore, may be reproduced by ERIC without a signed Reproduction Release form (either "Specific Document" or "Blanket").