

## **In-service training for academic librarians: a pilot programme for staff**

### **Abstract**

**Purpose** - This paper discusses the need for continuing professional development for librarians in academic libraries in general and at Rhodes University Library, South Africa in particular. It describes the planning, design, implementation and evaluation of a staff-development and training pilot programme for professional librarians at Rhodes Library.

**Design/methodology/approach** - a group of 15 librarians, drawn from the library staff complement, participated in an 8-session training course developed by Information Services librarians. The course, which covered basic information-finding skills using a variety of research databases and offered an introduction to concepts in 21<sup>st</sup> century academic librarianship, was presented using course management software in a face-to-face environment and required homework exercises and the completion of a 2-hour final test.

**Findings** – results of the project demonstrated the urgent need for such development programmes for professional library staff. 80% of the participants completed the course. The final test results indicated below average database search skills and an inability to think laterally. An unexpected finding was a lack of IT competencies. Important lessons were learned with regard to course-construction, content and timing.

**Originality/value** – by testing a variety of competencies expected of professional academic librarians this programme provided invaluable data and guidelines on which further continuing staff development courses could be based.

**Keywords** – Continuing professional development, Academic libraries, Librarians, Skilling, Training, Staff development

**Paper type** – Case study

## 1. Introduction

The 21<sup>st</sup> century academic library arena with its innovative services and ever-changing technologies (Lewis, 2007) presents a challenge to library administrators and senior supervisory staff to address the training needs and skills-upgrading of professional librarians. As Ashcroft (2004, p. 82) points out, Library and Information Science (LIS) is today characterized by ‘fast-pace change, new and emerging sets of skills’ and if these requirements are not addressed there is a strong likelihood that mid-career stagnation will occur, even within as short a period as two years (Broady-Preston and Bell, 2001). This is reiterated by Corral (Corral, 1995) who emphasises the challenge to library managers presented by shifts in job types and career paths and the need for upgrading of skills and knowledge. Further, Parry (Parry, 2008), after listing a daunting array of skill requirements for librarians, discusses initial training, recruitment, performance management and continuing professional development and, with regard to the latter, states:

*“Staff training may be perceived as a means of addressing weaknesses in performance but, more importantly, it is a tool to enable staff to update their skills continually – essential in an environment of ongoing change”* (Parry, p. 48).

The digital library environment presupposes enhancement of traditional LIS competencies, and includes creating search-strategies, metadata creation skills, the use of networked sources and online bibliographic tools, designing of interfaces and more (Bawden *et al.*, 2005). The role of librarians in developing countries in the information, communication and technology (ICT) field and the urgent need for relevant skills development, particularly in the African context, is described by Omekwu (Omekwu,

2006b) together with the particular challenges facing the continent's librarians (Omekwu, 2006a). A pertinent report from the Association of Commonwealth Universities (Harle, 2009) on the state of Commonwealth libraries includes a chapter on the development of new skills of librarians and indicates that 90% of libraries surveyed cited "a need for greater staff expertise" (Harle, p. 18) in ICT and Internet skills. Of the responding libraries "only 3% feel confident that staff already possess the necessary skills" (Harle, p.18).

Exposure to new products and skills is a key factor in staff development, a fact stressed by the Follet (Follett *et al.*, 1993) and Fielden (John Fielden Consultancy, 1993) reports. Analysis of job advertisements in the academic library field over the past 25-30 years (Lynch and Smith, 2001) and (Kennan *et al.*, 2006) confirms that professional requirements have changed radically. IT-based skills, together with management, teaching and interpersonal communications competencies and market awareness, figure prominently under essential requirements (Morgan, 1996). Terry (2001, p. 63), in a thought-provoking survey, highlights the importance of "continuing education, professional development and on-going training" for the library of the future and indeed goes beyond the boundaries of the traditional library sphere by recommending a training synergy between information professionals, publishers and vendors.

Peter Senge (1990, p. 3) in his seminal book on the learning organisation emphasizes that such an organisation should be,

*"a place where people continually expand their capacity to create the results they truly desire, where new and expansive patterns of thinking are nurtured, where collective aspiration is set free, and where people are continually learning how to learn together"*.

Continuing professional development may be seen in this context and is therefore the responsibility of both management and staff and it is essential that programmes are encouraged and supported (including financially) by supervisors and administrators (Callahan and Watson, 1995). An important aspect is the willingness of staff to change. A case study of change management among academic reference librarians at the University of New England, New South Wales by Leong (2008, p. 84), stresses that “change readiness was built from top-down by communicating the need for change openly and repetitively”, thus highlighting the importance of participative management. A case study, conducted in the late 1990’s, of skills and attitudes needed to cope with change in the academic library (Rice-Lively & Racine, p. 36) found that mastering new technologies “had [in some cases] actually energized and revitalized stagnating careers, providing motivation to learn and practice new skills”. The latter finding correlates with perceived benefits from formal training programmes which include improved staff morale and job satisfaction, organisational flexibility, improved quality and quantity of work and adaptable, resourceful staff (Callahan and Watson, 1995).

## **2. Capacity-building strategies in South African LIS sector since 1994**

Since the birth of the new democratic South Africa in 1994 the Library sector has been the beneficiary of a number of generous programmes/grants/initiatives aimed at transforming the sector and upgrading institutional capacity. These include:

- Department of Education (South Africa)/European Union (EU) Higher Education Libraries Programme which from 2001-2005 provided, together with extensive learning resource provision, 2500 training places for staff from the 17 historically disadvantaged institutions (HDIs) (Thomas, 2007)

- The Library and Information Association of South Africa (LIASA) has adopted Continuous Education and Professional Development (CEPD) as a strategic objective and has, with funding of nearly US\$500,000 from the Carnegie Corporation, created the Center for Information Career Development (CICD) which is a centralized initiative to make training opportunities available to all LIS workers irrespective of the levels of initial training (Library and Information Association of South Africa, 2009). The 4 focus areas outlined in the current training needs are Personal Development, Professional and Support Skills Development, ICT, and Management and Leadership Development. The South African Qualifications Authority (SAQA) plans to embark on a Joint Implementation Plan with LIASA to identify registered trainers and accredited training programs addressing the 4 focus areas. (Library and Information Association of South Africa, 2009). LIASA also aims to develop expertise and training opportunities within the 10 interest groups in LIASA and to facilitate relevant and appropriate skills-based training.
- The LIASA Mellon Foundation-funded South African Library Leadership Programme (SALLP) concentrated on developing middle to senior leadership skills in the library sector. Personnel from all types of libraries had the opportunity to take part in a 6-week intensive training session at the Mortensen Center for International Library Programs at the University of Illinois at Urbana-Champaign during the period 2001-2005 (Thomas, 2007).
- The Carnegie Centre for African Library Leadership hosted its first 2-week Library Leadership Academy in Pretoria in July 2009. This programme, funded

by the Carnegie Corporation of New York, awarded the University of Pretoria a US\$1million grant to establish the Centre of African Library Leadership (CALL) to address library leadership development needs within the South African context. 5 more Academies will be held over a period of 3 years. One of the objectives of the programme is to define and design a Train-the-Trainer programme aimed at developing skills of curriculum design and learning methods, delivery and evaluation. 120 professionals are to be selected for the leadership programme and 30 are to be trained as trainers. Training is to be under the guidance of the Library Schools of the Universities of Pretoria (UP), Cape Town (UCT) and KwaZulu-Natal (UKZN) (University of Pretoria, Dept. of Library Services, 2009).

- Another Carnegie Corporation-funded initiative is the Research Libraries Consortium's New Model for Research Support: Integrating Skills, Scholarship, and Technology in a South African Library Consortium. Phase I of this innovative project has been completed. This saw 36 mid-career subject specialists from UCT, UKZN and the University of the Witwatersrand (WITS) taking part in two intensive 12-days residential Library Academies. Aimed at enhancing research support in South African research libraries, the programme is designed to train competent research librarians who will work closely with faculty, and extend library services into new areas of support for beginning researchers. 15 participants from a range of diverse cultural, linguistic and educational backgrounds were selected to spend 6 weeks in major US research libraries during 2008 and 2009. Included in the programme is the development in each participating library of a state-of-the-art Research Commons area for postgraduate

researchers, to be staffed by fully trained research librarians. Phase II of this excellent initiative is at proposal stage and will include 3 more South African research libraries (University of Pretoria, Stellenbosch University and Rhodes University).

- The Committee for Higher Education Librarians in South Africa (CHELSA), formed in 2004, undertakes “to collaborate with one another and be of service to one another’s clients” (Thomas, 2007, p. 79). CHELSA has established a National Framework for co-ordinating Information Literacy services and aims to develop training skills and programmes across the 23 higher education libraries. This is not focused on practical information skills for librarians but on skilling librarians to develop Information Literacy programmes for users.

### **3. Regional and local context**

It may be gathered from the above brief outline that the opportunities for practical staff development are limited and do not adequately address the need for the basic skills training required on the ground in library operations. The isolation of the Rhodes Library, which is situated in the rural Eastern Cape region of South Africa, is exacerbated by the prohibitive costs of sending staff to workshops/courses (usually not skills-orientated) offered in the metropolitan areas where most other academic libraries are situated, or to conferences into which relevant workshops are incorporated. Feedback from such workshops is usually limited and of doubtful value. At best, due to the expense, only 1 or 2 staff members are usually able to attend. The same could indeed be said of the other three regional tertiary institution libraries (Nelson Mandela Metropolitan University, University of Fort Hare, Walter Sisulu University) which, together with

Rhodes, are members of the South East Academic Libraries Systems consortium (SEALS), founded in 1998. The LIASA membership in the Eastern Cape is very small (there are fewer than 40 paid-up members) and the Higher Education Interest Group of LIASA does not actively provide training opportunities for this region. The present paper is based on a presentation given to the DITCHE group in May 2008 (Shepherd, 2009). The topic elicited considerable interest and pointed to the fact that few such programmes are presently available or publicised - nor indeed, has any research been conducted.

The staff at the Rhodes Library comprises 27 professionals and 23 non-professionals who serve an academic community of 329 faculty and just over 6,000 students. Full Time Equivalent (FTE) figures for 2008 were 4318 undergraduates and 980 postgraduates. Rhodes University, in spite of its small size, has a tradition of research excellence and in 2006 ranked third in the country in per capita research output. The Library's present Information Services section is staffed by 2 senior librarians and 1 librarian. There are 4 branch libraries attached to faculties/departments, each staffed by a librarian with unqualified student assistants. Professional staffing is heavily weighted towards Technical Services and Administration. Restructuring of the Library Services in 2010 will see a radical change in this situation, with 65% of staff being deployed in areas that directly support researchers, faculty and students. Table 1 shows the present and proposed spread of staff across Grades and Sections. (Grade 15 being the Library Director). It will be noticed that, in the Public Services Section, the number of Grade 9 posts (requiring a 4-year professional library qualification or a 3-year basic degree with a post-degree library qualification) will increase from 2 to 12 and the senior Grade 12 posts from 2 to 5. These librarians will be drawn largely from the present staff who will need



extensive re-skilling, especially in the use of online research tools. (The Library subscribes to nearly 100 online databases and has access to close on 30,000 full-text e-journal titles and nearly 3,000 e-books)

<b>Grade</b>	<b><u>Current Staff:</u> Technical Services and Administration</b>	<b><u>Current Staff:</u> Public Services</b>	<b><u>Proposed Staff:</u> Technical Services and Administration</b>	<b><u>Proposed staff:</u> Public Services</b>
<b>15</b>	1	-	1	-
<b>13</b>	2	1	1	2
<b>12</b>	5	2	4	5
<b>11</b>	5	5	5	6
<b>10</b>	2	1	2	-
<b>9</b>	1	2	3	12
<b>8</b>	1	-	-	-
<b>7</b>	-	3	2	-
<b>6</b>	4	9	2	6
<b>5</b>	-	4	-	-
<b>1</b>	2	-	-	-
<b>Totals</b>	<b>23</b>	<b>27</b>	<b>20</b>	<b>31</b>

**Table 1: Library Services Staff – Proposed posts and Grades**

Formal staff development had not previously been offered in the Library. The pilot programme described was initiated as a result of the recognised needs of the Library in terms of succession planning and the proposed implementation, in the extended and restructured Library, of subject collections, each staffed by a senior subject librarian and a team of assistant librarians and paraprofessional assistants. The urgency and necessity for this type of programme may be understood in the light of the fact that by mid-2010 Rhodes University will have a modern academic library with facilities for which we do not have staff structures in place nor trained/skilled staff. In addition, the Library Services are in line with the overall transformation agenda of the parent institution,

thereby supporting the National Higher Education imperative to develop and adhere to strategies which will address past apartheid-engendered imbalances (South Africa, Dept. of Education, 2009). Post-1994 higher education policies led to the merging of a large number of separate higher education institutions, many of which had been established by the apartheid regime in pursuance of its segregationist policies. Rhodes University was not part of the merger process but is nevertheless obliged to participate in required reforms and to urgently address issues of equity and redress (Thomas, 2007). In support of such reforms the 2009 Library Services Self-Evaluation Report (Thomas, 2009, p. 33) discusses the “Transformation and Capacity-building Strategy for the Library Services Division” and outlines 5 key components of this strategy:

- staff development & training plans
- career planning & development
- succession planning
- equity and diversity planning
- the institution of developmental posts based on a 5-year plan.

These emphasise the provision of qualified, trained, skilled professional staff in order to address current inadequacies by the equitable reallocation of posts across the grades and the design of work units around streamlined processes and work flows. It is envisaged that by instituting this career-planning and succession model the Library will be able to support an entry-level through mid-career to mature-career process, and so ensure a supply of skilled staff for the future. The increase in mid-career posts (see Table 1) is “a deliberate strategy to open up the mid-path of the Library structure giving [RUL] Rhodes University Library competitive edge in retaining its respected and competent staff

through improved opportunities, but at the same time attracting bright young library professionals who envisage an ambitious career in a leading research and academic library." (Thomas, 2009, p. 34). It is also hoped that, in view of the difficulty of attracting competent library professionals to an isolated region of the country, the training programme will meet the needs of local librarians and encourage them to remain at Rhodes University.

#### **4. The pilot programme**

##### **4.1. Background**

The planning, development of course-content, implementation, teaching and evaluation of the programme were undertaken by the present Information Services librarians. The 15 participants were drawn from the Library's professional staff, qualified staff not in professional positions and those studying towards a library qualification. Participation was on a voluntary basis. The University's course management system, RUconnected, which uses the free software offered by Moodle (<http://moodle.org/>), was used for the pre- and post-programme tests and for the implementation and presentation of the course. All sessions took place in the Library's Information Literacy Laboratory with face-to face interaction with instructors. The rationale for using a course management system was to familiarise participants with the system as it will be used in future for training student assistants, library staff and for information literacy purposes.

##### **4.2 Purpose and anticipated outcomes**

- to upgrade skills and professional awareness
- to establish needs, capacity and issues (how do staff cope in a working environment; which areas need addressing)

- to enhance job satisfaction and improve organisational flexibility
- to increase quality and quantity of work and produce versatile and resourceful staff
- to provide a further means of evaluating staff
- to ensure that all professional staff are able to use competently the Library's subscribed databases
- to develop a practical, basic through to advanced course, supported by the Library and institutional management and based on theory and best practice, which would lay the foundation for an intensive staff-development programme for librarian teams, moving from generalist to faculty-based. (This is particularly urgent in view of the inclusion of Rhodes Library in Phase II of the above-mentioned Research Libraries Consortium's New Model for Research Support which will require competent librarians to staff the Research Commons)
- to emphasise competencies which can be evaluated
- to expose staff interested in information work to relevant job requirements (ahead of the restructuring process)
- to improve staff's general understanding of information resources and related areas

The content and anticipated outcomes were loosely based on the American Library Association's Reference and User Services Association Guidelines for Behavioral Performance of Reference and Information Service Providers (RUSA Task Force on Professional Competencies, 2003)

### **4.3 Goals**

These were to introduce participants to:

- information/reference services in an academic library environment
- a variety of information sources and their functionality
- topical concepts affecting academic libraries
- bibliographic management software and current awareness tools and their use in academia

Specific areas addressed were:

- optimal searching and use of a selection of major information sources
- citation searching and analysis and the use of bibliographic management software
- current awareness and Selective Dissemination of Information (SDI) including setting up alerts and RSS feeds.
- using various online and printed reference works
- the ability to answer satisfactorily a selection of 'real' information queries
- topics such as Open Access in scholarly publishing; institutional repositories; the 21<sup>st</sup> century academic library; Web 2.0 and Library 2.0; the concept of an Information Commons

#### **4.4 Design, description and implementation**

In a discussion of the competencies needed by academic librarians Mahmood (Mahmood, 2003) lists as essential: knowledge of sources, both print and electronic; the ability to conduct a reference interview appropriately and to apply critical thinking; effective written and oral communication and presentation skills. These were the main competencies considered when designing the course. Also taken into account was a

study in another South African academic library which aimed to establish guidelines for performance appraisal of subject librarians (Neerpath, 2006).

The Rhodes programme, preceded by a multiple-choice online test, consisted of 8 two-hour sessions (Table 2), each requiring homework, which was assessed. In addition, each participant was required to read a prescribed topical journal article prior to each session, write a summary and give a 2-minute presentation to the group. Participants were also asked to review a book of their choice. At the end of the course the group completed a 2-hour test paper.

<b>Session content</b>	<b>Details</b>
Introduction to Information Services / Reference work, OPAC, RUconnected	Constructing/refining OPAC searches, background to Reference Work. Using RUconnected
EBSCO <i>host</i> , SABINET Online (South African research databases)	Optimal searching, setting up a profile and alerts on EBSCO <i>host</i>
Google Scholar and Emerald Fulltext	Metasearching, linking, alerts, introduction to Emerald Fulltext
Web of Science, Current Awareness, SDI, RSS feeds	Optimal searching, setting up a profile and alerts, citation searching and analysis, current awareness and SDI information, setting up RSS feeds
Scopus, ScienceDirect, JSTOR	Optimal searching, setting up a profile and alerts on Scopus and ScienceDirect
EbscoAtoZ, DOIs, e-Reserves, Rhodes Institutional Repository (ReRR), Open Access	Finding journals on AtoZ, use of DOIs/stable URLs, about the ReRR, depositing an article in ReRR
Online Reference, Oxford English Dictionary Online, Oxford Reference Online, Oxford Dictionary of National Biography, Access Science, reference questions, evaluating information, Wikipedia	Answering a selection of 'real' reference questions, evaluating information in terms of accepted criteria
RefWorks & Information Commons	Using RefWorks, building a personal database on RefWorks. Concept of an Information Commons

**Table 2. Outline of the programme**

Initially, the 15 candidates were given the outline and asked what they expected to learn from the programme. The results of this exercise (Table 3) indicated a number of shared expectations:

<b>Candidates' expectations – programme seen as a way of:</b>	<b>% of candidates indicating similar expectations</b>
improving database search-skills	80
improving service to users	40
enhancing own work	33
learning latest LIS knowledge	27
learning Information Services processes	13
self-improvement	13
learning to use RUconnected	13
enhancing workshop presentation skills	13
improving workflow	13
learning to use RefWorks	13
enhancing LIS studies	6
learning acronyms	6
improving IT knowledge	6
leading to a change in job	6
learning about DOIs	6
improving knowledge of academic library processes	6

**Table 3. Candidates' expectations of the proposed programme**

RUconnected proved an ideal platform for the structured programme and at the same time introduced participants to an effective online learning community. Using this facility participants accessed readings, worksheets, additional information/database guidelines and homework questions, answers and feedback. They were required to add/upload their own comments, evaluations and article summaries to the relevant session areas.

#### **4.5 Assessment of the participants**

- Pre-course test on RUconnected using the quiz option:

The 50-question online multiple-choice quiz assessed participants' basic knowledge of a variety of academic library topics/skills (types of publications, database search strategies, subject headings, evaluation of information, citation searches, RSS feeds, RefWorks and plagiarism). Pre-test results are shown in Table 4.

Score range	Number of candidates
80-100%	7
60-79%	4
40-59%	4

**Table 4. Scores for pre-test (average = 74.1%)**

- Weekly journal article summaries and presentations: this was a valuable part of the programme focusing on the session topics and attempting to provide various viewpoints. The summaries, posted on RUconnected prior to each session, allowed presenters to monitor task-completion. This was important as not all 15 candidates were required to present at each session. In addition, this section of the course provided a vehicle for improving writing, summarising and presentation skills.
- Homework: this aimed to test each section and offered a way of evaluating grasp of content. Marks were not allocated but detailed feedback was posted on RUconnected. Candidates were encouraged to ask for help.
- Participants' weekly evaluations and their general interest in course: the evaluations were an integral part of the programme and provided valuable feedback. Individual verbal comments and suggestions which were both welcome and useful.



- Book reviews: this requirement was viewed as an opportunity to encourage recreational reading and improve writing and summarising skills.
- Final test: a 12 question 2-hour test (total of 40 marks) addressed the most important sections of the course, with a strong emphasis on database search strategies (see Appendix). Other sections tested were citation searching, online reference sources, DOIs, Library 2.0 and finding journals by title.

12 candidates wrote the test. Results are indicated in Table 5.

<b>Q no.</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>	<b>7</b>	<b>8</b>	<b>9</b>	<b>10</b>	<b>11</b>	<b>12</b>	<b>Mark/40</b>	<b>%</b>	<b>YE*</b>
<b>Question content</b>	<b>OPAC</b>	<b>Web of Science</b>	<b>Lib2.0</b>	<b>Ebscohost</b>	<b>SABINET</b>	<b>GoogleScholar</b>	<b>JSTOR</b>	<b>ScienceDirect</b>	<b>ORO.</b>	<b>E-Jrnls AtoZ</b>	<b>DOIs</b>	<b>E-journals</b>			
<b>Q Mark</b>	<b>3</b>	<b>2</b>	<b>5</b>	<b>5</b>	<b>3</b>	<b>4</b>	<b>3</b>	<b>5</b>	<b>3</b>	<b>1</b>	<b>4</b>	<b>2</b>	<b>40</b>		
<b>1</b>	2.0	0.0	2.0	4.0	3.0	4.0	3.0	5.0	3.0	1.0	4.0	2.0	33.0	82.5	5-10
<b>2</b>	3.0	2.0	5.0	2.5	3.0	4.0	3.0	3.5	0.0	1.0	4.0	2.0	33.0	82.5	15-20
<b>3</b>	1.0	0.0	3.0	5.0	2.0	4.0	3.0	5.0	3.0	1.0	4.0	2.0	33.0	82.5	15-20
<b>4</b>	1.5	0.0	5.0	1.5	2.0	4.0	3.0	4.5	3.0	0.0	4.0	2.0	30.5	76.3	10-15
<b>5</b>	0.0	0.0	5.0	1.0	2.0	4.0	3.0	3.0	3.0	1.0	4.0	2.0	28.0	78.0	10-15
<b>6</b>	2.0	2.0	5.0	1.0	1.5	4.0	3.0	1.0	3.0	1.0	0.0	2.0	25.5	63.8	5-10
<b>7</b>	2.0	2.0	5.0	2.5	3.0	0.0	3.0	0.0	1.0	0.0	4.0	2.0	24.5	61.3	5-10
<b>8</b>	1.5	0.0	5.0	0.0	1.0	4.0	3.0	0.0	3.0	1.0	4.0	2.0	24.5	61.3	10-15
<b>9</b>	1.5	0.0	3.0	1.5	0.0	4.0	3.0	0.0	3.0	1.0	4.0	2.0	23.0	57.5	5-10
<b>10</b>	2.0	0.0	2.0	1.0	1.0	4.0	2.0	0.0	3.0	1.0	4.0	1.0	21.0	52.5	10-15
<b>11</b>	1.5	2.0	1.0	2.0	0.5	4.0	3.0	1.0	0.0	0.0	0.0	0.0	15.0	37.5	5-10
<b>12</b>	0.0	2.0	1.0	1.5	0.5	0.0	3.0	0.5	0.0	0.0	0.0	0.0	8.5	21.3	5-10
<b>Average</b>	<b>1.5</b>	<b>0.8</b>	<b>3.5</b>	<b>2.0</b>	<b>1.6</b>	<b>3.3</b>	<b>2.9</b>	<b>2.0</b>	<b>2.0</b>	<b>0.7</b>	<b>3.0</b>	<b>1.6</b>	<b>24.9</b>	<b>62.4</b>	

**Table 5. Results of final test (\*YE=years of academic library experience)**

The results of selected questions dealing with 5 major databases taught are shown in Table 6.

<b>Q no.</b>	<b>1</b>	<b>2</b>	<b>4</b>	<b>5</b>	<b>8</b>	<b>Marks</b>	<b>%</b>	<b>YE*</b>
<b>Question content</b>	<b>OPAC</b>	<b>Web of Science</b>	<b>Ebscohost</b>	<b>SABINET</b>	<b>ScienceDirect</b>			
<b>Q Mark</b>	<b>3.0</b>	<b>2.0</b>	<b>5.0</b>	<b>3.0</b>	<b>5.0</b>	<b>18.0</b>		
<b>1</b>	2.0	0.0	4.0	3.0	5.0	14.0	77.8	5-10
<b>2</b>	3.0	2.0	2.5	3.0	3.5	14.0	77.8	15-20
<b>3</b>	1.0	0.0	5.0	2.0	5.0	13.0	72.2	15-20
<b>4</b>	1.5	0.0	1.5	2.0	4.5	9.5	52.8	10-15
<b>5</b>	0.0	0.0	1.0	2.0	3.0	6.0	33.3	10-15
<b>6</b>	2.0	2.0	1.0	1.5	1.0	7.5	41.7	5-10
<b>7</b>	2.0	2.0	2.5	3.0	0.0	9.5	52.8	5-10
<b>8</b>	1.5	0.0	0.0	1.0	0.0	2.5	20.8	10-15
<b>9</b>	1.5	0.0	1.5	0.0	0.0	3.0	25.0	5-10
<b>10</b>	2.0	0.0	1.0	1.0	0.0	4.0	33.3	10-15
<b>11</b>	1.5	2.0	2.0	0.5	1.0	7.0	58.3	5-10
<b>12</b>	0.0	2.0	1.5	0.5	0.5	4.5	37.5	5-10
<b>Average</b>	<b>1.5</b>	<b>0.8</b>	<b>2.0</b>	<b>1.6</b>	<b>2.0</b>	<b>7.9</b>	<b>48.6</b>	

**Table 6. Results of selected questions on 5 major databases**

(\*YE=years of academic library experience)

#### **4.6 Evaluation by participants**

The post-session comments (Table 7) and suggestions/evaluations from participants (Table 8) provided a valuable guide in the development of the programme and for future reference:

Positive Comments		Negative Comments	
Category	Number of comments	Category	Number of comments
Readings & presentations	8	Time required for course and homework	8
Database skilling	7	Course too rushed	4
Course presentation & presenters	6	Still lack confidence	2
Personal growth factor	5	Readings & presentations	1
Homework	4	Lack of IT skills	1
IT skilling	3	Thought of dropping out of course	1
Valued Open Access, RefWorks, Alerts	3		
Confident to assist users	2		

**Table 7. Participants' comments on the course**

Suggestions from participants	
Category	Number of similar suggestions
Homework (improve time-frame)	5
Have intermediate to advanced levels	3
Time course better	3
Reorganise readings & presentations	2
Need for reinforcement	2
Sort out IT problems	1
Choice of sessions needed	1

**Table 8. Suggestions from participants**

## 5. Discussion

Programme presenters felt that on the whole the anticipated outcomes were met. Participants gained confidence in using both known and unfamiliar resources. It was obvious that some candidates realised that information services involved far more than they had anticipated and found some sessions and exercises daunting. Job satisfaction

was hopefully enhanced and versatility and work quality improved. An unanticipated outcome involved IT skills. It was assumed when embarking on this programme, that candidates' skills were sufficient for manipulation of data. It therefore came as a surprise that many lacked basic IT skills. This unexpected gap emphasised the urgent need for staff to become IT-conversant. A lot of valuable time was spent getting to grips with simple IT practices. These are listed below (Table 9) together with the overall database skills learned:

<b>IT skills learned</b>	<b>Database skills learned</b>
discovering, navigating and using RUconnected	Selecting relevant databases
screen-shots, copying and pasting	Efficient search strategies – Boolean searching, truncation, wildcards, nesting, limiting / refining / modifying searches
saving files in different formats	Citation searching and determining <i>h</i> -index*
e-mailing attachments and using IMAP e-mail	Setting up search / journal issue / citation alerts
e-mailing selected information from research databases	RefWorks – bibliographic management software (importing and exporting records creating & organizing folders, formatting bibliographies)
using RSS feeds and Bloglines (RSS feed reader)	<i>*researcher with h-index of say 5, has published 5 articles that have each attracted at least 5 citations) – to quantify impact and quantity of research</i>

**Table 9. Skills learned during programme**

Interestingly enough, a search of the literature to discover similar findings revealed that a survey of ICT knowledge and skills of subject librarians at university libraries in a comparable South African context showed

*"that subject librarians generally do not have the knowledge to explore and take advantage of the opportunities technology creates, nor did they have the skill or ability to perform the applications functions and operations described [in the study] effectively"* (Hoskins, p. 162).

Several of the scenarios at the 2006 Taiga Forum (From the Taiga Forum, 2006), which reflected on the future of the library world and examined service delivery and the continuing value of libraries, identified ICT competencies as pivotal to the success of librarians in today's world. One of the provocative statements went as far as stating that "[in the next five years] "all library staff will need the technical skills equivalent to today's systems and web services personnel" (From the Taiga Forum, p. 424). While this scenario may not yet be a reality, it warrants serious consideration by library management contemplating the training requirements for staff development.

Participants' comments and evaluations showed that the course was challenging and exciting. Especially prominent in the positive feedback was appreciation of exposure to the various databases and search-techniques. Many skills/ideas were new to the majority of participants (only 2 presently work in Information Services positions). It was felt that the programme had succeeded in its goal of introducing a variety of information sources and their basic functionality. This is supported by comments such as: "will be better equipped [and more competent] to assist users"; "am keen to use what I learnt and explore the databases"; "before [the course] I had made amateurish attempts to use

databases and was unaware of the myriad of ways of manipulating the resources and obtaining information”; “acquired skills and confidence in searching”.

A gratifying outcome, in line with Wittwer’s (Wittwer, 2001) comments on the need for librarians to proactively manage their own professional development, was the positive attitude toward the journal readings and the presentation of summaries. The reason for including these was to emphasise the many challenges in academic librarianship and to introduce participants to topical debates. Most people felt intimidated by the idea of presenting to the group but it was acknowledged as a worthwhile confidence-building exercise. Comments included: “[readings] reinforced the idea that cataloguers and reference staff should work less in isolation and ... librarians should be ‘hybrid’ or ‘holistic’ in order to cope with new technology in [their] professional and personal lives”; “presenting is a good thing as it can only build self-confidence, and makes you focus on what you are being required to read”. These favourable reactions notwithstanding, it was observed that some participants tended not to concentrate on the presentation currently in progress due to nervousness about their own forthcoming contribution. It was also felt that many people did not read beyond their own required article despite being encouraged to do so.

Personal growth, featuring high on the positive list, was attested to by comments such as: “feel my expectations have been met and even exceeded”; “workload was demanding but that is to be expected if a course is worthwhile”; “wonderful opportunity to learn more about what it means to be a reference librarian in 2008”; “valuable and worthwhile experience”; “valuable personal growth”; “once thought of dropping out but realised it was for my own development”.

Participants remarked on the considerable time and effort expended on the course preparation and assessing of homework exercises. Comments such as, “professionally presented, and with obvious enthusiasm about the databases” and “unique opportunity – much appreciated”, were valued.

The ‘negative’ comments came as no surprise as many of these factors had become evident as the course progressed. Almost half related to the time required for both attending the sessions and adequately completing the often demanding homework exercises and the fact that more time needed to be spent on individual databases or concepts. This could be explained by an underestimation of participants’ skills and knowledge and by too much content in some sessions, e.g. Web of Science, Scopus, RSS feeds, RefWorks. Comments such as, “time constraints – not able to do justice to the course”; “participants should be given a clearer idea of how much time the preparation and homework would take”, clearly bear this out. An unexpected issue arose when Division supervisors expressed concern about the amount of time spent by staff on the course and homework (comment – “homework took up a considerable amount of my working time and this created quite some tension and frustration”). It was decided that staff would be allowed to devote 5 hours per week during working time to their homework and should complete outstanding exercises in their own time. This controversial issue will have to be addressed in the future. Another issue needing attention is that some candidates were unwilling to devote personal time to the course. At this level of the profession it is felt that responsibility for development should involve some sacrifice. It will also be necessary to ensure that supervisory staff participate in this type of development and realize its importance.

Suggestions made by participants were useful and will be taken into account in the development of further courses. The time frame of the whole course and homework exercises needs revision. The suggestion of intermediate to advanced levels is constructive and would work well, especially taking into consideration the proposed introduction of subject teams staffed by professionals with different levels of experience. Several people commented on the need for more practice and reinforcement. This could be addressed by pruning session-content and allowing more time for revision of exercises.

The final test results were fairly predictable in that those with more experience generally scored higher. The fact that one participant with 5-10 years experience scored a top mark may be attributed to the fact that all her academic library experience has been in Information Services. Another anomaly is the poor results for the candidate with 10-15 years experience. This may be explained by the fact that this person is not in a professional position and is still studying towards a LIS qualification. The overall performance in database searching was disappointing. Table 5 shows that even those librarians with over 10 years academic library experience did not score well when answering questions requiring advanced search skills, insight and lateral thinking.

Also regrettable was the non-receipt of some homework exercises, journal summaries and the final book review. Many people did not see the point of the latter exercise. It should be remembered in this context that many of the participants are second-language English speakers who possibly found the written exercises and oral presentations challenging. The homework question on 'real' reference questions was particularly disappointing. Only 9 people attempted this exercise and of these only 4 produced a correct answer.



This was despite encouragement to request help from Information Services librarians. Midway through the course, at the suggestion of participants, a revision exercise was developed and again completed by only 9 people. There were unfortunately 3 drop-outs from the course and several people who said that the course was not applicable to their current jobs. The latter comment might indicate an inability to view academic librarianship holistically.

## **6. Conclusion**

The experience of designing and implementing this pilot programme has been invaluable. The use of RUconnected as an online-learning tool will be continued, and indeed is presently being used for student Information Literacy courses. It will also be used in the training of student assistants and student “navigators” in the Information Commons. In the light of our experience with the pilot project it was realised that too much content had been included in sessions. This problem, together with the application of future programmes, will be addressed by senior librarians collaborating with the University’s Centre for Higher Education Research, Teaching and Learning (CHERTL) whose staff will provide input on professional course-design and pedagogical issues in the development of an accredited programme for structured continuing professional development courses. Consideration will be given to developing subject-specific training programmes such as that outlined by Tucker for librarians staffing an academic business library (Tucker, 2004). The problem of lack of ICT-skills will be addressed by sending staff to courses offered by the parent institution.

At the outset of the project the presenters did not realise how time-consuming it would be both in terms of development and assessment. This will be taken into consideration in

future programmes. Urgent consideration will also be given to developing a regional programme where courses could be developed using relevant areas of expertise available within the SEALS consortium, which shares similar problems and issues. This role of academic library consortia is one of the “critical challenges which need to be addressed” (Thomas, 2007, p. 85) by South African academic librarians in order to fulfill the consortial mandate “to share training resources and expertise” (Thomas, 2006, p. 432) and it is felt that a practical, hands-on, implementable, programme aimed at enhancing/developing professional librarians’ skills, understanding and expertise would be an invaluable addition to the scarce training resources available in the isolated region which SEALS serves. Collaboration in training within consortia is advocated in a recent LIASA/CICD seminar presentation by Vivian Agyei (Agyei, 2009). There is a dearth of recently published research on practical library staff development, and this presentation, together with that by Clare Walker from the University of the Witwatersrand, is the first indicator that local work on staff development in the library sector is being published and/or shared publically. In the Walker presentation, which is entitled “The Research Librarian: a transformation act”, the urgency for training is succinctly stated:

*“to become research librarians, present information professionals need to acquire and continuously build on appropriate high level knowledge, attitude, skills and habits that will bring them closer to membership of the researcher team”* (Walker, 2009, p. 25)

The experience gained in designing the Rhodes project, as well as its application and outcomes, confirms that academic libraries are indeed faced with a paradigm shift as traditional roles, expertise and operations are challenged in the 21<sup>st</sup> century academic

library. Unless we are prepared to embrace this opportunity and train present and future librarians for the competitive digital environment, librarians' skills will become increasingly redundant (Ross and Sennyey, 2008).

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**Appendix: Final Test Paper**

1. Does the Library have any theses on the topic of brain injuries? Describe how you got your results. (3 marks)
2. Using Web of Science create a *citation report* for all Prof. Mike Davies-Coleman's articles (2 marks)

3. Describe the concept of Library 2.0 in about 50-100 words (5 marks)
4. A student needs information from journals on slave labour in either Thailand or Burma. Use Academic Search Premier to find relevant articles. Include your search string. i.e. make sure that the search string appears in the screen shot. (5 marks)
5. Using SABINET Online find suitable journal references for a user needing information about activity theory. Include your search string (3 marks)
6. Use Google Scholar to find the reference to the 1999 article by Greg Blatch published in BioEssays on the topic of mediating protein-protein interactions
7. Use JSTOR to find: “The confusing words of business policy” by Milton Leontiades in the journal “Academy of management review”. (3 marks)
8. Use ScienceDirect to find review articles on the topic of plate tectonics. (5 marks)
9. Using one of the online reference sources demonstrated in session 8, find the Irish word for hospital. (3 marks)
10. Does the RU Library have online access to the journal Biodiversity and conservation? How did you find this information?
11. Give the correct DOI/Stable URL/persistent link for the article: “Learner development in language learning” by Anita L Wenden in the journal “Applied linguistics” 2002 23:32-55. (4 marks)
12. A user wants to access this article online: Incidence of retinopathy of prematurity in very-low-birth-weight infants born at Kalafong Hospital, Pretoria Authors: Delpont, S.D.; Swanepoel, J.C.; Odendaal, P.J.L.; Roux, P. Published: 2002 From:

South African medical journal, Vol 92, Issue 12, Dec, Pages: p.986-990. How would she do this? (2 marks)