The relationship between curriculum, learning and teaching in library and information science with special reference to the University of Transkei

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KEYWORDS

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Competences
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Students
Practitioners
Academics
Transkei
South Africa
THE RELATIONSHIP BETWEEN CURRICULUM, LEARNING AND TEACHING IN LIBRARY AND INFORMATION SCIENCE WITH SPECIAL REFERENCE TO THE UNIVERSITY OF TRANSKEI

by

Mavis Nozikhumbuzo Titi

A Doctoral Thesis

Submitted in fulfilment of the requirements for
the award of
Doctor of Philosophy of Loughborough University

Supervisors

Professor M. Kinnell-Evans PhD
Dr. R. P. Sturges PhD

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ABSTRACT

Curriculum development involves considerations about curriculum relevance. Thus it is necessary that the curriculum should identify with the needs of the graduate and with professional practice. This requirement shows that curriculum relevance is not fixed, a view that is consistent with a dynamic, situational approach to curriculum development.

The basic categories which define librarianship curriculum development are library activities, theory, innovation, teaching and learning, employers, students, lecturers. These are influential factors in curriculum relevance.

Variables in curriculum content such as theory and practice affect curriculum relevance. Librarianship curriculum development should aim at relevance by integrating academic study and practice. Hence, the goal of study towards librarianship education must be focused on the activities performed in library and information services.

The need for innovation in library and information services means that novel viewpoints and solutions must be practical. For example, this requirement indicates that curriculum development must take into consideration learnt attributes which are general and transferable in a changing world. This is in view of the employers' requirement that graduates should have critical intellectual ability and the capability to learn rather than their just immediate attributes, skills and knowledge.

With teaching and learning there is abundant rationale for the development of more effective delivery systems than traditional lecturing. If outcome-based learning is valued, individualised, self-directed learning is a prerequisite. The
practices of the task-based curriculum, with its focus on student learning and on the development of transferable skills more closely approximate the ideal approaches to librarianship education. The teaching of transferable skills is more likely to define the conditions under which critical reasoning can develop. It has an advantage over the students’ abilities to learn to function in the profession outside the university and for continuous development. In this respect task-based education has much wider implications than that of simply providing students with skills.

Professional practice does not always fit with the curriculum that is developed by the experts. The expert-developed curriculum also poses a problem for those who interpret it, learn it and receive the products. Thus, a strong joint partnership in which the library and the library school are both recognised in curriculum development is essential if the profession is to fulfil effectively its unique role in society.
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Lastly to my family, particularly my late parents who had always encouraged me.
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CHAPTER ONE: INTRODUCTION TO THE STUDY

1. INTRODUCTION

This chapter sets the subject for the research in context beginning with a general introduction leading to a discussion of the background on the problem. The discussion identifies and explains what the problem is followed by the objectives of the study.

1.1 BACKGROUND TO THE PROBLEM

Perceived weaknesses in education in general resulted, during the 1990s in the higher education sectors in South Africa examining all aspects of education to determine their relevance for the South Africa and the approaching 21st century. Also, the Department of National Education [1] shows every sign of playing a major role in tertiary education.

Whilst government proposals are not primarily designed to constrain university curriculum development, they exercise a series of indirect pressures on it. Most of the issues considered in relation to the librarianship curriculum can be seen as representing some kind of concern with the relevance of that curriculum. This demand for quality in the Higher Education Act [2] constitutes a significant form of interaction between the government and the tertiary education sector.

Hence, the various departments at the University of Transkei have responded to the government's call that curricula be revised. The University of Transkei is located in a rural, underdeveloped area of South Africa. Its mission is stated as the provision of service 'to its clientele through optimal utilisation of its resources, and in offering relevant and effective teaching, research, and community outreach programmes with a special emphasis on the promotion of sustainable rural development' [3]. As such,
one of the requirements in curriculum development is that each department’s curriculum should be aligned to the University mission. This constrains the Department of Library and Information Science of the University of Transkei to identify certain areas of focus, in accordance with the needs of the specific community it serves [4]. However, a number of reasons have led to an oversight in adequately meeting the university mission.

On completing their studies, graduates often seek employment in both the developed and the developing South Africa. In turn, this entails that the librarianship curriculum has to be designed to also fit the wider context as well as the national needs of all South African communities. The need to cater for both the developed and developing South Africa has also been brought about by the fact of the University of Transkei becoming a South African university and thus a member of world universities [5].

In the context of librarianship education the twin goals of meeting the underdeveloped community needs and the needs of modern society have not been adequately met by librarianship curriculum. For example, the present curriculum has failed to have a serious impact on the needs of the underdeveloped and rural communities of Transkei. In particular, the curriculum has not found a way to encourage graduates to take seriously the needs of developing communities to improve service delivery. The result is that the problem of satisfying the needs of communities that are ninety percent functionally literate and underdeveloped is neglected by the current librarianship curriculum that emphasises the needs of the ten per cent elite Transkeian community and those of the developed South Africa. It is argued that one of the key problems in curriculum is lack of understanding of the professional needs and activities of graduates serving the disadvantaged communities.
Inter-institutional co-operation at the University, and thus the Department of Library and Information Science, has been part of that co-operation from its inception. Among other things, this co-operation is described as a practice through which '[the university's] standards in terms of curricula ... are checked against those of other universities regionally and nationally' [6].

Part of this co-operation involves the assessment of curriculum designed locally by two curriculum experts on the basis of their expertise in curriculum development in a specific field of study [7]. Another practice by the Department is to check curriculum of other library schools as a basis on which to develop curriculum. However, contrary to the expectations that these measures should help achieve quality assurance, the practice has failed to focus on library practices and has led to the adoption of other institutions' curricula without much modification. As a result conflicting interpretations of the curriculum by the lecturers are a problem.

In addition, the university requires that curricula be revised at least on a three-yearly basis [8]. Even then, the university has been negligent in controlling the suggested three-yearly curriculum revision span. As a consequence, the present librarianship curriculum was last officially revised, that is assessed externally, in 1992. Observing ongoing trends at other library schools has influenced the implementation of unofficial amendments in the present curriculum. Because following what others do has resulted in an outdated curriculum, Mbhele suggests a continual curriculum revision so as to adapt to the constant changing needs of library services [9].

Although the Library Association does not lay down what each institution should offer, the South African Institute of Library and Information Science (SAILIS) must, in line with practice at the university, assess the curricula designed by library schools,
through curricula experts, to see if they meet the required ideals [10]. The Library Association formed in 1997 has not amended the position.

Because the professional decision making association tends to have a majority of senior long-established practitioners, the view they take of undergraduate training is often a somewhat conservative one. This is a source of dissatisfaction and complaint among the academics whose courses are subject to their authority.

There is unanimity on the need of a core curriculum. In South Africa a core curriculum, is the competency of the South African Institute of Library and Information Science [11]. The guideline stated in the SAILIS Standards is that at the heart of any examination of the curricula of librarianship education is the existence of a core, a standard essence required of each graduate of an accredited programme [12]. The core is expected to reflect the broad foundations of all the types of general libraries as a basis of a common content relevant for beginning professionals.

Equally, Government Report 116/2/96 sets out that a tertiary education system that simultaneously exhibits cohesion with regard to certain key aspects should be developed. However, diversity has to be satisfied by tertiary institutions [13].

Similarly, Van Brakel [14] has addressed the importance for South African library schools to have a core curriculum as well as differentiation of courses among library schools according to various geographical factors. It is suggested that a core would allow the students to work in the wider South Africa. The University of Transkei recognises this demand and insists that:

The University ... must ensure that her graduates are comparable in their levels of skills, knowledge and understanding to graduates with equivalent degrees from other universities so that if the students get employed elsewhere they can succeed professionally [15].
Accommodating information technology has resulted in discontent in the profession. The SAILIS Committee on Formal Education [16] at its Annual Conference Meeting in September, 1990, adopted policy changes for the education and training programmes. All library schools were required to reflect the impact of technology on information service systems.

The reason for including information technology in the curriculum has been a response to necessary and possible changes in the library functions and tasks of personnel made by technology usage. Processes leading to services have been changed and in due course so have the tasks of library and information work. In addition, changes brought about use of technology show clearly the need to consider librarianship curriculum development. The emergence of significantly changed activities makes curriculum change necessary. In turn, technology has serious consequences about the role of education and educators.

One of the key features of the librarianship curriculum has been an increasing emphasis on the discipline of information science as distinct from librarianship. Consequently, it has been practice for some library schools to offer a three-year degree information science programme concurrently with a four-year degree programme of librarianship.

The most prevalent and accepted form in South Africa is the integrated four-year degree programme of librarianship and information science. The Department of Library and Information Science at the University of Transkei follows it. However, the Department may be seen to have encompassed technology to teach librarianship, indications are that students have not learned more as a consequence. The result has been a mismatch between education and work due to the intention and reality in the manner teaching is approached. Also, there is concern amongst educators about an excessive emphasis on information technology with the resultant lack of curriculum relevance [17; 18].
Because of the inappropriate manner in which technology is included in curricula, a recent survey by the Public Relations Committee of SAILIS in the Eastern Cape in which Transkei is situated shows a high demand of in-service training courses in this area [19]. The problem emphasised here is that although technology is a means and not an end; the graduate has to be able to cope with technology. Thus acquiring the necessary expertise is an education in its own right. It also causes curricular problems.

The view on the 'envisaged curriculum' proposed by the Department in response to the White Paper call for curriculum revision emphasises the lecturer's concern.

'The envisaged curriculum will enable graduates of the Department to acquire skills to manage modern information systems such as the virtual library and electronic library system as against the traditional library system to which they are presently focused [20].

The library types for which students will be prepared do not exist generally in South Africa and particularly in Transkei. This reflection on professional reading, although commendable, shows that curriculum development has been open to imported theories. It is very difficult to achieve relevance and the quality with imported theories and methodologies from other disciplines. As this danger is not theoretical, it has curricula implications. It is argued that it is vital to the profession in South Africa generally to design a curriculum that changes as it adapts to new and existing library activities. In turn, this emphasises the need for educators and practitioners to come together and design a curriculum on concrete professional practices.

Differences of opinion about how technology should be included as a component in curriculum development prevail. For example, according to Dick [21] information science should be more dominant in the curriculum as guides to practice. This is not unique to South Africa. In USA, Corbin [22] criticised the inappropriate consideration of technology in librarianship curricula.
Divergence of opinion has extended to the profession, itself with Underwood and Nassimbeni [23] doubting the difference between librarianship and information science while others [24; 25] support the division. In this respect, one of the problems is failure to identify to which degree librarianship and information science share a common knowledge base. Further, the problem shows that without a knowledge base it is very difficult for librarianship education to transfer a kind of professional identity to graduates, as they may be weak in the job market.

Concurrent with the SAILIS Committee on Formal Education proposal that all library schools include information technology in their curricula, was the proposal that with the approval of their universities the schools replace the degree name Baccalaureus Bibliothecae with Bachelor of Information Science [26]. However, the Department of National Education did not approve the name. The government persists in objecting to the librarianship/information science dichotomy on the basis that 'the proliferation of degree designations should be limited in order to bring about uniformity' [27]. This is in line with the view upheld by Underwood and Nassimbeni [28]. This problem points to a need for librarianship curriculum to have clear objectives as a prerequisite for producing suitably qualified graduates. Clear objectives are one of the important parts of the education process.

One of the problems in librarianship education relates to the technikon versus university education. For example, the 1995 guidelines of the South African Institute for Librarianship and Information Science Committee for Formal of Education state that

'the curriculum for undergraduate career training can clearly be identified as belonging to the university level, that is, the university's definition and characteristics, and can therefore be distinguished from the technician level [29].
A degree programme is considered to be a coherent body of knowledge and academic activity aimed at the acquisition of a qualification. In contrast to technikons, ‘degree programmes are not necessarily vocational, rather the students are prepared for a career’ [30]. Accordingly, technikons are concerned with training and universities with education.

The reasoned basis for the distinction between universities and technikons rests to a large extent on the Van Wyk de Vries's Main Report of the Commission of Inquiry into Universities. The report upholds the view that society can be divided into 'spheres of relationships' that are independent of one another and have unique characteristics [31]. In these terms, universities constitute a 'sphere of relationships' that sees the promotion and diffusion of basic or strictly academic knowledge essential.

In view of this distinction technikons are often criticised by academics. It is believed they violate the true mission of the university by engaging in vocational pursuits rather than pure scholarship. An important assumption opposing vocational education is that skills training are inefficient in a climate of rapid change [32; 33] as this emphasises practice above theory, the manual above the intellectual. Also there is criticism of what is called narrow psychologically derived terms like ‘training’, ‘competence’, ‘skill’. As Dick [34] argues that this is in opposition to the needed focus on learning to develop conceptual understanding and higher cognitive abilities.

The academic point of view ignores that unlike those delivering academic programmes, librarians and information workers have a set of practical professional tasks to perform. Consequently, there are bound to be difficulties to the learner if the curriculum in not perceived to be relevant to his or her professional practice.
The problem is best summarised by Nassimbeni who has observed that programmes leading to these qualifications are not uniformly applied [35]. For instance, in South Africa no direction presently exists for graduates who qualify through the National Higher Diploma offered by technikons to obtain additional professional qualifications similar to a graduate qualification. This produces a problem of the difficulty encountered by students wishing to move from one institution to another as encouraged by the government. Besides, this problem indicates a need for an agreed system of modular courses, accreditation and the ability to use credits gained elsewhere. Then students would not find themselves locked in to a particular package of courses offered by one institution.

Within the context of 'academic thought', there is a growing concern among academics about what they see as lack of relevance in library and information science curricula [36; 37; 38]. The bulk of evidence shows that the relationship between education and job competence is relatively low. Curricula do not appear to equip graduates to enter the job market as skilled and trained personnel. Hence, the South African Graduates and Diplomates Association (SAGDA), a non-profit making organisation, is working to address issues by looking at ways to bridge the gap between the study world and the working world by offering training programmes [39]. Similarly the National Commission on Higher Education (NCHE) report refers to a mismatch between education and training, and the needs of industry, consumers and reconstruction and development programme [40].

The problem is that like academic degree programmes, librarianship curriculum is so highly structured that it becomes insufficiently flexible to meet the requirements of a working environment where professional practices are changing rapidly. Many students graduate after accumulating the required number of courses but still lacked a coherent
body of knowledge or any understanding as to how one sort of information might relate to others [41].

The major weakness of the degree structure is the lack of focus on specialised career-oriented profession. Employers are looking for ‘rounded but adaptable people who can successfully tackle a range of tasks and be effective members of a team’ [42]. This is because librarianship differs from many other subjects. With librarianship the focus is not the subject but the activity, which implies that the discipline changes when the profession changes.

Also, the Arts and Culture Group recommends an essential need for in-service training and continuing education ‘in the short and medium term to enhance the skills of underqualified and inappropriately qualified LIS personnel’ [43] to improve the level of professionalism in the profession. This recommendation questions the relevance of South Africa's library and information science curricula.

Related to the technikon/university dichotomy, one of the current problems in the Department's curriculum concerns the question about the mix of theory and practical skills in curriculum. Debates on curriculum development show that curriculum developers in South Africa still continue to work within respected methods for contributing to the development of the librarianship field. The use of traditional models of discipline based and sequential courses still prevails. This mode of thinking has resulted in no practical reference on the body of knowledge which library education should encompass especially in the light of South Africa's employment markets.

To explain by example, academics are reluctant to recognise the knowledge base which practitioners exhibit in performing library activities. The works of Dick [44; 45], an academic show that the chief concern is to de-emphasise practice. Evidenced by this
style of thought is that in South Africa, the primary drive over the past and current periods in library education has been to construct a body of theory. Hence, theoretical concerns have received high consideration in curriculum development.

The explanation for a restored theoretical focus on knowledge is that it would both clarify the deeper underlying intellectual currents that support given professional outlooks and in addition, it would supply the essentials for re-shaping the future development of library and information science as a professional discipline [46]. The problem here is that these suggestions on theoretical considerations leave unanswered the questions of where does the necessary knowledge originate or what constitutes librarianship knowledge base.

The result of this stance on librarianship knowledge base is that it also neglects the quick rate at which it becomes obsolete because of innovation brought about by technology. One of the major consequences of the theoretical focus on knowledge has been the observation that:

'lecturers ... do not respond positively to much of the content of the curriculum given that ownership of this content does not originate in the profession' [47].

This failure goes to show that knowledge base is intimately linked to quality teaching and curriculum innovation and also determines how the students should be educated. Furthermore, this goes against one of the principles underpinning the vision of transformed curriculum as proposed by the government in South Africa, namely, the improvement of quality teaching with the corresponding quality learning based on relevant curriculum.
Consequently, poor curriculum implementation has resulted in individual skills that are not adequately matched with the country's needs and the development of human resources which is increasingly wasteful according to Barron [48]. Also, as students and practitioners do not have any doubts as to the value of the training and a skilled professional for library and information practice, the solutions needed relate to curriculum. It is in practitioners' training that the future service orientation must be inculcated.

Squire's [49] observation was based upon issues involving poor curriculum implementation. Relating to this problem he has noted that such a weakness shows a gap between the hopes of curriculum designers and the practice in classrooms [50]. In fact, some lecturers [51; 52] at the University of Transkei feel that their part in student assessment does not reflect the educative value of work experience. This is due to a lack of an opportunity for theory application, skill practice and the development of corresponding understanding.

Vermeulen [53] argues that the professional attitudes established perpetuated by the library profession are an important part of what all graduates need to acquire. As such they should be integrated fully into all aspects of the library education curriculum. However, despite the realisation that professional attitudes are integral part in teaching and learning, the curriculum is also seen not to address these important elements in student's careers [54].

The four-year professional degree or one year postgraduate diploma presently offered in South African universities is said to prepare students to exercise professional tasks in a library or information centre and to assume a position in middle management [55]. The view of middle management, which many professional librarians in South Africa hold at present, is at variance with current thought in librarianship education. Buckholtz [56]
maintains that current trends have redefined librarianship practice, thereby reducing the role middle managers had in teaching traditional practice in the organisation. In turn these trends require education to empower graduates to make and implement decisions.

Generally, it is suggested by this background discussion that if librarianship is to foster development in all aspects of society, the current South African climate fosters courses that are more outcomes-based. In turn, education should help graduates enter the work with skills and abilities appropriate to the needs of employment market. This implies that with curriculum development, relevant education and training function as a means to achieve other ends and should not be pursued just as ends in themselves.

For the Department of Information Science, most of the issues that have been considered in this chapter in relation to librarianship curriculum can be seen as representing some kind of concern with the curriculum relevance. This demand for relevance is now spread widely through every sector of higher education. It constitutes a significant, if indirect, form of interaction between the government and the tertiary curriculum. It is understood that a fundamental goal of the exercise of relevant librarianship curriculum development is for a curriculum to be designed in order to meet the University's local needs and the stated national imperatives for change as planned in the Higher Education Act [57]. In particular, the national imperatives include a need for curricula to conform to the requirements of the South African Qualifications Authority (SAQA), and as articulated by the National Qualifications Framework [58]. The content of this framework of control has direct implications for the university sector and, among other things, for its departments on development of its programmes.

One of the requirements is that curricula should be designed as vehicles to support transformation. This is in view of the observation made by the Ministry of Education in
the Green Paper that with many of the institutions serving the majority of the population there has been a high decline in the quality of educational performance [59]. This necessitates that education must be revised. This poor quality of education can be said to be linked to the capacity of education and training, the appropriateness of the curriculum, and the way in which learning and assessment does not address the needs of the learner and work.

Hence, the Minister has called on the Library and Information Association of South Africa (LIASA), the new unified South African library association, to play an integral part in achieving the goals of Curriculum 2005 that the government has introduced. The concept of Curriculum 2005 emphasises a shift from teacher/content learning to learner centred processes. This further involves outcomes-based education which requires learners to ‘be active and independent in their learning; ... be able to explore, seek and create new meaning and knowledge from information’ [60].

Commenting on Curriculum 2005, Loubster relates that after generations of sitting and learning subjects by repeating things over and over again, South African students will face a far different and friendlier system [61]. What this author indicates is that outcomes-based education is seen as having a potential to bring about meaningful change in learning processes and curriculum development. What the proposal and comment leaves out, however, is the type of curriculum model that meets the proposed Curriculum 2005. However, the proposal by the government has been made amidst dissatisfaction with current curricula.

More, this outcomes-based education has resulted in a stronger debate into the education of library and information professionals to meet the training requirements of the existing and future library and information services and socio-political environment. Hence, both the White paper and the National Commission on Higher Education Report suggest that
degree programmes be purposely designed to ensure that each graduate emerges well prepared for the working environment of the 21st century as well as post-graduate study [62; 63]. This means that students are prepared for a career. Also, Curriculum 2005 explains that one of the functions of it is to see that education and training is brought together.

This need for quality education equally applies to the students at the University of Transkei, which like many universities in the developing South Africa has suffered from past inequities. It follows that there is no reason why students in the underdeveloped universities like the University of Transkei should be taught only to obtain irrelevant degree qualifications when their counterparts in other parts of the world have access to appropriate professional qualifications through their university education. Thus there is a need to provide courses that meet the need for appropriate career and student needs.

The widely recognised importance of the principle of life-long learning is linked 'to the development of a National Qualification Framework based on a system of credits for learning outcomes achieved' [64]. This implies that curriculum should allow students to move between education and working environments. Further, the debate on curriculum relevance recognises that South African librarianship education should have a curriculum that will make increased mobility. However, it does not ensure portability, mobility and easy articulation across the tertiary education system in the country as may be necessary for some students [65].

1.2 STATEMENT OF THE PROBLEM

The critical issue to be investigated in this study relates to the observation that the study programmes that are offered in library schools do not prepare graduates to meet the
challenge of the times and to fulfil the obligation to the societies they serve. It is assumed that librarianship curricula need to respond to professional practice. From this it follows that there is a need to update the quality of education being given by establishing curricula that will equip librarians with a sense of purpose. In addition such curricula should help produce professionals who are eager and able to accept their share of responsibility in the attainment of the development of the profession.

The imperative for change can be summarised as the lack of focus on career-oriented education in librarianship. Thus the current programmes need to be adapted within library schools to meet career objectives. The rationale is to determine a structure that will facilitate the development of more holistic and relevant and more career-oriented programmes as required by the Act on Higher Education.

It is thus held that there is a need for general examination of the professional curriculum that would identify areas of development and to address relevance. As Dudley [66] and others state such an investigation is concerned with current and future educational and professional needs and curriculum responses as well as the influence of the curriculum on library functions. In the revision that is needed in the South African library and information science curriculum, it is important to identify the common knowledge, skills and attitudes necessary to perform library functions in a creative and determined manner.

1.3. DEFINITIONS

1.3.1 LIBRARIAN

Sturges defines a librarian as ‘the manager and mediator of access to information for user groups of various descriptions, ... initially through collections of information
materials under their immediate administration, but also through the global range of available sources’ [67].

He argues that librarians have also accepted new technology and such development has probably been stimulated by the creation of a rival professional identity of ‘the information scientist’ [68]. Although, initially, information scientists took a role which encompassed higher level of activity on behalf of the end-user than librarians generally felt their profession demanded, however, ‘today it is arguable that there is little, if any, difference between information science and the many sectors of librarianship’ [69]. The term library and information science is widely used as a consequence of this union. The definition given here is in terms of what a librarian does and this is the definition that will be adopted for this study.

1.4. OBJECTIVES

The objectives of the study are:

- To explore the existing information structure in South Africa.

- To enlist the understanding and co-operation of students, practitioners and educators in the identification of library activities, skills and knowledge relevant to professional practice.

- To investigate and recommend a curriculum that will attempt to:

  (i) Convey a common core curriculum for the first professional qualification in librarianship for students in the University of Transkei.

  (ii) Satisfy a need for career-oriented curriculum as envisaged by Curriculum 2005

  (iii) Help our graduates prepare for the world of work and to develop skills and interests, including creative abilities, which will help them to lead a fuller life and to be able to contribute more to the profession.
Relevant to the goal of developing a core curriculum for the University of Transkei, are attempts to:

1. Identify the activities, skills and knowledge that could be integrated with librarianship curriculum;

2. Determine the necessary personal qualities and attributes related to the library environment;

3. Determine the strengths and weaknesses in graduate education and professional performance;

4. Establish how the librarianship curriculum can help contribute to quality graduate performance.

1.5. ORGANISATION OF THE STUDY

Chapter One is an Introduction that sets out the purpose of the study.

To give an insight into the range of problems that need to be taken into account in curriculum development for library and information science in South Africa, Chapter Two explores the current library and information infrastructure in South Africa. The intention is to highlight the range of library practices that need to be taken into consideration and the challenges they pose to achieve relevant curriculum for library and information science curriculum in South Africa.

Chapter Three examines, in the context of competing philosophical approaches to the Library and Information Science curriculum, comparative examples of curricula relating
these to relevance, learning and teaching. An examination of the experience of other curricula shows that the conceptualisation of the librarianship curriculum informs the content, teaching and learning of the profession. The researcher has drawn upon a large body of research into curriculum development in fashioning an account of these approaches to curriculum development and their potential application into resolving the relevance, learning/teaching problems. It is evident, nevertheless that there are lessons to be learned from international experience of curricula whether or not they share the orientation of the South African library infrastructure.

Chapter Four gives a theoretical framework that sets out the basis on which methodology is derived.

Chapter Five discusses the methods used to collect data. It also makes reference to some studies that are related to the current one. Although the study does not repeat the previous ones, the techniques have been used because of their success with the earlier studies, which were aimed at collecting activities performed by professional librarians and not necessarily with the view of curriculum development.

Chapter Six analyses data and discusses the results of the analysis. The SSPS system has been used to get levels of agreement on the data collected.

Based on the analysis of data, in Chapter Seven there is a discussion in the context of literature review and other chapters. Also a curriculum model for library and information science for the University of Transkei is offered that will aspire to enable students to perform their professional duties when they graduate.

Chapter Eight contains the Conclusion and Recommendations.
REFERENCES


8. Ibid.

9. Interview with C. N. Mbhele, University of Transkei, 05 May, 1998


12. Ibid.


15. University of Transkei. Faculty of Arts Executive Meeting, 1998 (15, May). Unpublished, p. 4

17. Interview with Mbhele, C. N. University of Transkei, 31 May, 2000

18. Interview with Magwentshu, V. V. University of Transkei, 31 May, 2000


20. University of Transkei, Prospectus: Department of Library and Information Science Mission, 2000, p. 61


30. Du Pre, R. H. Outcomes-based Programme Development..., Umtata: University of Transkei, 1999, p.4


37. Kaniki, A. M. ‘Specialist Training for Information Provision to Rural Communities in South Africa’. Innovation, 1994, 9, 35-42


41. Report of Boyer Commission on Educating Undergraduates in the Research University, p. 2
42. Report of the National Commission into Higher Education: Dearing Report. par 9.4
43. Arts and Culture Task Group: LIS. Report on Library and Information Services as Presented to the Minister of Arts, Culture and Technology, 1995, p. 25
46. Ibid.
48. Barron, C. ‘South Africa Falters as Science Slips to the Bottom of the Class’. Sunday Times (SA), 1996, April 14
50. Ibid.
51. Interview with Mbhele, C. N. University of Transkei, 05 May, 1998
52. Interview with Magwentshu, V. V. University of Transkei, 05 May, 1998
54. Ibid.
58. South African Qualifications Authority Act, No. 58 of 1995

68. Ibid.

69. Ibid.
CHAPTER TWO: DEVELOPMENT OF THE HYPOTHESIS

2. INTRODUCTION

This study was carried out in the context of practitioners' and educators' increasing awareness of the need for library and information science education that would equip graduates with the necessary skills and professional attitudes to meet the needs of a rapidly developing society. Chapter One shows that the establishment of a relevant curriculum in librarianship is a critical issue in South Africa. To date a number of factors continue to make it the critical issue. It is assumed that librarianship curriculum has been developed with a narrow perspective on the variables that affect agreeable relationships between elements of the curriculum.

To better understand the nature of the study, it will be helpful to consider some of the significant developments and limitations in both library and information services and education and training of librarians in South Africa. Hence, library and information services environmental background as a factor that influences curriculum is being described.

2.1 SOCIO-POLITICAL CHANGE

Sabor [1] believes that the characteristics of the setting in which prospective librarians will be serving is an aspect to be considered in formulating the content of a library school curriculum. This includes whatever changes the concerned population group may be experiencing now or is likely to experience within the next few years.

Thus, the development of the librarianship curriculum can be considered against the background of the general pattern of library services in the country. For example, it is possible in South Africa to identify some of the political-social factors that have brought
about change in the social make up that have impacted both on the provision of library services, and, as a result, on curriculum development.

According to the National Education Policy Investigation (NEPI): The Framework Report and Final Summaries [2], the current approach to curriculum development which glosses over the connection between power and information has resulted in an inability to engage with pressing socio-political and economic issues. Implicit in this statement is that, within the South African context of appropriate library education, it is important to take cognisance of societal changes and prepare practitioners for these.

With the continued political and educational changes that keep occurring in South Africa, such relevance is being promoted extremely strongly. Any attempt to develop the curriculum by library schools and departments in South Africa may be seen then as an attempt to deal with the persisting changes. In this respect, Dick [3] cautions that the extent to which South African library education neglects any crucial environmental changes will match the extent to which it will lose its relevance.

2.2 INSTITUTIONAL CONTEXT

The Standards of Education of Librarianship [4] recommend that professional education be given at university level. Defining a profession in terms of the university implies that curriculum development is interpreted in an array of programmes that may be followed toward the attainment of a particular qualification [5] at tertiary level. Since, the focus is on a particular discipline through which the student seeks further learning, the understanding that the student seeks learning specifically in librarianship bound the activity of curriculum development in this instance. It is implied that curriculum relationship with the profession is critical to formal degree programmes. Hence the South African Library Association expects that the goals and objectives be designed to satisfy the expectations of the profession.
Consequently, the accreditation process of the South African Institute of Library and Information Science (SAILIS) requires that schools provide formal statements about their goals and objectives that respond to the views of the profession [6].

The problem raised in respect of library and information science in the institutional context is whether it should engage in a vocational or academic form of education. Chapter one has shown that in practice the distinction between vocational and academic education with the corresponding distinction between training and education in South African universities has proved difficult.

2.3 INFORMATION TECHNOLOGY

In South Africa, development of technology is a significant trend that continues to alter the shape of library and information services. To illustrate, at the launch of the Library and Information Association of South Africa (LIASA), the Minister of Education stressed the importance of information in a democratic society. He added that 'the future success, development and prosperity of our young democracy primarily depend on the population being better informed, better able to use the information they have in order to fully participate in all spheres of South African life [7]'. He also warned that library and information workers have a responsibility to help to lay the bridges and foundations for communities to have access to information. In his view this is because information is of little practical use if mechanisms do not exist for people to become aware of, and gain access to, the information they need and are entitled to [8].

In this regard computers and networks are also means to achieve these ends. The Minister recognises that grassroots networking will also have an important benefit for libraries and their communities where ultimately South Africa’s most urgent needs will be met in a
competitive economy, driven by informed and enlightened people who form the productive and creative core of the economy' [9].

In addition, the Minister states that the South African economy is confronted with a task of integrating itself into the competitive sphere of international production, culture and communications [10]. It is believed that as South Africa locates itself within the network of information exchange and interaction, librarianship education will have to produce the technological skills necessary for successful participation in information processing. This calls for a range of broad generic skills enabling graduates to deal flexibly with a varied set of tasks and with new technology and to equip them for unpredictable career paths and changes in employment.

This influence of technology in libraries and information centres has led to the development of a great yearning for curriculum relevance. This is evident from the themes and papers of the SAILIS Conference of 1988 [11]. The commission and research exercise that produced the Zaaiman Report constitutes another important example [12]. Accordingly, technology is an aspect that cannot be ignored in South Africa and in particular in library and information science education. This is because the library and information science profession also needs relevant education based on recent technological innovations.

Shillinglaw and Thomas [13] argue that the possession of knowledge and the ability to influence its environment has always been vital to society. The vital need to control and use of knowledge emphasises the role that information technology plays in curriculum development. Analysing the extent to which South Africa has progressed towards an information society, Zaaiman concluded that 'the infrastructure for an information society [had] grown robustly' [14]. The South African Bibliographic Network [SABINET], which is based on the national quality-computer network of the Department of Posts and Telecommunications, is an example of the growing sophistication of the information and
communications infrastructure in South Africa. Hence, it is possible in libraries, both in
developing and underdeveloped South Africa, to search bibliographic databases online.

It is possible for a number of libraries in Transkei to have access SABINET. Also, a few
libraries, both academic and school, have online access to international database hosts.
Some also access international databases on CD-ROM. Facsimile transmission speeds up
the delivery of copies of documents [15]. The University of Transkei and some schools with
electricity use of electronic mail and have access to the Internet.

The uneven growth of technology in South Africa has raised a considerable concern at the
perceived lack of relevance in professional education [16, 17, 18, 19, 20]. Lor [21], in
particular, questions the relevance of technology to curriculum development. He doubts
whether students should be trained in online services and use of SABINET while many
townships and villages still lack libraries, and while such libraries as there are may well lack
electricity and telephones.

However, Shillinglaw and Thomas [22] summarise that despite the differences in
information technology development in South Africa, the country has strong aspects of an
information society and exhibits many of its features. Thus, South African libraries are able
to utilise sophisticated information technology. In addition, most large and medium-sized
libraries including those situated in the Transkei area have computerised some or most of
their library housekeeping procedures [23].

Thus, given a set of information requirements it must be considered how computerised
information systems can deliver the required information [24]. Altogether, there is a general
agreement amongst educators [25, 26] that if library and information science is to compete
effectively both nationally and internationally in library and information science education it
should respond rapidly and sensibly to technology-induced changes. Thus information
technology-based activities should be catered for in librarianship in the light of activities that graduates could perform outside the first world type library service. Library information graduates can expect to work in both the third and first world South Africa.

Also, the practitioners are concerned with the growing information gap between the more developed South Africa and urge library schools to increase their efforts to help graduates in less developed areas to improve their abilities to generate and handle information [27]. It is believed that the inability to respond to this information challenge in rural areas will further confine them to a secondary role in the life of South Africa.

The impact which information technology has on librarianship affects not only library practice, but also the way librarianship is taught. The library educators and curricula need to respond to the information technology environment in order to ensure the continued role of librarians in the use of information systems.

2.4 LIBRARY AND INFORMATION SERVICES IN SOUTH AFRICA

To identify the specific purposes and situations with which a library practice has to cope, one begins by analysing the library system in which that job occurs [28]. South African libraries and information services, in addition to socio-political and academic institutional contexts, impose special requirements on professional practice as well as shaping the development of the librarianship curriculum.

As Tamir [29] states, a profession continuously generates its own unique contents and applicable skills. Professional practice is more usually seen as responding to a series of circumstances. Given the functions of a professional person within the range of libraries, the emphasis therefore is what the task of the library and information professional must be. In
addition, those characteristics, both physical and social, that impose special requirements on professional practice are important. In turn, the nature of the library services offered has an influence on the education of professionals.

It is inferred that relevance has become more important to the profession because employers see a skilled workforce as fundamental to gaining and maintaining a competitive advantage. Libraries and information services want students who can understand their work, their services, be creative and adaptable, and capable of becoming multi-skilled [30]. Over and above, these services demand that graduates possess knowledge, skills and attitudes that are central to professional innovation and practice.

The current debates in South Africa on curriculum development in library and information science [31; 32; 33] have re-inspired interest in curriculum forms. It is presumed that they need to be understood as part of a reshaping of the skills of professionals engendered by wide-scale patterns of library practices and the adoption of automation in South Africa.

Dick [34] states that some of these practices replace the Taylorist and Fordist arrangements of the past. He thus suggests that the future of library and information science education be framed in terms of the human capital imperatives of South Africa as revealed by the newly styled library and information services in the light of their post-Fordist reformation. For emphasis it may be pointed out again here that in South Africa it would be short-sighted to neglect the underdeveloped areas which do not boast this post-Fordist economy. Despite the barriers of existing economic conditions, limited resources and the changing facets of the professional practice that have been indicated, relevance should be central in curriculum development.
A description of the library services suggests some gaps in the elements of curriculum that have been used as a basis for educating librarians. This in turn may help suggest elements to be included in curriculum design.

2.4.1 THE ANGLO-AMERICAN MODEL OF LIBRARY SERVICES

Asheim [35] writes that libraries are a social agency reflecting the values and needs of the society they serve. Central to the library tasks that are carried out by librarians is that of meeting user information needs at all levels of development.

Lor [36] observes that separate facilities for the various population groups have been developed within the framework of South African government policy. In turn, this has resulted in library services and human resource supply that are marked by serious disparities. Hence, the distinctive feature of libraries is that they are either well developed, or poor, or non-existent.

As the ACTAG LIS Group [37] endeavours are directed at changing the current trend in the provision of library services, it is important to examine the situation they purport to rectify and some attempts that were made earlier to provide services to all communities in South Africa. This is because library and information science education has a pivotal role to play in the improvement of library services by ensuring the training and education of the necessary library and information science professionals. So, if curriculum development is to fulfil the educational role effectively, 'it will have to address itself into a people-centred service oriented programme' according to the NEPI Report [38].

Underwood [39], ACTAG LIS Committee [40] and Dick [41] comment that the South African library and information system follows the Anglo-American model or the First World model 'with some deviations arising from historical conditions' [42].
The key question is to what extent the Anglo-American Model has helped in meeting the information needs for development?

The First-World model presents elitist, literacy based, technicist, professional and culturally biased features. For this reason, current library and information services in South Africa could be criticised, as they are related to one section of society, the elite, to the exclusion of the illiterate who are in the majority. It is thus believed that basing library services and education on this model only has distorted the already strong tendencies from population-based information policies. While the issue of popular information gains urgency as information for transition increasingly takes hold of South Africa, the Anglo-American model lacks subsistence information.

The problem hinted at here is that the definition of the library services that exist in the country is so specific that curriculum content will have relevance to only a limited number of students. In assuming adequate responsibility for both developed and developing information services, it may be biased in viewing the needs of the disadvantaged communities. The Anglo-American model is frequently concerned with academic problems that are remote to the needs of those in the underdeveloped South Africa. The perception might go a long way in helping practitioners to perceive sense of support for the needs of developing communities on the part of educational programmes.

The disapproval of the Anglo-American model is especially appropriate if education and literacy are seen as two areas that form part of the five key programmes in the Reconstruction and Development Programme [43]. In essence, the First-World style of library and information services does not, on its own, offer a viable orientation for the South African library and information system and education.

An added disadvantage is that this First-World library process and at present the dominant practice in South Africa identifies with libraries as neutral agencies, that is, no politics, no
religion, no morals [44]. As Dick [45] and Underwood [46] observe, this has led to a failure to recognise that the conflict in the workplace, schools, universities, and country-side of South Africa involve a contest over ideas and aspirations, and therefore libraries are also sites of efforts in the solution of the conflicts. The Anglo-American model as it is applicable to the First World cannot be a reflection of the involved contest of ideas and aspirations in South Africa. Dick emphasises the incongruity of this type for South Africa concisely when he writes:

In South Africa new structures are being adopted in every sector of the economy, including that of information. Because many parts of the community have become politicised rather than marginalised, the disengaged position discussed by Foskett (The creed of a librarian: no politics, no religion, no morals) is no longer tenable for any librarian and information worker [47].

Support for this view comes from one of the observations made by the ACTAG LIS Report concerning the neglect of the current realities of the local and African context [48].

2.4.2 NATIONAL LIBRARY SERVICE

While South Africa has some excellent libraries and a quite sophisticated infrastructure for information provision as characterised by the First World model, library and information services are either lacking or not addressing the needs of rural areas like Transkei and of the black South Africans in townships.

In fact, a proper realisation of the importance and value of the library to the third world South Africa is something that only came about in 1976. The establishment of ‘national libraries’ in independent homeland states of South Africa is closely linked to their establishment. As a result of the lack of library services an evolution of the homeland National Library Service system came into effect. Frylinck designed this in Transkei the mid-70s [49; 50; 51] and the model was later adopted by other former homeland states of
South Africa. The service evolved as a synthesis of both public and school libraries. This was in response to the needs of the underdeveloped communities. However, despite their poor infrastructure as well as the fact that they were set up in terms of the apartheid thinking which prevailed in the mid-70s, the National Library Service introduced the awareness of libraries into much of Southern Africa. Secondly, it established services and library service points at various places. This is something which the South African provincial library services, with their predominantly First World orientation were not able to do [52].

Librarians working in these libraries have been invariably trained to work in libraries which possess a well-developed information infrastructure. A general understanding is that the Transkei National Library service system was based directly on the forms as found in developed South Africa. A description that fits the homeland National Library Service is that presented by Havard-Williams when he said that most African libraries because of a lack of innovation amongst librarians were 'pale imitations of UK libraries of the Sixties' [53]. Subsequently, it can be assumed that education based on them also lost touch with those they were intended to serve.

Kotze [54] has warned against what he calls transferring library services appropriate to the needs of a technologically advance European country to a country with an agriculturally based economy. As a result, because of their failure to be innovative library use has been limited for the people for whom these services were meant. This has been ascribed, amongst other things, to lack of a reading tradition, a lack of suitable books in the mother tongue and a low literacy level. This is something that could have been taken care of if libraries were based on these needs.

Support for an innovative approach for libraries also comes from Penna [55] who feels that the scale of the challenge posed by societies in which illiteracy and poverty feature prominently must call for a more fundamental, and indeed a more radical approach. They
conclude that with respect to these communities traditional approaches to library service may have to be forgotten. In defence of the National Library Services Ndambi and Brink argue despite their weakness that they be maintained. They reason that:

It will make good economic and managerial sense, particularly in the chronically cash-strapped library sector not to discard the existing infrastructure and first to look at ways and means of adapting to meet the needs of the democratic South Africa [56].

Despite the above caution, since 1994, these homeland libraries merged with the provincial library system of the different provinces of South Africa. This has meant returning to some extent to the Anglo-American model.

The guidelines of modern librarianship is that every person needs and has a right to access to the human record, appropriate to his/her own level of concern [57]. However, whilst heavy use of all types of libraries in urban areas by pupils, children and adults from disadvantaged areas is reported in South Africa [58; 59], access is a problem. As Fokker [60] observes accessibility is one of the key issues in the development process. One measure of accessibility relates to proximity of a facility or service to the given population [61]. However, poor roads represent a barrier in meeting the needs of the rural communities by the library services. Thus for both rural and township communities the cost of these trips to libraries can ‘be measured in terms of cost of opportunities foregone, over and above cash, time and effort costs’ [62]. Nevertheless, there can be little doubt that the transition to a democratic system of government has led to many changes, and one such change is access for all races to use all the existing libraries even those previously reserved for whites.

Because a number of students had to be turned away from some of these libraries as the libraries were not designed to provide seating for so many [63], librarians all over the country, and particularly in the Eastern Cape, are aware of the need to improve library services. Thus, building the few new libraries in townships is a step in the direction of
improving library services. In view of the need of township and rural library services, these services also form an important educational component of librarianship.

2.4.3 RESOURCE CENTRES

If one accepts that the goal for which libraries strive is access by all community members then the passive approach of providing merely traditional library services for a developing community as symbolised by the traditional library and the homeland National library services becomes unjustified.

Due to the danger that an elitist based library system could be meaningless to the aspirations of the large part of the South African population, in the mid-80s resource centres emerged in South Africa as a parallel system of information service. These resource centres arose as a reaction to the lack of access to libraries by marginalised communities. Contrary to the Anglo-American model to library services, 'they emphasise community librarianship and the need for progressive information workers' [64]. Stilwell, who is quoted by Underwood, concisely portrays the nature of the resource centre movement when she writes:

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Their predominant task has been to strengthen the mass-based organisations and consequently to serve the mass democratic movement. Their orientation derives from a situation of mass oppression, including inadequate and biased library and information services, severe state censorship and unequal education system. These resource centres seek to empower communities through the provision of resources and facilities otherwise unavailable to oppressed communities [65].
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The resource centre programmes challenge educators offering the strongly elitist-based library system curricula to be more analytical and critical of the ideological assumptions underlying their educational programmes that impart to a large extent irrelevant curricula.
Underwood asserts that firmly rooted in the Reconstruction and Development Programme in South Africa, library services represent an attempt by practitioners to address user needs for information [66]. The resource centre movement's aim is that information services should be aligned to the aspirations of the communities they serve if they are to be effective. However, in the Transkei area, with its central National Library Service, there has been no resource centre movement.

2.4.4 MULTI-PURPOSE COMMUNITY CENTRES

Information is just as critical a resource for people in underdeveloped areas as it is for those in developed areas. Hence, the 1988 Report on Use of Libraries for the Development of South Africa saw librarians as the most suitable group concerned with adapting their services to the needs of development [69].

In South Africa information for development has been applied with respect to economic, social and political development. According to Frylinck [70] these needs may include eradicating illiteracy, assisting agricultural development and providing life-support information.

However, he observes that too often libraries serving developing communities have been established ad hoc with little or no adaptation to the information needs of the populations they are to serve [71]. Hence, the librarians did not accept the expressed needs by users from developing areas as valid. The feeling expressed was that these needs fell outside the classical library thinking [72]. The reaction of these librarians leads to the assumption that one of the basic obstacles to providing information needs that meets the needs of underdeveloped communities is the professional stereotype based on professional idealism. Academic elitism's attempts to produce a truly universal system of education in South Africa have therefore been only partially successful. The assumption is that the vision of society
sees librarianship as practice-oriented. So, librarianship education stands in complementary relation to society, servicing the current and future needs of the society.

This further suggests that curriculum has to improve the professional content of undergraduate education. More should be done to raise the consciousness among librarianship students so that they can better understand what problems their users have and gain a better sense of what actions they can take to intervene and improve the quality of library services.

An emerging pattern of the South African library and information service scenario, is the radical plan to which government policy has committed itself for establishing library services where they have never before existed. Mainly, the aim of the plan is to expand library services through the creation of multi-purpose community centres (MPPCS), and resource sharing is paramount. So, many rural areas, where levels of illiteracy are highest and the provision of services currently lowest, are targeted for both the provision of services and the development of the existing poor services [74]. The significance of MPPCS is that they diverge from the First-World mode in which a large part of the current South African library and information service is grounded. There are already a large number of such projects in the townships as well as the rural Transkei.

Benjamin describes them as the creation of what is called an 'inclusive information community' [75]. In particular this inclusive information community concept stresses that library and information services should not be separated from the wider development of the needs of the country. The MPPCS goals can be summarised as:

- integration with the education system
- equal provision of LIS to all communities and education sectors such as schools
- free and equal access to LIS for all South Africans
- the establishment of a unitary LIS for South Africa
- democratisation of the structures of LIS and practices in the workplace
- human resources development, for example, occupational structures and student enrolments reflecting the demographic realities of the country [76]

In summary, their objective is to ensure the creation of equitable information services, nationally, regionally and internationally as Benjamin states [77]. In that sense they are an important part in creating universal access to all users in South Africa. One of their roles is to bring together information sources for development, rather than being responsible for development itself.

The goals have far-reaching implications for library schools who have the responsibility of educating library and information professionals. It is believed that recognition of these services stresses the importance of curriculum developers acknowledging the need for curricula to accommodate competencies necessary to work in the MPCCS.

Also, within the broad democratic movement in South Africa, a number of groups have articulated positions on education that have curriculum implications. For example, a Curriculum Model for Education in South Africa proposed in 1991 [78] is an attempt to evolve curriculum changes on the basis of the present situation, rather than to break radical ground. These proposals are raised with reference to curriculum development that aims to meet the different types of libraries. There is a realisation that libraries place demands on the goals and objectives of initial graduate librarianship curricula.

The reflections implied by the description of the practices of library and information services available in South Africa and as described in this study are less evident than might be supposed. This is because 'practice tends to be situated on a continuum between the two poles' [79]. Hence, it is assumed that other library types that are closely tuned to
the needs of the disadvantaged and rural communities, require a partnership of equals between practices of the developed and developing worlds, so that the shared information is reliable and pertinent.

As indicated in Chapter One, with the different information needs, librarianship education in the University of Transkei confronts two sets of challenges. Firstly, curriculum development will have to develop a curriculum model that will accommodate the learning and teaching of students from disadvantaged communities. Secondly, curriculum development must be devised to meet the needs of an increasingly technologically environment in addition to meet the needs by traditional, manual oriented activities.

Crucial curriculum questions for the combined third/first world system are how such a diverse programme can be articulated within a qualifications framework and how the mix of curriculum can be planned to ensure effective curriculum implementation and a fit with necessary skills development. It is inferred that librarianship education should offer the type and quality education which is relevant to the concerns of library tasks in meeting broad user needs served by types of libraries described.

There is no doubt that the Anglo-American model in South Africa will in the foreseeable future need a steady and regular supply of librarians. Also, it is important librarianship students in the University of Transkei to function in library and information services existing in South Africa. Granted the pressure resulting from technological transformation and the expectation of the government, appropriate responses through education are a matter of practical, applicable, relevant skills. If this is to be satisfied, it is necessary to develop a curriculum that will reinforce the students' capacity to use skills in different environments. The assumptions concern relation of relevant skills to the profession, the nature and function of knowledge, the function of education and the role of educators, all of which are implicated in curriculum development.
It is believed that the definition of numerous functions that the libraries discussed in this study encompass, clarify the role of graduates, but the multiplicity also requires an emphasis on the unity of the profession. Education like this is expected to be relevant, to be accountable and its outcomes confirmed in the experiential domain of the profession.

2.5 HUMAN RESOURCES

The Minister of Education states that one of the purposes of higher education is to provide the labour market with high level of competencies and expertise for the growth and prosperity of a modern economy. In addition, it teaches and trains people to enter professions, or pursue vocations. This market is based in a 'knowledge-driven and knowledge dependent society [80]'.

Hence, in South Africa this has resulted in a system of education with a strong human capital component. This is particularly true with respect to librarianship. For example, The National Council for Higher Education [81] claims that since the mid-1970s, the South African government has provided librarianship education for (black) students in black universities. A stable and skilled urban black labour force was recognised as an essential component of economic renewal.

One crisis that affects schools or departments of librarianship in these so-called black universities and in particular the University of Transkei, in relation to the provision of the necessary supply of human resources is that there are insufficient libraries. Even the few that are available lack resources and often the qualified staff to offer quality service and help to trainees.

An additional problem relates to the location of the University of Transkei. This university, built in the apartheid era of control, could not be located in the industrial combinations of
‘white’ South Africa [82]. As a result, it has been built in an underdeveloped region, far from industrial enterprises able to provide on-the-job training. This lack of libraries has seriously depressed employer demand for training. Also, this means that in contrast with urban based institutions, the Department of Library and Information Science in the Transkei does not have developmental relationships with libraries and communities they serve.

Learning and teaching is another dimension that is integral to librarianship curriculum development. Co-ordinating learning and teaching helps provide a means for implementing the curriculum. However, the social realities propose an enormous challenge for educators of librarianship in South Africa.

To illustrate, during training, the majority of the intending library professionals undertake their formal preparation with little appreciation of the relative importance of what is being taught [83]. This is because upon first registration at university, the majority of students from disadvantaged communities have never set a foot in a library or been exposed to the technology used in libraries. As a consequence, when these students register in library schools, they present the problem of a tremendous lack of librarianship background. It is supposed that this absence of a librarianship framework has implications for both teaching and learning and resources.

Dick [84] observes, that in South Africa, the emerging educational conditions as stated in the Green Paper appear increasingly to lend themselves to meeting new economic demands, and prompt the need for vigilance regarding the quality of education of information professionals. More relevant to South Africa's immediate purpose of provision of library and information services is the need for a re-educated workforce to meet these changed circumstances. Increased responsiveness is essential through a curriculum that is suited to a wide range of social and economic needs. In the Reconstruction and Development Programme Document, the government recognises that education and training are central to
the supply of qualified personnel. Subsequently, the government reasons that the three essential ways in which librarianship education supports professional performance are:

- the supply of suitably qualified manpower;
- technology transfer;
- research and development [85].

Accordingly, the focus of attention is of a national library policy for a post-apartheid society South Africa that helps to address the disparities in the provision of services. Hence, the aim of developing nation-wide distribution of library and information services has been realised in some areas.

Evaluating new libraries in Port Elizabeth, Rodiorn says:

Because of an ambitious building programme, Port Elizabeth has three new libraries... The bad news is that they have no books and no staff either... Unless Bisho (government, Eastern Cape Region) can help, there will be a crisis of delivery [86].

The statement reflects a growing comprehension that transformation and delivery in South African libraries will not happen without human resource development as the most critical component. In response to this national library policy, South Africa is moving from an elitist system of education to mass education. This strategy depends on an increasingly skilled and knowledgeable workforce with increasing demands on technology. Curriculum development in librarianship has an essential input to make in this area.

In the 1995 ACTAG LIS Report [87] on libraries and information services, one of the goals of future policy formulation is human resources development that reflects the demographic realities of the country in terms of occupational structures and student enrolments. This does not mean to undermine the Standing Committee for Formal Education's valuable
contributions over the years to the training and education of library and information workers through its standards, guidelines and accreditation activities.

The South African Institute for Library and Information Science (SAILIS) [88], the accrediting association of library schools and their education, recognises the need to reassess the nature and content of the formal library and information science curriculum.

The rationale for this assessment is in order to develop and further educate librarians and information professionals to ensure that the curriculum and student body become more appropriate to South African circumstances and are able to meet the needs and demands of new user groups. This goal is encapsulated in the form of human resources and occupational structure, which refers to the educative processes which library and information workers undergo in their training programmes.

Additional, the Association's policy acknowledges the staffing of libraries with appropriately qualified librarians is important in developing and maintaining an adequate service. However, the employment of professional librarians, including archivists, in 1989 reflected disparities according to population groups. Similarly, the 1990 enrolment of LIS students showed these peculiarities. Also, a factor that has contributed to unemployment is the shortage of black librarians that can be directly linked to the low output of black librarians by the universities.

The anomalies that are reflected in the statistics of professional librarians and students by population groups parallel the extent to which library services are available to the different population groups in South Africa. The following tables represent the numbers of professional librarians in 1989 and of students enrolled in library and information science in 1990. These were the latest figures available.
Table 2.1  Statistics by Population Group and Gender

**Professional Librarians (Including Archivists) in 1989**

<table>
<thead>
<tr>
<th></th>
<th>Male</th>
<th>Female</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>White</td>
<td>393</td>
<td>2287</td>
<td>2680</td>
</tr>
<tr>
<td>%</td>
<td>11,7</td>
<td>68,2</td>
<td>79,9</td>
</tr>
<tr>
<td>Coloured</td>
<td>74</td>
<td>110</td>
<td>184</td>
</tr>
<tr>
<td>%</td>
<td>2,2</td>
<td>3,3</td>
<td>5,5</td>
</tr>
<tr>
<td>Asian</td>
<td>88</td>
<td>89</td>
<td>177</td>
</tr>
<tr>
<td>%</td>
<td>2,6</td>
<td>2,6</td>
<td>5,2</td>
</tr>
<tr>
<td>Black</td>
<td>153</td>
<td>158</td>
<td>311</td>
</tr>
<tr>
<td>%</td>
<td>4,5</td>
<td>4,7</td>
<td>9,3</td>
</tr>
<tr>
<td>Total all categories</td>
<td>3352</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 2.2  Enrolment of LIS students and graduates by population group in 1990

<table>
<thead>
<tr>
<th>Population group</th>
<th>Students registered</th>
<th>Successful graduands</th>
</tr>
</thead>
<tbody>
<tr>
<td>White</td>
<td>1029</td>
<td>205</td>
</tr>
<tr>
<td>Coloured</td>
<td>159</td>
<td>20</td>
</tr>
<tr>
<td>Asian</td>
<td>133</td>
<td>28</td>
</tr>
<tr>
<td>Black</td>
<td>486</td>
<td>30</td>
</tr>
</tbody>
</table>

In 1994 the then ‘National Library’ of Transkei and now the region of the Eastern Cape Province was reported to have only fourteen qualified professional librarians [91]. Transkei is a vast area of 41,100 square kilometres comprised of twenty-eight magisterial districts.
This is an area twice the size of Israel and larger than the Netherlands [92]. The total number of schools was reported to be 3,519 in 1993 [93]. The implication is that one librarian ran a public library that served an area of about 1,468 square kilometres and a large number of schools.

The inability of librarianship education to provide for the human resource needs is an expression of the lack of political will coupled with a lack of financial resources, which were primarily targeted at the industrialised South Africa. Figures show a declining numbers of students of library and information science at South African Universities. The figures are still declining. Viewing the question of human resources overall, it would also appear that blacks, particularly Black Africans, are under-represented both in the student cohorts and in the employment sector.

In her study of secondary school library standards Vermuelen [94] also refers to a trend of reduced staffing provision in school libraries, and reports that one (unspecified) provincial library service had only four full-time teacher librarians, compared to 107 in 1978 and was expected to have none in 1992.

With regard to school libraries, Vermuelen [95] observes a tendency to withdraw full-time posts and ask teacher-librarians to assume greater teaching responsibilities. In the recent cutbacks in white education, the first post to be frozen or removed has been that of the librarian. On the other hand, the future for school libraries is promising. For example, the government promotes the education of teacher-librarians for whom it encourages dual qualifications of librarians and teachers.

From 1997 schools have introduced a curriculum on library skills. According to the latest figures available in the University of Transkei, at least five graduates qualify with the stated
dual qualification [96], since 1992. These students come from their schools at the encouragement by the government that they undergo librarianship training in order establish new school libraries [97]. Although 'the ideal of a full-time teacher librarian specifying the number of pupils, for example 500, per teacher' [98], is far from being met, at least a start has been made. This is a high achievement considering that there were no librarians at all in these schools.

In addition, Van der Merwe [99] identifies ‘restrictiveness’ in library and information science education in South Africa as a barrier to human development. By way of illustration, the national review of library schools undertaken by the Academic Planning Committee of the Committee of University Principals (CUP) resulted in some reduction in the number of library schools [100; 101; 102]. This process of the rationalisation of the library schools has also affected the advancement of librarians.

For instance, according to the Library and Information Services NEPI Research Project in 1991, before the implementation of the CUP recommendations, the average undergraduate LIS enrolment at 12 universities was 156, and the average postgraduate enrolment was 27. For the residential universities in 1991, there was an undergraduate enrolment of 100 and postgraduate enrolment of 20. The Report upholds that the averages of undergraduate enrolment, however, are misleading, because the totals included registration for information science as a subject in the Bachelor of Arts degree [103].

As a consequence, geographical and language constraints resulting from the rationalisation of library schools have produced limited opportunities for students wishing to receive instruction through the medium of English [104; 105]. The effect that rationalisation has on curriculum development in the Departments of Librarianship in the University of Transkei is the need to develop a curriculum that will prepare graduates to work in both the first and
third world South Africa. So, this has implications for an approach that would accommodate
the students with different educational backgrounds in teaching and learning.

Van der Merwe [106] argues that at a time when pressures from the greater section of the
population to participate fully in South Africa's society are increasing, South Africa cannot
afford to cling to antiquated methods of education. He goes on to say that in the era where
media is used to improve general education access to education should be extended to all
people.

The demands for equity in information services and education have for the first time in the
history of South Africa brought curriculum developers face to face with the problem of
drawing up a nationally acceptable curriculum for South African library schools. The LIS
Task Group has done a good job of its national assignment given to it by the Ministry of
Education.

The group helped provide an insight of a nationally co-ordinated, adequately funded LIS
system which will bring LIS within reach of all South Africa's people [107]. Such a project
would enable library schools to place their training programmes in a local context, using
relevant up-to-date information. However, there are still a number of dark spots to be
cleared in the area of librarianship education which it is necessary to uncover for timely
correction.

Library schools have a significant role to play in development, especially as a shortage of
qualified professionals is considered one of the most acute problems for the effective
provision of the necessary services. Unemployment in library and information services is a
challenge to the relevance of traditional. In addition, it points to a need to emphasise the
relationship between education and employment.
Van der Merwe [108] relates the situation to human resource development succinctly when he states that South Africa is twenty years behind the times and many of her educational practices are outdated. Hence it can be understood that the removal of such irrelevant educational practices can be addressed in part by a relevant curriculum.

2.6. EFFECT OF LIBRARY AND INFORMATION SERVICES ON RELEVANCE IN EDUCATION FOR LIBRARY AND INFORMATION SCIENCE

Ensuring relevance is critical to the future of library and information science education because training must be geared to the needs of individual library and information services and to the graduates who seek to work in them.

Thus, professional practice sets the standards for skills in different information services. In turn, students expect that the lecturers provide such skills and standards required by practice to them. This has implications for the work of lecturers. To achieve these varied expectations, a curriculum must be established to guide the profession through change and continuous improvement.

In view of these expectations, a high degree of convergence of views has emerged around the need for the national co-ordination of training and the need for greater articulation and portability of skills. Hence, the National Training Strategy (NTS) [109] has focused amongst other things on the need for the effective co-ordination of all education and training efforts. This signifies that learners should be given training and education that will enable them to work in both the developed and the developing context of South Africa.

A closer look at the problems relating to the library and information science curriculum in South Africa reflects on the curriculum's inadequacies to meet the expectations. For
instance, although programmes of education for library and information science in South Africa seem, on the surface, to have clear objectives, whether these are met in practice is a different matter. SAILIS Standards give a convenient source of general objectives common to all library schools. The library schools are responsible for the formulation of specific objectives compatible with these general aims:

- Professional competence which encompasses knowledge and technical skills.
- The acquisition of a scientific approach or scholarly approach to the problems of practice.
- A sense of social awareness and understanding.
- A service-oriented approach and a cultivation of professional ideals [110].

Consequently, the general objective of the Department of Library and Information Science, University of Transkei, is to educate and train professionals to satisfy the need for trained practitioners in library and information services [111]. In accordance with the Association's objectives the development of a relevant librarianship curriculum for South Africa implies that such a programme should mesh with the needs of both the first world and third world South Africa.

If such objectives were not considered as mere statements of policy, curricula for the training of library and information professionals would relate to different library services and user needs in South Africa. However, looking at the issue of training from the perspective of the employee one sees inadequately educated and trained graduates [112].

Also, if one takes the library and information science curriculum, it is difficult to believe that the peculiar needs of the different sections of the country have been reasonably
articulated. This is because, currently, most LIS curricula provide little in the way of skills that open up opportunities for employment in both the first and third world South Africa.

In addition, it appears that, in a number of instances, whenever curriculum reforms are looked upon or actually carried out in some schools or departments of librarianship in South Africa not enough facts are gathered from libraries, about their services and mode of delivery. For example, rural communities have special, largely unrecognised information needs, according to Vermeulen [113]. In these particular cases the needs of the large majority of South Africans have not been addressed through shaping the curriculum toward both their general and specific needs.

The Library and Research Project Team [114] comments that current conceptions of librarianship education generally make the false assumption that South Africa has a literate society. As a result library schools tend to proceed without acknowledging crises in education. Hence, librarianship has in the first place focused on serving the needs of users in industrialised societies. This demonstrates that librarianship education based on such a foundation cannot equip South African graduates with the necessary skills to meet the needs of the developing country.

The problems suggested are due to the habit of adopting librarianship curricula from developed countries. For example, Matoti reports with respect to general education in schools in the former ‘independent’ Transkei that:

> It is worth noting that whenever Transkei sought to bring about changes in her system of education, especially content education, she intended to look upon the Cape Education Department syllabi pattern. there is no evidence she ever tried to produce something unique answering her specific needs [115].

Also, from his experience of educating librarians in developing countries Dean confirms the practice of transplanting curricula developed elsewhere in librarianship. He complains about
a tendency for schools of librarianship in other developing countries to seek to produce a librarian who is specifically oriented toward the satisfaction of the library needs of the intellectual elite of the particular country. He reasons that there is rarely sufficient emphasis on the needs of the less privileged socio-economic groups and neo-literates [116].

Likewise, the prospectuses of library schools from the underdeveloped areas such as the Universities of Fort Hare and Transkei suggest that at the moment these schools of librarianship do not have a systematic programme which shows understanding of other types of library services other than the Anglo-American model. Lack of accommodating other types of services leads to the neglect of equipping and encouraging librarians to solve problems related to other services other than the first world model.

The Arts LIS Committee [117] argues that the effective and efficient use of library and information services together with the use of information for scientific and clinical purposes requires a major co-ordinated training programme. The concept of library practice as the basis of curriculum development so strong. However, it is not surprising if the majority of library and information since curricula are not regarded as relevant. The penalty of ignoring professional practices in curriculum development includes the ineffective and inefficient operation of library and information services [118]. In contrast, in the UK there is evidence that efficiency in graduates' education is based on the needs of students and employers [119; 120].

Also, neglecting to take into account the needs of library and information services has been the cause of much of the failure to ensure innovations are implemented. For example, evidence by some library and information science students [121; 122] at the University of Transkei signifies that librarianship education is of a very abstract nature in order to facilitate the transferability of learned skills to the work situation. This further emphasises the weakness of library and information science curricular failure in meeting the needs of
practice because of stressing theory first. This was seen to be a problem, as sources with Chapter One have demonstrated.

It is argued that a key component of curriculum development is a resource guide that identifies key library trends, needed skills, critical areas of expertise, learning activities and resources, and a curriculum for setting objectives and taking action steps.

2.7. SUMMARY

The questions that are raised above have important implications for education in library and information science in Transkei, particularly in respect of the roles for which library and information science departments prepare students. The main consequence of this is that curriculum development in South Africa appears to have ignored the environment in which the library functions. As library services change, they influence education needs. Thus the emphasis on environmental analysis refers to the contexts in which library and information practices occur in the real world, outside the institution as well as the context in which such education takes place.

Account must be taken of the learners' need of curriculum relevance and use of professional education for their future development and to the full range of their personal goals. Education should seek to secure commitment of students by offering programmes whose immediate application to the world of work appears evident. As part of their education both activities and information needs in the longer term should be accepted. These goals must be the purpose of librarianship education. These can be understood in societies where the level of development dictates that information needs' considerations take priority in order to fulfil the user needs. Education, however, should take a broader view. The directions of change at work call for qualities that are best developed by means of broad education which combines orientations that draw students into the changing world of professional practice.
With MPCCS, more attention has been given to increasing coverage of basic services. Their development has led to greater emphasis on ensuring that the most efficient use is made of scarce resources. Information must be obtained to support these needs. In addition to considering the needs, they must be provided for in the educational programmes. It is suggested that it is important that curriculum must be developed for both immediate and future library practices. Hence local and national library service trends are also important in planning curriculum development.

A concern with reality ensures contexts as well as functions are an integral part of the library and information science curriculum. This is because planning the curriculum is not an abstract exercise, but one that is intimately influenced by factors such as the environment and the related skills and knowledge. The significance of inclusion of all library types is indicative of organisational pressure to start acquiring those skills that will help close the gap. Hence, an integrated curriculum in which diversity of issues are infused in both academic and professional practice would likely be quite effective in ensuring knowledge, skills and qualities on the part of graduates who are working within the South African context. Means for achieving these goals might be achieved through relevant curriculum.

Evidence given in this chapter points towards the institutional and social framework of the curriculum. Thus the debate suggests that the development of librarianship education must be located within the broader evolution of South Africa to democracy, which has corresponding socio-economic, political and educational components. Hence, librarianship education must contribute towards the education of librarians who can respond to the needs of all communities in South Africa.

Although the evidence also identifies the barriers to full and equitable involvement in librarianship faced by students, government policies reflect the belief that all citizens should be guaranteed equality in education.
REFERENCES


7. The Minister of Education. Speech of the Minister of Education at the Launch of the Library and Information Association of South Africa: (LIASA), (1997 Jan. 8-10: Pretoria), Unpublished

8. Ibid.

9. Ibid.

10. Ibid.


17. Nassimbeni, M. 'The Imperative for Change: Curriculum Revision in South Africa'. Education for Information, 1988, 6, 169


23. Ibid.


29. Tamir, P. 'Professional and Personal Knowledge of Teachers and Teacher Educators'. *Teaching and Teacher Education*, 1988, 6, 169

30. Ibid.


33. Kaniki, A. M. 'Specialist Training for Information Provision to Rural Communities in South Africa'. *Innovation*, 1994, 9, p. 35-42

34. Dick, A. L. 'Reflecting on the LIS Curriculum in South Africa'. *Discussion Document at a Seminar on Curriculum Development Held at the University of South Africa*, 1997


59


42. Ibid.

43. Reconstruction and Development Programme Document, 1994, p.4


46. Underwood, P. 'LIS Education in South Africa: The Advance from Neutrality'. The Library Association Record, 1996, 98 (3), 147

47. Dick A. L. The Philosophical Basis of the Library and Information Science Curriculum in South Africa. Paper Read at University of Fort Hare: Department of Library and Information Science Workshop on Curriculum Development, 30th November - 1st December, 1995


52. Ibid.

53. Havard-Williams, 'Appropriate Education'. SAILIS Newsletter, 12 (9), 1992, p.1


58. Republic of Transkei, Department of Education Education: Annual Report, 1992, p.70


61. Ibid.


66. Ibid.


68. Ibid.


70. Frylinck, J. H. *The Possible Adaptation of Library and Information Services to the Needs of Developing Communities in South Africa*, Unpublished, 1984, p.1

71. Ibid.

73. Ibid.
75. Benjamin, P. 'Multi-Purpose Community Centres in South Africa'. *SAILIS Newsletter*, 1996, 16 (10), 6-9
77. Benjamin, P. 'Multi-Purpose Community Centres in South Africa'. *SAILIS Newsletter*, 1996, 16 (10), 6-9
84. Dick, A. L. *The Philosophical Basis of the Library and Information Science Curriculum in South Africa*. Paper Read at University of Fort Hare: Department of Library and Information Science Workshop on Curriculum Development. 30th November - 1st December, 1995
85. Reconstruction and Development Programme Document, 1994, p. 4


89. Department of Manpower. 'Manpower Survey no. 18: Occupational Information, 1990'. In Nassimbeni, M, Stillwell, C. and Walker, C. 'Education and Training for Library and Information, Innovation, 1993, June (6), 34


91. Interview with Malotana, V. N. Transkei National Library, Umtata, 04 February, 1994

92. Interview with Mrara, A. Department of Geography, University Transkei, 12 November, 1996

93. Republic of Transkei, Department of Education. Annual Report, 1992, p.73


95. Ibid.


97. Interview with Potelwa, B. Department of Information Science, University of Transkei, 17 June, 1998


111. Department of Library and Information Science, University of Transkei. Prospectus. 1998, p. 66
118. Ibid.
121. Interview with Niklaas, F. University of Transkei Library, 03 June, 1993
122. Interview with Jonas, S. University of Transkei Library, 03 June, 1993
CHAPTER 3: REVIEW OF RELEVANT LITERATURE

3.1 INTRODUCTION

In South Africa, the Reconstruction and Development Programme [1] proposes curricula that will prepare students at all levels for the challenges of reconstruction and development. Library and information science is no exception. This is in view of the need to develop a relevant curriculum to support reconstruction and development by training the necessary human resources.

The literature shows that the search for relevance is not confined to so-called third world countries like South Africa. For example, since the 1980’s the literature on curriculum development from United Kingdom and the USA as well as South Africa, has addressed curriculum change in librarianship education [2; 3; 4; 5]. It has been observed that education is not relevant and that the competences of librarianship graduates are inadequate.

Practitioners' [6; 7; 8], educators' [9; 10; 11] and students' [12] disapproval has been expressed at the inadequate attempts by library schools to match students' learning needs with the educational needs of the profession. Burrell [13], Conant [14] and Martin [15] addressed this problem when they stated that practitioners often viewed the students' education as having been of doubtful value. Hence, they urged curriculum designers should move away from traditional methods to methods that would empower students. In recent years Dick [16]; Reid and Brown [17]; Underwood [18] plea for a curriculum that will transform conventional librarianship practice.

Yoloye [19] and the South African Institute of Library and Information Science [20] have appealed to curriculum planners to provide the students with a curriculum which on completion of their education will equip them with the necessary competencies.
3.2 DEFINITION OF TERMS

3.2.1 CURRICULUM

Curriculum is defined as the planned interaction of students with instructional content, instructional resources, and instructional processes for the attainment of predetermined educational objectives [21]. Davies [22] identifies this as all teaching and learning activities planned and provided for students. She goes further to explain that the curriculum is what is taught, and instruction is how it is taught. ‘Therefore, the instructional programme is both the curriculum and its implementation processes, procedures and services’ [23].

This definition exceeds the level of stated aims and content of the traditional curricula. It involves:

- the learning and development of individual students;
- the nature of knowledge and developments in knowledge itself;
- the teaching process of educators;
- the practice of professionals;
- the changing needs and interests of society;
- the library institutions to set the context.

These factors interact in a strong manner to produce a complex set of relationships. Curriculum cannot be removed from these factors. This is because curriculum cannot be viewed as an ‘abstract idealised prescription of the education process’ [24].

In addition, van Brakel and Boon [25] argue that a curriculum is the subject of a continuous process of change and ‘curriculum development’ is the term best describing the activity.
Development suggests a more incremental or evolutionary process and negotiation between different perspectives and a degree of flexibility and openness about the end result.

3.2.2 RELEVANCE

Relevance is a concept that should be included in curriculum development. Curriculum relevance is normally taken to mean a training programme that is strategically planned in conjunction with the stakeholders, that is linked to the goals of training and skills formation, and which offers worthwhile training relevant to the profession [26].

This definition suggests that the concept of relevance is a broad view which can include practical, theory, learning, teaching, political, social and cultural contexts. It implies that education will have an accepted input and be made available to all who want to follow the profession.

3.3. EXPLORING APPROACHES TO CURRICULUM DEVELOPMENT

One of the purposes of the study is to investigate a curriculum that will attempt to equip graduates with a broad range of generic and transferable skills and allow for their continued professional development. Thus, it is important to discuss some of the major approaches to curriculum development which may serve as theoretical foundations. As one particular approach to curriculum development may be more appropriate for one aspect or for one stage of students' development than another, several possibilities will be explored here, along with their implications for library and information science education.
3.3.1 CONTENT-BASED APPROACH

In the content or subject-based curriculum, knowledge of the subject assumes an important role. As such the basis of such a curriculum is content to be learned. Decisions on the content are largely the preserve of the academics in the discipline [27]. As the traditional librarianship curriculum often includes a portion dealing with theory underlying the operation of library services, this theory portion does not teach students to perform tasks. Rather, it teaches them to describe library functions.

The weakness of a theoretical approach to curriculum development is that it leads to a traditional approach to teaching and the perpetuation of an instructional view where the role of the lecturer is to pass on knowledge and skills. The deficiency in relating basic knowledge to real professional problems does cause problems. This is because real professional problems can be solved in many ways to develop the best solution.

In addition, the abstract nature of the content-based curriculum suggests that students may not achieve attributes desired by the market. For this reason, White [28] criticises a content-based curriculum as he observes that theory-based practice can be unworkable because practice is so complex. Higher skills cannot be developed in the abstract or in the absence of an informed context [29]. It is therefore suggested that for curriculum control to be effective, there must be more flexibility over teacher-learner contact, and this means less autonomy for the lecturer.

Also, there is opposition to a content-based approach to curriculum development because employer expectations provide additional perspectives for the overall understanding of the field of librarianship. According to Lunin and Cooper [30], the librarian faces a bright future but only assuming s/he has the right combination of qualities and qualifications needed by prospective employers.
Also, Ochogwu [31] argues that professionalism is not the receipt of subject-based knowledge. According to him it requires an understanding of the process of learning, the enthusiasm and motivation to grow, and a shared commitment to finding ways of doing things better.

In short, the main concern of the content-based approach is knowledge, so that both lecturer and student both regard their task primarily in terms of knowledge transfer. With librarianship the focus is an activity. Thus, a curriculum with an emphasis solely on the theoretical side of librarianship will tend to produce graduates who will have had a hard time in the real world.

3.3.2 THE RATIONAL PLANNING APPROACH

The realisation that a content-based curriculum has weakened the relationships between library schools and information services also leads to an understanding that this model has involved failure in the quality of students' learning and experience. Therefore, the curriculum has needed to move beyond that of content and to be concerned with aims and outcomes that challenge the content-based curriculum [32] - a rational approach to curriculum development.

The rational approach to curriculum development has also been called the 'academic approach' [33]. According to Squires [34] rational curriculum development is linked to the advent of systems analysis and to the work of behavioural psychologists. This development required observable learning outcomes and that outcomes be stated in terms of changes in behaviour. Moreover, much work on curriculum development has derived from assessment and evaluation, and is concerned with measuring what has to be learned. The determination of what had been learned 'refers one back to the matter of aims and objectives' [35].
According to this approach curriculum development is a systematic process directed by academic rationality and theoretical logic. Consequently, the curriculum specialist or specialist team is placed in a position where, without the stakeholders involved, curriculum decisions can be made unilaterally [36].

It is worth noting the influence of this aspect of curriculum theory on curriculum development in librarianship in South Africa, as the works of Tyler [37] have been used as the foundations for curriculum development. For example, Nassimbeni [38] quotes Tyler as suggesting that curricular objectives are derived from the learner, the society and the subject. In addition, de Bruin [39] says that the curriculum is composed of an aim to be striven for by education, the content to be learned, the methods and techniques to be followed, the evaluation of the end result and the scheduling of the education so that it will be completed within a certain time. This is the basis of Tyler's curriculum cycle. Objection to the rational model is that fragmentation of understanding can follow from long lists of specified objectives [40].

Moreover, within the South African context, the criticism to the rational planning approach, as has been indicated in Chapter 2 is an example of curricular professional programmes, techniques and issues which arise predominantly from the West, and specifically in the USA. This means that adherence to this model of the curricular concerns and interests of the first world information profession are not relevant to a developing community like Transkei. However, taking both the acceptance and criticisms of a rational, objectives-based approach it may be unwise to repudiate it completely. This is because in teaching there is a need to both effect learning and to have evidence that learning has occurred.

The aims of librarianship must be taken into account. These aims, as indicated by the theory-practice debate, may be to acquire theoretical knowledge and to acquire the ability to perform with some degree of efficiency certain library activities. With librarianship
A 'means-ends' view is unavoidable and the objectives model has provided and continues to provide a popular framework for library and information science curricula in South Africa. As a statement of desired teaching-learning outcomes, such objectives constitute guidance for the acquisition of learning and testing or criterion referenced assessment [41].

3.3.3 METHOD-BASED APPROACH

Squires [42] says that the distinction between content and process is another way in which the concept of curriculum goes beyond that of the traditional curriculum. He calls this curriculum approach a process-based approach whilst White [43] calls it a method-based approach. According to Squires [44] the process-content distinction has had the effect of making lecturers aware of what students 'do' with content. The benefit of a method-based approach to curriculum development is its practical, systematic and reality vocational focus.

Hence, the vocational approach to librarianship training has been accepted as one of the chief means of providing graduate librarians with the necessary skills, the underlying assumption being that the major deterrent to employment is a lack of skills [45]. Vocational education emphasises qualities that would lead to professional competence. Competence has been translated by higher education institutions into skills, attitudes and qualities that can be introduced into the curriculum [46]. It is considered that a graduate should be 'competent' i.e., knowledgeable, creative, realistic, flexible, capable of meeting current needs and meeting anticipated needs [47].

Further, the content-process has helped to clarify the complex notions of 'level' and 'difficulty' as Squires explains

... (l)evel and difficulty are more crucially a matter of process; of how one engages with content. The decision depends on an analysis of both the internal structure of subject or field, and the aims of the course [48].
Examples of two types of method-based curricula designs which are regarded as a departure from the traditional approach to the curriculum are competency-based education [49] and the task-based or procedure-based curriculum [50]. These curricula are also called vocational because they focus on competences' or skills' development.

Insofar as the Foundation for Research Development's (South Africa) [51] criticisms are focused on lack of skills and technology use in amongst other things, and a lack of flexibility in facing changing needs, the Foundation's approach can be seen as part of a new ideology in education and training which is vocationalism.

3.3.3.1 THE COMPETENCY-BASED CURRICULUM

Hermann [52] defines competency as a performance capability needed by workers in a specified occupational area. He also points out that competencies may be cognitive, attitudinal and/or psychomotor and that a competency does not imply perfection. 'It implies performance at a stated level or criterion (which) needs to be specific for each occupational area' [53].

The CBE movement appears to have developed out of events in the 1970's both in UK [54] and USA [55; 56]. The emphasis was on perceived needs, accountability and personalisation. This concept of competency-based education, rather than competency based library education, is selected for consideration because the concepts of CBE are applicable to many different areas of education. With such an approach to curriculum development, the achievement of such an objective is reported as a component of the students' employability profile [57]. Jowkar [58] writes that a competency approach places stress on the practicability of the content of programmes. In the School of Library and Information Science at the Syracuse University in the USA competency based education has been used as a basis for constructing learning and relevant careers for librarians [59].
Stoffle and Pryor [60] say criteria levels must be a part of each objective as a standard against which to compare performance. The basic characteristics of CBE have been defined as follows:

(i) Role-relevant competencies that include standards are identified and stated.

(ii) Competencies are specified.

(iii) Criterion-referenced measures are used to measure the achievement of competencies.

(iii) A system exists for documenting the competencies achieved by each student [61].

In addition, in order to achieve maximum flexibility, CBE usually incorporates some form of individualised learning.

The following characteristics are seen as desirable:

(i) Individualised materials and methods are used in instruction.

(ii) Learning is flexible.

(iii) Learning is guided by feedback [62].

The rationale for competency-based learning includes claims that it is more cost effective, more relevant, more flexible and more fulfilling than traditional forms of curricula. It is argued that because CBE programmes are closely based ‘on specific job requirements’, this ensures that students are taught the relevant and current skills required for employment. According to Jowkar, of these outcomes, ‘meeting perceived needs’ has been paramount in informing curriculum development [63]. However, CBE can be criticised on this account. Simply meeting existing needs would indicate a stagnant profession with no professional growth [64]. Yet librarianship continues to experience significant changes.
Because of the tendency for specific occupational demands to be central in curriculum development with CBE, students can be trapped because of occupational immobility. This works against flexibility and the generic skills to which South Africa aspires. Meeting employers' demands, therefore, does not necessarily translate into job mobility. A position that is a reconciliation between what the employers need and what the students need is thus more tolerable.

Also, lack of uniformity amongst all educational institutions or programmes that call themselves 'competency-based' has been held to be a disadvantage for this type of approach to the curriculum development process [65]. As a result, CBE has not really been well accepted by many academics in South Africa. Many academics and others responsible for training are 'unconvinced about the values and merits of competency based education'. Research findings have after all so far have not been positive [66; 67]. A curriculum which stresses the practical side will tend to produce graduates who will have difficulties coping with derivations from what they were taught.

3.3.3.2. TASK-BASED CURRICULUM

In the face of such criticism competency based education has therefore been redefined to refer to the underlying cognitive representations that enable performance, and has included in the targeted performance some of the professional concerns such as problem solving and right attitudes [68]. These include transferable skills based on the task-based approach to curriculum development.

For task-based education the term ‘procedure-based’ is often used interchangeably [69]. Task-based education is similar to competency-based education in some aspects. As with CBE, task-based education requires that the knowledge, skills and attitudes taught in a programme are those required by workers to perform successfully in the related occupation.
However, task-based approach expands beyond the competency-based approach through the following:

the identification of generic tasks which are transferable to other contexts; closer vertical and horizontal articulation between education and training systems; prompting the concept of life-long learning and blurring the concept of education and training [70].

Such a curriculum is based on a statement of what a student should be able to do [71; 72], the conditions under which the tasks will be performed and the standards for evaluating the performance. In addition, it encourages a modular structure for librarianship education. These considerations help to distinguish task-based education from other kinds of educational provision. It is believed that these details would help provide flexibility of provision of library and information science curriculum development in that task-based programmes are assumed to have a strong association with the profession as well as with life after college [73].

The advantage of such strong association with the work is that it would have a key role to play in easing the transition from college to work and in enabling graduates to acquire employment-related skills [74]. This is because task-based education not only enables the acquisition of knowledge, but gives more emphasis to the exposition of knowledge, the inculcation of values and attitudes as well as the transmission of skills used within the library and information science profession. On completing the programme the learner will therefore be prepared with a view to entering a career.

Also, this form of education is defended by Mwamwenda [75] when he describes the three major purposes of education as civic, personal and utilitarian. He emphasises the need for skills, knowledge and respect for values. The main rationale for the introduction of skill-based education is to increase the relevance of education and to cope with changing work patterns. Harmon [76] concurs as he believes that procedure-based education encompasses
such notions as relevance, objectives, pragmatism, guided experience and education for employment.

Writers [77; 78; 79; 80; 81] proposing the academic approach to curriculum development have tried to reason that the relationship between skills and knowledge are readily separable and context independent and therefore easily transferable. On the other hand, task-based education proponents argue that many skills, knowledge and theory are context dependent. In this respect, Morris [82] says the idea of cutting back a knowledge-based content and replacing it with transferable skills, is not appropriate at higher levels of education since knowledge, theory, reflection and application are inseparable. If they are separated, he argues, knowledge can become inert. Thus greater involvement with practice could be highly educative, ‘since practice is partially constitutive of the content of knowledge’ [83]. However, this is not to argue that the education of professionals based on task-based educational ideas should take on the roles of occupational training as with competency-based education.

In the context of the task-based education debate, it may be argued then that the key concern should not be with theory first but with articulating the responsibilities of the profession. Hence, if library education is to serve library practice it must assume a form consistent with the aims of library practice. The question here is not only whether curriculum has struck a balance between its academic and vocational components.

According to Erridge and Perry, [84] it is rather whether the content of the librarianship curriculum is relevant enough to the profession in which the student wants to seek employment, after graduation.

Carl [85] states that South Africa has a need for the dynamic curriculum development of a tertiary education that prepares students for the world of work and theoretical studies which
contain work-related skills. The implication of the statement is clear; that the mainstream of
the curriculum needs to be relevant to the world of work.

Certainly, the essence of professional growth demands a response from both educators and
practitioners to respond to unforeseen circumstances. Psacharopoulos [86] advises that as
both jobs and graduates keep changing educators can support responsiveness to change.

Education for the real world should not be confused with education for the harsh
demands for the present world... Education for the real world may include helping
[students] to think and see things in new ways so that we can more easily change
circumstances and thus forge a new and better reality [87].

As the task-based curriculum is tied to the activities of library and information services, if
such activities change in emphasis, so will curriculum development. An analysis of the
needs of the graduates in the light of the demands which library and information services
will make upon them, will produce a curriculum that will meet these needs. The necessary
conditions are 'a realistic time scale, adequate resources and attention to library services in
which graduates will have some chance of working' [88].

In South Africa, the development of new technologies has spawned a new range of library
activities, for example, searching online databases and helping in the exploitation and
utilisation of new technology. In view of these developments in librarianship, Morehead
[89] argues that with the extent that computer technology pervades library operations,
activities involving the use of IT should be redistributed throughout the curriculum so that
computer and other technology topics fit in naturally whenever and wherever they belong.
The design of a task-based curriculum allows the accommodation of new activities
comfortably. In turn, this is giving rise to new forms of teaching and learning.

From the description of task-based education it is evident that among the curriculum
premises underlying its approach are that:
- Job analysis provides a sound basis for making decisions for curriculum development and the training of professional librarians.

- The library services set the context which has an influence on curriculum development.

This implies that a task-based curriculum is more than just a formal academic programme.

3.4 SUMMARY

The academic model in decision-making with regard to curriculum development is based on a theoretical and academically logical argument. The task-based approach coincides with the academic model in that it also makes uses of the means-ends pattern and is based on the Tyler rationale. The specification of learning outcomes or desired behaviour are key in both approaches but they differ in regard to the relationship between means and end, the methods for identification of instructional goals, the structure and formulation of outcomes. The bases also differ in important aspects.

While there are fundamental differences between competence-based and procedure-based approaches to education, both share the view of curriculum development as the embodiment of assumptions made by the educational system, the content and competencies or activities related to meeting predetermined outcomes.
REFERENCES

1. The Reconstruction and Development Document, 1994, 14
5. Nassimbeni, M. 'The Imperative for Change: Curriculum Revision in South Africa'. Education for Information, 1988, 6, 155
8. Zaaiman, R. B. 'Differences in Educational Programmes for Libraries and Information Officers. Education for Information, 1984, 2, 102


15. Martin, S. K. 'Library Education: an Administrator's View'. *Journal of Library Administration* p.4


23. Ibid.


31. Ochogwu, M. G. 'Producing the Basic Competencies in Information Science Education in Nigeria'. Education for Information, 1993, 11, 147-154


34. Squires, G. The Curriculum Beyond School, London: Hodder and Stoughton, 1987, p. 81

35. Ibid.


46. Ibid.

47. Ibid.


52. Hermann, G. *Developing Occupational Courses*, Sydney: Macquarie University, 1990, p. 60

53. Ibid.
60. Stoffle, C. J. and Pryor, J. M. 'Competency Based Education and Library Instruction'. Library Trends, 1980, 29 (1), 58
62. Ibid.
63. Hermann, G. Developing Occupational Courses, 1990, Sydney: Macquarie University, p. 62
66. Ibid.

85


74. Ibid.


84. Erridge, A. and Perry, S. 'The Validity and Value of National Vocational Qualifications: The Case of Purchasing'. The Vocational Aspect of Education, 46, (2), 1994, 139-154


86. Psacharopoulos, G. 'Education and Work: the Perennial Mismatch and Ways to Solve It'. The Vocational Aspect of Education, April, 1991, (114), 127

87. Triggs, E. 'The Quest for Pre-Vocationalism: a Context'. The Vocational Aspect of Education, August, 1987, 39 (103), 48

88. Poole, M. 'Job Choice and Advice'. The Vocational Aspect of Education, 35, (90), 1983, 21-27

Also, with the realisation that education be occupation related, the government has appealed to education and training institutions to focus on educational outcomes. For example, in 1995, Fort Hare University, South Africa was financed to restructure the library and information science curriculum to achieve competence in professional education [2]. Such an attempt involved both practitioners and academics in analysing the activities performed in libraries as a basis for curriculum development and education.

*It was argued* that without identifying the variables affecting curriculum development, one could only guess what the relevant curriculum should address. It is further suggested by this vocational approach to curriculum development that if the librarianship profession seeks to address relevance, such curriculum relevance will be attainable by variables that yield high predictability and control of the present and unforeseeable future. As Dudley and others [3] state such an investigation is important to define current and future educational and professional needs and curriculum responses as well as the influence of the curriculum on library functions.

The main variable of interest in this study is the dependent variable of the relationship between the curriculum and teaching and learning. This is because relevance, which is essential for librarianship curriculum development, relates chiefly to the curriculum, teaching/learning, practice and academic credibility. There are several issues that almost all schools of librarianship address in their conceptual framework. Some of the most important issues that library schools and that are independent variables that influence the dependent variable that might be taken to be indicators of curriculum relevance are:

1. Professional practice
2. Other curriculum models
3. Participants in curriculum development.
CHAPTER FOUR: THE THEORETICAL FRAMEWORK: CURRICULUM DEVELOPMENT

4.1 INTRODUCTION

The purpose of this chapter is to discuss factors from which curricula frameworks are derived. There is a need to lay down the components of the conceptual framework of the curriculum so that the individual nature of each programme can be clearly understood. The purposes achieved by giving a theoretical framework for curriculum development is emphasis of certain aspects and facilitation of distribution to the stakeholders.

In South Africa, each library school has a different list of essential conceptual issues, depending on the priority of values for that school of librarianship. Hence, the establishment of a suitable curriculum programme of study in library and information science has been a critical issue for years in South Africa. Although all previous curricula may have been developed to ‘offer useful guidelines in terms of which action to take in [librarianship] education’ [1], the suggestion is that library and information science education in South Africa is insufficiently relevant to professional practice. Apparently, professional curricula have been developed with a narrow perspective of variables that affect harmonious relationships in the curriculum.

In South Africa, challenges reflecting the redefinition of librarianship education and ways of making it a more explicit form of education and the transformation of the nature and conditions of the library and information profession are evident. According to job advertisements, the basic standard on which graduates are selected as a necessary condition for employment is ‘relevant education’. As a basis to attain such an ideal of relevance a planned curriculum is needed.
The independent variables are also interrelated. In addition to these, the South African Institute of Library and Information Science [4] suggests that each library school should discuss the setting. Changes in any of these elements alter the conceptual framework and, in the possible curriculum, alter the curriculum.

4.2 PROFESSIONAL PRACTICE

Library activities lie at the heart of professional practice. It is hypothesised that the physical and socio-cultural environment in which librarians find themselves acts as both stimulus as well as constituting a basis for the framework in which education will be met. Hence, the librarianship curriculum can be understood by being placed in context, as ‘one cannot separate [the] curriculum either from [the] library services which created it or from the individual who perceived it’ [5].

In respect to contextualising curriculum development, Fokker [6] and Tau [7] argue that an understanding of how people apply their ability to professional practice is both desirable and useful. This is because skills help to guide professional preparation and in developing skills to fit particular contexts. As such, the curriculum developers should very closely relate planning for the curriculum to the problem of meeting the needs of library and information services as well as the graduates who will provide such services.

In addition, Shillinglaw [8] observes that social change and technology have brought new elements in the practice of library and information science activities. Taking into consideration social change, the library and information services are a forceful major factor influencing education, training and employment, with respect to both the use of technology and to changing professional inputs to society.
As Hyland puts it:

The pace of change in education ... has produced a fluid and uncertain professional practice in which lecturers are required to be flexible, critical, reflective and knowledgeable about a vast range of curricula matters [9].

It is acknowledged in South Africa that there is a need for a curriculum that is responsive to change to safeguard the profession as a whole. Addressing library professionals in South Africa, Cronin [10] has advised that librarianship will neglect to respond to social and technological change at its peril, and that the library schools have a duty to be sensitive to such change.

Within South Africa, it can thus be assumed that the mismatch that is observed in the education of professionals derives from a difference between radically changed practice and the imperfect system of student preparation which leads to the perpetuation of out-dated practices. This problem highlights the fact that in library and information science, the curriculum cannot rely automatically on its current resources to achieve the quality expected by its stakeholders. Burrell [11] suggests the importance of an approach to vocational education which analyses, lists and describes in detail the aims and activities of librarianship as a basis for the preparation of librarians. He explains

this approach is a source of strength that more than compensates for the lack of a philosophy or comprehensive theory or even a set of principles of librarianship [12].

This is because the developments in library practices suggest possible curriculum changes. Consequently, job analysis helps cope with the new diversity of tasks and trends caused by change as new activities are included in the curriculum.

The assumption that emerges here is the need for an acceptable job description, against which the curriculum can be modelled. The activities performed in library
and information services make a significant input to curriculum development. As Fokker [13] argues, a curriculum should be based on up-to-date information concerning the actual tasks performed in the library, and the tasks likely to be performed in the near future. Such a curriculum will then be based on a model representing a logical sequence of actions carried out in the process of broad library tasks. It is emphasised that library services are central to curriculum development and are the basis of the professional language.

For example, 'When students learn these words they will be able to speak the professional language' [14]. Moreover, libraries and information centres investigated in this study are all engaged in essentially the same activities. The only essential differences are due to the size and scope of the services provided [15].

In the context of this study an assumption is made that the failure of curricula to take library activities into consideration in curriculum development has been a contributory factor to irrelevance in curricula. The unifying effect of the activities is important in relation to curriculum relevance because they are directly related parts of the objectives of education and practice. If the curriculum developers have a clear understanding of theoretical concepts, expected innovation and the activities to be performed, they can contribute more adequately to the accomplishment of the goals of education.

4.3 OTHER CURRICULA MODELS

One of the strong complaints about educational irrelevance in South Africa can be seen to come from inappropriate curricula models. A reflection on the models that have been used in the development of the curriculum in librarianship in South Africa can help to explain the complaints. Most of these models have been adopted and altered in the light of a number of reasons, and amongst these could be the search for relevance.
The key question, then, is to what extent the models reviewed in this study helped information services to meet the needs of all the different users within South Africa. The assumption can be made that the training undertaken by the professionals has been through the curricula that have been used in the country, that is: the content-based curriculum, the rational curriculum and the current South African national model [18] of Kruger. Underwood and Nassimbeni [27] observe the latter model of librarianship education and its concern with ethical principles is strongly influenced by Anglo-American and European concerns and practice.

As indicated in Chapter 2, the observation made about inability of librarians to serve certain communities was that it seemed that these librarians based their approach mainly on the education they had received [22]. Implicitly, this finding acknowledged the irrelevance of the curriculum education they had undergone. Further, one of the concluding comments of this SAILIS report on the survey reads:

It is clear that it is extremely dangerous to have a rigid preconception of the nature and function of a library. If such a preconception was implanted during the librarian's professional education, it was most likely based on concepts that originated in highly developed countries in Europe or America. In South Africa these ideas [would] probably apply to the developed part of the community, but they would be quite inappropriate for the needs of a developing community [23].

Despite the fact that several different models have been used in South Africa, this concept of irrelevance suggests some gaps in the elements of curricula that have been used as a basis to train and educate library and information professionals. The basic problem is the gap that separates the reality of the local context from the ideals and methodology which underlie the foreign educational models that are adopted and followed. This is an important explanation for the lack of relevance. Consequently, these curricula have been developed to improve on previous curricula rather to respond in a specific way to the needs of indigenous employment. The link
between the environment created by the community served by the library schools and the library practices operating is made clear here.

According to Underwood and Nassimbeni [28] this is, in part, a reflection of the education, training and experience of many library and information science educators and also of the types of teaching materials and textbooks readily available. The missing elements in content-based, rational and competency-based education, that is, library activities and user needs are unattended aspects of the curriculum. Proposals for a change in emphasis in education imply that the system is under-functioning and many professionally concerned with education agree [29, 30].

The inability of the previous curricula not to contribute to relevant professional practice suggests that there was a mismatch between the professional provision and curriculum models. Whilst this means that education and training of library and information professionals should be made more relevant to the needs of the country, this does not exclude relevance to international standards.

Watson maintains that 'where ... professional education has been successful, it has been because such countries ... have developed their own indigenous approaches for job specificity' [32]. This means that in the University of Transkei, the models of other countries may not be appropriate ones to use, because the needs are different and the context is different. Also, there may be irrelevance, with traditional curricula having deeply attached learning methods continuing to make the task of transfer of skills in working contexts difficult. In this respect, vocational education is an attempt to encapsulate a new paradigm in a new education system. It arises from a critique of a form of education that has existed in librarianship education.
4.4 PARTICIPANTS IN CURRICULUM DEVELOPMENT

One of the flaws of library and information science education in South Africa is that consensus curriculum development methods have been much ignored in curriculum design. For example, there is no mention of the essence of positive interaction between schools that are to implement the curriculum and the employers who will recruit the graduates of the new curriculum. Co-operation between schools and library and information services is limited mainly to fieldwork [33]. Limited use of co-operation implies that educators seem to have lost sight of the fact that libraries rely heavily on educational institutions for the regular supply of manpower and for the execution of their functions.

With respect to curriculum development, an overview of the composition of curriculum development shows that in South Africa library has two participants. First information science curricula are a matter between the educators of the institution concerned and two curriculum experts [34] from two schools of librarianship on the one hand. Secondly, in the Library Association Standards [35], no consideration seems to have been given to seeking the views of employers and students. At least there is no reference made to any such consultation as one reads through the SAILIS document [36] or the University of Transkei Standing Order on Curriculum Development [37]. Nor are the schools of librarianship made aware of the impact library and information practice can have on their curricula beyond the level of SAILIS, whose activities include setting and assessing curricular standards for library schools.

Attempts to achieve relevance involve, to some extent, placing some experts on to education advisory committees [38], however, such experts may often be limited to either the developed or underdeveloped South Africa. This reliance of library educators on the panel of experts alone has been severely criticised because of their possible ideological viewpoints [39; 40].
Discussions by lecturers [41; 42] indicate that such curriculum development is based on a particular view of expertise that is not necessarily compatible with changing professional practice. Hence the academic based curriculum that is supposed to fit all situations is not a reality. Once these frameworks are seen as interpretations, they raise awareness of someone's effort to persuade [one] of something [43].

Also, Jackson [44] notes that curriculum development is subjective and that use of a particular framework does not necessarily imply objectivity. The concept of education and training as based on traditional curricula by experts results in a failure to arrive at objectives agreed upon, understood and accepted by all stakeholders.

The assumption that surfaces here is that it is inconceivable that a curriculum that is unilaterally planned can be relevant to all those who are going to teach it, to all those who are going to learn it and to all those who will receive the graduates of that curriculum. Here, the curriculum developer takes the role of telling lecturers what principles to follow and how to deliver the curriculum [45].

Evidence suggests that this has not been successful. For example, some of the weaknesses of the rational planning model are described as the problems associated with achieving a consensus [46] on what should be taught. A case in point is the different curricula now in operation in the country that are criticised as being irrelevant. This goes to show that relevance and the high standards to which the profession in South Africa aspires do not necessarily go together.

As indicated in section 4.2 above, what is problematic about the work of curriculum development is that the curriculum should have clear relevance to the profession. Thus in considering curriculum relevance for the profession, one of Goodlad's and Ritcher's [47] curriculum models is based on who should decide in curriculum planning. Their answer to the query is 'those who have access to the appropriate data sources' [48]. In this respect one of the modern developments affecting library
and information science education is the emergence of new forms of variables in curriculum development. There are the growth of employer, educator and graduate visibility, and the various partnerships and collaborative procedures.

For example, in librarianship education a growing awareness in many parts of the world of the importance of co-operation in matters affecting education is witnessed. In the USA [49] and UK [50] terms like 'employer-employee, student-teacher' co-operation have continued to be echoed in publications. In South Africa, such awareness has been evident in the activities of the SAILIS which include setting and assessing curricular standards for library schools, including placement of librarianship students for field-work experiences [51], and providing professional and student membership in its association.

In the mid 1990’s, in South Africa, the National Training Strategy (NTS) [52] privileges the practitioners by arguing that employers should play a pivotal role in curriculum design. The NTS is premised on the belief that employers know best about how education and training can meet the needs of library users. Deliberations in a workshop on curriculum development for Fort Hare University [53] and seminars at the Universities of Transkei [54] and South Africa [55] on curriculum development have indicated a need for wider co-operation amongst the stakeholders in curriculum development. Irrelevance in the curriculum may be due to the fact that the curricula were drawn up without consultation with employers, students and educators.

This framework also provides for organisational goals, learner needs, subject matter and learning theory to be considered as part of the consultation. Consensus in curriculum development emphasises that to make professional education relevant, library schools and library and information services need to understand each other better. Aina [56] has stated that library and information services should be helped to
appreciate the aims of the library school and the context in which they seek to achieve them.

Conversely, library schools and students need to be helped to understand how library and information services are organised; the relationship of library and information services and users; and the process of creating library and information services [57]. This emphasises knowledge more worth having and not just adding topics haphazardly to the curriculum [58].

The importance of such consultation is that development of the curriculum is employment-led, that is, to meet the needs of both employers and employees. While innovation and uncertainty have influenced library services and core skills are also much in demand, the implication of such changes in training and education emphasises that all concerned in the profession should have a role in changing the curriculum.

Musgrave [59] has reminded curriculum developers that the key to the survival of [professional] practice is a succession of practitioners to replace those leaving or needing replacement. Curriculum development is viewed in terms of those who are served by librarianship education, namely, the students, the employers, the practitioners, the library and information service and the higher education institutions that collaborate in validating librarianship courses. The assumption here is that feedback from such sources should help inform curriculum development.

As a result, in order for the curriculum to respond more effectively to the needs of the profession, the content of library and information courses must also be presented to reflect the co-operative role between library schools and practice in the learning process. Provision for such interaction should enable employers and students to have input on the modes of teaching that would prepare students adequately to perform various activities.
As curriculum experts of the traditional curricula are replaced by planners with hands-on experience, this suggests that the library and library school might be seen as keeping in closer touch with the library and its ever-changing needs and activities. Employers' involvement in the curriculum is based on the fact that innovations cannot exist or grow in isolation from the work places in which they are being implemented. On the other hand, the people who can best interpret the curriculum are educators. However, students tend to feel that library and information science education is not preparing them for their profession [60; 61]. The designers of a curriculum may not share the students', employers' and educators' views. The consequence of inviting a broad cross section of employers, lecturers and graduates to respond and react to an early draft of the planning document could therefore provide useful insights about the most productive direction to take.

This in itself would be a basis on which to provide quality curricula. Thus, there may be an opportunity to use a co-operative approach for the purpose of developing the relevant curriculum. The capacity to work together is crucial in an ever-changing environment. According to Alaezi, [62] relevance means that all stakeholders share a common purpose and work together in solving problems brought about by changes in environmental demands. Further, as mutual trust is enhanced, all these stakeholders are open to one another's needs and concerns whenever changes in environmental demands occur [63].

A lack of inputs by employers on the curriculum content in terms of what knowledge and skills should be taught can be a serious omission. Hence, it is only reasonable that employers who are to be direct recipients of the graduates of such curriculum be afforded the opportunity of having inputs on what knowledge and skills are to be imparted to the students at different levels of study. The advantage of such opportunity is that the generality of employers would be assured that the graduates they would be recruiting have acquired knowledge, understanding and skills together with attitudes relevant to their prospective employers and that they
would require only minimum adjustment as practitioners. In addition, given proper consultation with employers the curriculum can be designed and be taught with professional needs as the forefront.

Where there are new and emerging professional demands, it is those from practice who will be able to influence library schools, which should in turn respond by directing the curriculum toward meeting those demands. Such courses will be beneficial to the students in terms of relevant professional qualifications, and to employers by assuring that the graduates they are recruiting have been adequately prepared for the profession [64; 65].

Furthermore, such wider and thorough consultation by curriculum developers would allow a number of optional means of meeting the country's educational objectives to evolve. For example, in South Africa, such a curriculum would help make provision for library practitioners with peculiar needs to be consulted as may be evident by the types of their users and their level of education.

This type of arrangement would equally be relevant to students who would acquire skills that would enable them to fit into the type of library prevalent in their community. Thus relevance is enhanced when employers and lecturers and students are all involved in curriculum development as this helps to assess teaching and learning activities in their full context.

Negotiation would also produce a greater degree of match between the staff and students' perceptions of the course, and of its aims, objectives and expectations [66].

4.5 SUMMARY

Curriculum development includes decisions on the course structure, the formulation of aims and objectives, decisions on content to be included, the teaching strategy and
methods to be used, media choice and assessment techniques. In developing curricula, whatever view one holds, one must bring their expertise to bear on the professional practice. Such knowledge is based on a careful examination of library and information services to establish what skills graduates need and use in tasks at work. It is the converse of the subject and academic models that seek to emphasise theory and leave the graduates to apply theory to practice in the work environment.

It is argued that those who are involved in curriculum development affect curriculum relevance. This is because the personalities and policies behind it determine the character of any curriculum. As such, to really come up with a dynamic curriculum that would be responsive to the needs of the changing society, the issue of the most effective participants in the formulation of such curriculum design needs to be accommodated in curriculum development.

Hence the importance of involving academics, students and employers in curriculum development is evident. These stakeholders deserve important regard, in particular in examining the impact of curriculum relevance, since curriculum development is dependent on their judgements. All these groups in curriculum development can interface to provide the desired outcome.

The construction of the methodology was informed by these ideas. It was intended to achieve a balance between students, academics, and practitioners, the conceptual aspects of the curriculum, implementation and practice in identifying the optimum curriculum for South African library and information service development.

These aspects provide an orientation to the broader dimensions along which curriculum developers are expected to ensure an appropriate balance. This framework has thus provided the basis for defining the sample for the survey and directing the questions to respondents.
REFERENCES


2. Kabamba, J. 'Position Paper'. Paper Read at the University of Fort Hare: Department of Library and Information Science Workshop on Curriculum Development, 30th November - 1st December, 1995


5. Ochogwu, M. G. 'Producing the Basic Competencies in Information Science Education in Nigeria'. *Education for Information*, 1993, 11, 147-154


7. Tau, C. Co-operation Between Library Schools and University Libraries in the Training of Library Professionals. Paper Read at the University of Fort Hare: Department of Library and Information Science Workshop on Curriculum Development, 30th November - 1st December, 1995


12. Ibid.


15. Ibid.


17. Ibid.


20. Ibid. p. 5

21. Ibid. p. 22

22. Ibid. p. 11

23. Ibid. p. 12


25. Ibid.


28. Ibid.


32. Watson, K. 'Technical and Vocational Education in Developing Countries: Western Paradigms and Comparative Methodology'. Comparative Education, 1994, 30, 85-98


34. University of Transkei Policy Document on Curriculum Development


36. Ibid.


38. The Standing Committee for Formal Education. 'Rethinking LIS Training and Education'. SAILIS Newsletter, 1994, 14 (1), 5-6


41. Springveldt, R. 'Overview of Library School Curriculum in South Africa'. Paper Read at University of Fort Hare: Department of Library and Information Science Workshop on Curriculum Development, 30th November - 1st December, 1995

42. Aina, L. 'The Concept of Curriculum Development'. Paper Read at University of Fort Hare: Department of Library and Information Science Workshop on Curriculum Development, 30th November - 1st December, 1995


44. Ibid.


48. Ibid.


50. Reid, B and Brown, P. 'Asking Practitioners'. Library Association Record, 1995, 97 (9), 488-489


52. National Training Strategy, 1995
53. Kabamba, J. Department of Library and Information Science, University of Fort Hare. 'Position Paper'. Paper Read at University of Fort Hare: Department of Library and Information Science Workshop on Curriculum Development, 30th November - 1st December, 1995


55. Workshop on Curriculum Development Held at the University of South Africa, 1997

56. Aina, L. 'The Concept of Curriculum Development'. Paper Read at University of Fort Hare: Department of Library and Information Science Workshop on Curriculum Development, 30th November - 1st December, 1995


58. Fokker, D. W. 'Library Curriculum Needs in the Context of South Africa'. Paper Read at the University of Fort Hare: Department of Library and Information Science Workshop on Curriculum Development, 30th November - 1st December, 1995


60. Interview with Niklaas, F. University of Transkei Library, 1993

61. Interview with Jonas, S. University of Transkei Library, 1993

62. Alaezi, C. 'Crafts and Technology in the Curriculum of Primary Schools in Plateau State, Nigeria'. The Vocational Aspect of Education, April, 1988, 27-33

63. Ibid.
64. Olen, S. 'Education to Empower Media Teachers'. *Mousaion*, 1996, 14 (2), 81-88

65. Coetzee, J. A. 'CALICO (Cape Library Co-operative) and Western Cape Libraries. *Cape Librarian*, 1996, 40 (2), 8-11

66. Tau, C. *Co-operation Between Library Schools and University Libraries in the Training of Library Professionals*. Paper Read at the University of Fort Hare: Department of Library and Information Science Workshop on Curriculum Development, 30th November - 1st December, 1995
CHAPTER FIVE: METHODOLOGY

5.1 INTRODUCTION

The overall goal of this study is to explore and investigate librarianship curriculum that will satisfy a need for career-oriented and relevant education as envisaged by Curriculum 2005. Relevance of curriculum is critical given that education must be useful to services provided to society, the needs and trends of professional practice and to the students attending each library school.

Given the facts the curriculum must be relevant and developed on an accountable basis [1] in order to comply with the needs of library practice and the various stakeholders. Changes in librarianship are occurring so rapidly that curriculum innovation is widespread. One would therefore argue that the library practice in which students, employers and lecturers are the main stakeholders is the main concern of curriculum development.

In developing the librarianship curriculum, the aim is that the curriculum should support the aspirations of library services. Such curriculum development also corresponds to the organisational environments of the sample being questioned. In this sense, curriculum development and curriculum relevance are influenced by the respondents’ evaluation of what should be included in the curriculum to meet professional practice. This is consistent with the obvious point that library activities and professional attributes are set in the context of a library [2]. The point made is that activities need to be contextualised and analysed with relation to other qualities both practical and dispositional such as knowledge, skills and personal attributes or qualities.
This assumes a library context in which all types of libraries included in the investigation will be common, despite the fact that the organisational contexts will vary.

5.2 RESEARCH DESIGN

Sellitz, et al. [3] have stated that a research design entails the arrangements of conditions for the collection of data and analysis of data in a manner that aims to combine relevance to the research purpose. This being the case it was the research purpose and objectives of the study which had to inform the type of the research design for this study to achieve its intended purposes and objectives.

5.3 RESEARCH METHODS

Two types of research methods that are commonly used in library and information science research are quantitative and qualitative approaches. The first puts emphasis on measurement and testing and the second emphasises understanding participants and factors in context.

5.3.1 QUANTITATIVE RESEARCH METHOD

Quantitative research often formulates research problems in the form of testable hypotheses, attempts to identify and measure relationships between variables and strives to minimise researcher interference [4]. A variable is described as a characteristic that in a given research project can have more than one value. Value here is used to include qualitative as well as quantitative gradations [5]. Quantitative research uses hypotheses and sets out to test them and uses an approach to evidence which examines how far or well observations confirm the initial claim. For this reason it is referred to as 'hypothetico-deductive' [6]. This is because hypotheses are often regarded as propositions that lead to prediction of facts under given
circumstances. This type of research attempts to ensure that the circumstances are as controlled as possible.

Further, quantitative research often identifies and examines variables based on frequencies. Hypothetical relationships between data can be determined. Systematic methods of data collection and analysis are used, often based on statistical techniques like sampling and significance testing. According to Hannabuss, such approaches are suitable where data fall likely into natural, convincing categories and where collections and causal relationships and group differences are critical to a full understanding of the events concerned [7]. Testing by statistical techniques may follow. Differences that emerge between observed and expected data present the researcher with issues of statistical significance. The instruments used to measure data and the extent to which the scales and criteria used for measurement are valid are important in this situation [8].

In addition, the quantitative approach stresses the rules and norms by which researchers can explore and explain events objectively and defines valid knowledge and inquiry in scientific terms. It concentrates on the description and explanation of well defined studies, on explicit theories and hypotheses, clear distinctions between facts and values, rationality and logic, statistical techniques and detachment.

5.3.2 QUALITATIVE RESEARCH METHOD

Qualitative research can be described as any social science research that produces results that are not obtained by statistical procedures or other methods of quantification [9]. Some of the data may be quantified but the analysis is qualitative. This is because research done in this way produces descriptive data.

The qualitative approach emphasises understanding the work context, the point of view of the participant. There is, 'a recognition that there is no clear-cut distinction
between facts and values, non-quantitative data, and acceptance researcher involvement and perception' [10]. In view of its descriptive nature, the qualitative approach emphasises understanding, perception and the participants' ways of making sense of experience, and has other names like 'humanistic, naturalistic, exploratory and qualitative' [11].

Another characteristic is that qualitative research is relatively unstructured. The research strategy is to a large extent open, to allow the researcher to investigate unexpected topics that may only become apparent after an investigation has begun. This means qualitative researchers often reject the formulation of theories until after they have started investigation. 'Instead of formulating hypotheses as in quantitative research, investigation and testing theories may go together' [12]. This is because in qualitative research, investigation is the process by which data is used to identify themes, construct hypotheses and to show support for the themes and hypotheses [13].

5.3.3 DIFFERENCES BETWEEN THE TWO APPROACHES

The major differences between the two approaches may be summarised thus:

<table>
<thead>
<tr>
<th>Aspect of Research</th>
<th>Quantitative</th>
<th>Qualitative</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Relationship between researcher and subject</td>
<td>distant</td>
<td>close</td>
</tr>
<tr>
<td>2. Research strategy</td>
<td>structured</td>
<td>unstructured</td>
</tr>
<tr>
<td>3. Nature of data</td>
<td>hard, reliable</td>
<td>rich, deep</td>
</tr>
<tr>
<td>4. Relationship between theory and research</td>
<td>confirmation</td>
<td>emergent [14].</td>
</tr>
</tbody>
</table>

These differences between qualitative and quantitative research may be defined as qualitative research being more sensitive, subjective and deep. On the other hand, quantitative research is structured, objective, measured and wide. Another major
The difference between qualitative and quantitative research is that the former does not seek to prove a hypothesis. The aim is to show that the hypothesis is convincing.

Reality and validity are often questioned in qualitative research. Both validity and reliability have rigid connotations in experimental research. It is useful to distinguish between quantitative and qualitative validity. The first task asks whether the testing instrument measures what it is supposed to measure, while the second asks whether the researcher has gained adequate access to the knowledge and meanings of the respondents.

Similarly, for reliability, the quantitative approach is to ask whether the measure will throw up the same results on different occasions and the qualitative approach is to ask whether different researchers will make similar observation on different occasions. Richer contends that grounded theory can produce theories that closely mirror the social reality of the setting and are therefore more useful than speculative theories that are based on data [15].

5.4 QUALITATIVE RESEARCH METHODS AS THE BASIS OF THIS STUDY

The differences between the two methods of research emphasise that not all situations lend themselves to quantitative research, particularly if the variables involved are not easy to measure.

The central concern of this study is that of improving the librarianship curriculum and teaching and learning in the University of Transkei. Alongside this is an attempt to identify the character of librarianship knowledge, skills and attitudes to be incorporated in the librarianship curriculum.
This study is exploratory in nature. It is intended to examine what is taking place in libraries themselves in order to maximise on stakeholders’ views by obtaining data and information as regards what potential professional practices could lead to the development of a relevant curriculum.

In his study, where he points to underlying theoretical assumptions about a lack of foundations for a theoretical basis of librarianship, Burrell has suggested a paradigm shift in librarianship away from the traditional academic model to the vocational model [16]. In turn this implies a move from research that is based on quantitative methods to a qualitative methodology, when investigating curriculum development.

As the type of study that the researcher is conducting seeks understanding of the context and sees the social world from the point of view of the participant, and human behaviour from the participants’ own frame of reference, the research method is based upon a qualitative approach. Given the nature of the research problem, it was felt the most appropriate methodological approach for an in-depth study of the problem was to conduct a survey research.

Mellon [17] calls this type of research ‘naturalistic’, an in-depth study of people and situations and events, challenging researchers to establish rapport with the situation, maintaining objectivity with distancing participants and perceiving theory from an excess of interesting and conflicting information. She states that naturalistic studies focus on viewing experiences from the perspective of those involved [18]. On the other hand, Glaser and Strauss [19] refer to the approach as grounded theory. Because of its practical implications, grounded theory has also been classified as applied research.

Further, Glaser and Strauss [20] suggest that the best theory is grounded theory and is generated from concrete cases of a naturalistic and empirical type. Such research
grow out of questions researchers ask people in specific contexts. The librarianship setting is best understood within its field of practice. Such a setting helps define professional practice for practitioner participants as well as academic participants.

The data gathered and analysed are contextual because participants are studied in naturalistic settings [21]. Hence, the overriding principle in choosing the qualitative method for this study is one of suitability. They meet the needs of the problem. This is based on the belief that qualitative methods are appropriate to reflect the underlying meaning of important library activities and professional attitudes, beliefs about librarianship curricula and graduate performance in participants' contexts because of their complexity.

Qualitative research is also the appropriate approach for understanding how respondents view activities performed in libraries and the required professional qualities. The assumption is that the method would help reflect the underlying evaluation of library activities and professional attributes which should be included in the curriculum in the respondents' context because of the curriculum's potential complexity and subjective nature [22]. The basic assumption is that library activities in each unit should be relevant for inclusion in the curriculum and that the professional qualities are necessary to be acquired by graduates.

Naturalistic research is guided by the assumption that respondents in the study have patterns of experience. They order and make sense of their experience. This in turn reveals one of the major characteristics of this approach. The world is taken by members of a particular society to be 'reality in the subjectively meaningful conduct of their lives. It is a world that originates in their thoughts and actions and is maintained as real by them' [23].

To gain access to the inner perspective [24] of respondents and their professional relationships, and to get access to the objective realities that exist in relation to this situation and setting, the need is for an approach informed by evidence from the
work environment. Hence, the decision to opt for the qualitative approach not only comes from a belief in evidence gained from professional practice as a means of viewing and understanding the work context, but also the nature of the problem being investigated.

New forms of knowledge are contesting the separation of theoretical and applied knowledge [25]. A major change is that knowledge is not only generated in its traditional and discipline-driven manner in the academy, but in the new focus in the work particularly users of libraries, the orientation to, and the interface between education and professional practice. On the basis of their findings White and Mort [26], Burrell [27], Brittain [28] and McKerrian [29] argue that professional knowledge is created and can be elicited where practitioners are carrying out library and information activities. Rubin and Rubin agree as they say that knowledge is contextual and 'stripping away context is stripping away meaning' [30].

Professional attitudes are an integral part of the profession [31]. If these arguments have been acceptable in research into library and information services, then library activities, professional knowledge and professional attributes should be supportable in the curriculum.

Reflecting the underlying meaning of important library activities and professional attitudes in librarianship curricula and graduate performance in participants' contexts enhances the understanding of the situation. This means that one 'proceeds from example to generalisation' [32]. This enables researcher to learn, first hand, about the librarianship setting being investigated by means of involvement and participation in that world through a focus upon what respondents say and do.

Sproull [33] recommends the technique as being appropriate especially when attitudes, ideas, comments and public opinion on a problem were being studied. In the scope of this study the method was justified as it allowed the researcher to collect
a broad sector of data and information from all or part of the population identified. The collected data and information provided the researcher with an important base upon which strategies towards curriculum development and curriculum relevance could be addressed.

Further, the strength of this method was also evident in its ability to study, describe and explore and analyse relationships among geographically scattered and categorically different subjects like the libraries and subjects in this study were. Thus, this would result in data and theories relevant to what is going on in the investigator's research area. Also, this made grounded theory appealing on relevance. Particularly in curriculum development, the researcher was dissatisfied with preconceived evidentiary research proof because it is not providing findings that make curriculum irrelevance problems any better. Grounded theory helps tell what is going on. It tells the researcher how to account for the respondents' concerns and reveals accessible variables that allow incremental changed. The core of grounded theory is what is, not what should or ought to be [34]. In order to accomplish the above mentioned research design, the following methods were employed in data collection.

5.5 SAMPLE

As just using 'experts' and lecturers in curriculum development is not sufficient to ensure an effective, that is, relevant curriculum, it is clear that a different approach would be helpful. Consequently, the sample was based on the belief that the population of employers, educators and graduates, as the members of the librarianship profession, would be better placed to have information about solving curriculum irrelevancy, from their understanding of professional practice. As people sharing common circumstances in librarianship, they would share patterns of meanings and behaviour [35].
This selection strategy ensured objective presentation in the pool of respondents along the dimension of the professionally interested. It also promised a wide range of experience and some level of diversity in professional practice that would more fully capture the responses of those involved in the profession. The goal is to uncover a core curriculum and model from this diversity instead of exploring any possible differences between these groups.

A list of 40 academic and 62 public libraries in South Africa was obtained from a directory of interlibrary loans. Also a list of 32 school libraries was obtained from the Department of Education, while a list 14 library schools was obtained from the prospectuses of the various academic institutions, resulting in a mean of 39 and SD of 19.9. From the libraries, 22 academic libraries, 20 public libraries, 16 school libraries and 8 library schools were included in the sample, with a mean of 16.50 and SD of 6.191. The goal was to capture enough sample to be statistically valid at the desired confidence level without using costly and excessive samples of excessive size.

The 95% confidence level to determine sample size was used.

\[
 n = \left( \frac{1.96(19.9)}{6.191} \right)^2 = (6.30)^2 = 39.69 \text{ approximately 40. [36]}
\]

Hence, the number of cases required at 95% confidence level is 40. The total of sample taken was 66. This shows that the sample is statistically significant at 95% confidence level. The sample size selection, apart from being statistically significant, represents an even geographical distribution of South African libraries and library schools.

From these libraries and library schools, the sample of 240 was purposefully selected.
For the purposes of constructive and co-operative curriculum development, students, activities and employers identify activities performed in libraries as a basis for discussion and curriculum development. The researcher hypothesised that the consideration of variables from participants' and individuals' work context were a source from which one could get consensually identified variables and evidence where respondents agree or disagree about variables.

What is suggested is not new. McKernan states that to understand that the curriculum continues to pose a problem is to recognise the fact that lecturers, practitioners and students experience a problem and should take the roles in solving them [38]. Also, as noted in Chapter Four, Griffiths and King [39], Conant [40] and Burrell [41] have argued the case for practitioners, students and lecturers being involved in curriculum development.

The process of collecting data from three groups of respondents has a reasonable explanation. Each group of respondents stands in a unique position with respect to viewing relevant information about librarianship practice and curriculum relevance. The practitioners are in the best position to explain how libraries and information services function and thus influence curriculum in the actual work situation.

The lecturers are in the best position to react to the same professional practices through reflecting on the intentions and aims of professional practice. The researcher is in the best position to collect data about the observable features of interaction between practice and education [42]. By comparing an account from both practical and educational viewpoints the researcher has an opportunity to revise the situation on the basis of more sufficient data. Further, Elliott [43] argues that the provision of three-sided accounts is an important occasion for participants as often it will be the first time the practitioner or lecturer has come face to face with evidence of a factual nature concerning his or her practice.
In order to ensure the representativeness of the samples, care was taken to draw respondents from all the areas in the developing South Africa and to some extent from the developed South Africa. The list of libraries was obtained from the interlibrary loans listing of libraries. Addresses for the Departments or Schools of Librarianship were obtained from prospectuses. The selection of University of Transkei students was limited to those the researcher was able to trace.

Although a job analysis based on the method proposed by Burrell [44] was beyond the scope of this study an adaptation of it was possible. Furthermore, Burrell’s approach was adapted for the study in the absence of such a study in South Africa. The order of the following sub-sections reflects the stages in which the data were collected.

5.6 ANALYSIS OF JOB ADVERTISEMENTS AND PROSPECTUSES

In the job analysis an important distinction is made between the different levels of description which can be applied to work activities in a given area [45; 46]. For Teryek [47], work activities are most typically described at three levels of generality:

‘Tasks’ being discrete units of work, with a definite beginning and end, and performed to accomplish the goals of the job; ‘functions’ being broad categories of tasks; and ‘job’ relating to the overall unit comprising a group of tasks.

When a job analysis is carried out in a work situation or in respect of any occupational group, one of its main aims is to arrive at a valid list of the tasks into which all the jobs of the work group can be broken down. If a job analysis of the work of library and information workers were carried out, such a list would provide a means of studying this occupation structure.
Field notes are the means by which qualitative data are recorded. The form these take depends largely upon the setting in one which is working on curriculum development [48]. Cronin has used job advertisements and prospectuses to do research on curriculum development [49] and these were used for this study. The aim was to arrive at a valid and representative list of job specification items used by employers when recruiting newly qualified librarians and thus necessary for inclusion in the curriculum. This was achieved by analysing job specifications of the 1993 Cape Technikon Library Services and the 1994 Natal Society Library Fieldwork Schedules used by employers in recruiting newly qualified professionals in the areas of library and information services or assessing fieldwork students.

Secondly, prospectuses of institutions offering library and information science degree programmes, that is, the Universities of Transkei, Fort Hare, North, Zululand and Western Cape and diaries compiled by newly qualified professionals from the Department of Library and Information Science, University of Transkei, were analysed. As content-related evidence demonstrates the degree to which degree the tasks in question are representative of librarianship professional content, such a list was taken to be a fair sampling of the kind of job specification currently in use in library and information science teaching.

It was also upheld that these corresponded very generally to the tasks of the Burrell approach, hence providing a way of arriving at a basis of components from which most library and information science jobs are formulated [50]. From this, a long list of job specification items was drawn up and refined down to 180.

As the essence of the qualitative approach is to view events through the perspective of the people who are being studied to find out what they think and how they view the world, the methods used for this study include diaries, unstructured interviews and questionnaires. These methods have also been selected as a means for learning about the variables used in the study.
5.7 VERIFICATION BY DIARIES

Before this study was conducted it was necessary to prepare the questionnaire and interviews based on an appropriate conceptualisation of activities performed by professional librarians. This was done through adapting ideas and methods from the techniques of job analysis [51].

The diary sheets (appendix B1) started with a brief introduction and explanation about the purpose of the diaries and permission was requested from the respondents as well as employers. The practical verification of activities performed in libraries in the context of the study was sought through a detailed examination of the activities of eight newly qualified professionals at the University of Transkei Library, Umtata Public Library and Vela Private School, Umtata.

In doing this six respondents from the University of Transkei Library, Umtata Public Library, Vela School Library were asked to log their activities in a diary for a period of five days. This was done to test if it was possible to establish what was done, who was doing it, where it was being done and how it was done [52].

Each student had been requested to supply the following work factors: type of institution, qualifications, and experience. These diaries were used to get a picture of the specific activities that are carried out by the professionals, the equipment and materials used. To give the log a structure, respondents were asked that they record information at hourly intervals [53; 54]. To allow for activities to be measured, each graduate was also asked to keep a record of time spent on activity or activities. This presumed that the graduates would be honest in reporting the time spent in carrying out the activities [55].

The record had thus been constructed to undertake activities that occur on an hourly basis for five days. Also, the investigator believed that in using diaries where
perceptions, observations and emotions were all recorded on a daily basis would provide a realistic method of collecting a substantial part of the data necessary. In addition to this, use of diaries recorded at intervals, as a result of reflection, would also be an important device as a means of preliminary analysis [56].

Ferreira [57] states that diaries contain observations, feelings, attitudes, perceptions, reflections, hypothesis, lengthy analyses, and cryptic comments. Diaries were also employed to encourage description, interpretation, reflection, and evaluation on the part of the respondents. The purpose here was to evaluate the working actions and objectives achieved. It was conceived that the graduates proceeded with some goals or intentions that resulted in actions resulting in performance. The idea of the diary was to organise entries by reference to activities performed which led to outcomes [58].

Further, it was envisaged that performance could be successful or unsuccessful. By successful actions, it could be that intentions are achieved and that some goals not set have been reached. It could also be the case that interaction in terms of the timing of activities performed and of the outcomes that significant progress has been made by the librarian. Performance could be described as unsuccessful if the entries in the diary would indicate constraints, barriers, problems, and areas of conflict and tensions experienced at work. Such a record, provides a collection of detailed items of information that could help the curriculum developer gain some insights, changes in values, progression and regression in professional practice [59].

The respondents’ diary entries represented units of activity. Activities were categorised after reading the diaries. These activities were incorporated into the list of activities drawn from job advertisements and university prospectuses.
5.8 VERIFICATION OF LIST OF LIBRARY ACTIVITIES BY PROFESSIONALS AND EDUCATORS

After the list of tasks was identified, the University of Transkei Librarian and his Deputy were each asked to explore how the task list might be typically categorised when library and information professionals' jobs were being devised [60; 61]. As senior personnel in the library, each has a deep and regular experience of framing job descriptions for their own employees. From this process 12 categories emerged:

- document-related activities
- reader-related activities
- marketing-related activities
- finance-related activities
- numeracy-related activities
- personnel-related activities
- information resource management activities
- records management activities
- self-development activities
- activities related to premises
- communication-related activities
- one-off activities.

The other two items identified were professional qualities and performance level. Seventeen professional qualities or attributes were drawn from the Natal Society's Library List of professional evaluation. These were regarded as the main categories of activities from which library and information jobs were constituted, and the attitudes required of professionals, and were taken to correspond with the functions of the Burrell framework [62].

The list of 160 activities was next re-organised under these headings. The list was then given to two lecturers in the Department of Library and Information Science, University of Transkei for evaluation of its representativeness [63; 64]. Completing of diaries by students, verification of activities by the University Librarian and his
deputy and by lecturers were done on the basis of the belief that there is a high level of identification of activities by the three groups of respondents as indicated in the hypotheses.

From the responses a final list of 135 activities was retained. The list of activities is obtainable in the questionnaire (appendix B2). Such a reduction was possible due to limiting some activities that overlapped as synonyms. The list was then used for a pilot study along the lines of the intended design for the main study. From this pilot emerged the final listing of professional activities. It was felt that these could now provide most students, educators and employees with scope to express their views about curriculum content, based on valid list of appropriate library and information activities for qualified professionals. After considering the list of required personal qualities, the qualities identified were considered sufficient by all three groups. They were thus adopted as such for the study.

5.9 THE PILOT STUDY

First, the questionnaires were pretested by asking at an early stage a staff member in the Department Information and Library Science, Loughborough University [65] to look at a draft so as to get an objective but constructive critical opinion [66] (appendix B2).

Both interview schedules and questionnaires were piloted. Piloting permitted the investigator to determine the approximate amount of time required to complete the questionnaire or the interview so as to be precise about this when introducing the final instruments. It also provided the researcher an opportunity to carry out a final screening and revision of the instruments. Pilot testing involved administering the questionnaire to a small number of respondents in order to check that it was likely to produce the information required without presenting respondents with problems [67].
5.10 QUESTIONNAIRES

The questionnaire method is a form of interview by proxy, with the interviewer removed the face-to-face contact of the interview method. A narrow description is that of 'written questions requiring responses' [69]. Many researchers advocate the questionnaire technique. As a data collection instrument the questionnaire is easy to administer, provides direct responses of both factual and attitudinal information, and makes tabulation of responses straightforward [70].

The respondents were presented with a pre-set list of structured questions (appendix B2). The researcher was concerned with identifying activities performed by professionals and to attempt to establish consensus among the respondents on important library activities for possible inclusion in a curriculum for professional librarians. In addition, the questionnaire was involved with exploring the necessary qualities required of a professional as well as getting the respondents' views on the extent to which graduates performed their duties satisfactorily.

The list of the activities was introduced as job specification elements used to make up any job analysis on graduating in library and information science degree programme. Each respondent was asked to indicate in the list what librarianship programmes ought to provide in student education. They were asked to take each activity as conveying an opportunity that should be available on educational programmes. In doing this they had to consider each activity separately. Then the respondent had to rate each category of activity in a way that he/she thought would reflect the importance of such an activity to be included in the curriculum.

Because the totally structured format requires such advanced knowledge on the part of the researcher, and so severely restricts the respondents[71], an unstructured option at the end of the structured list was added. This option simply said 'And
other. On the other hand, the totally structured format was most appropriate where
the range of possible responses was limited and known.

This format was used in this research by the variety of surface level questions
seeking descriptive data about respondents' biographical details and institution. This
was done with a view to simplify the researcher's task of data analysis, for the data
would come labelled in predetermined categories which could be counted directly.
The researcher offered structured questions as she intended to analyse and report on
them [72]. As the intention was to analyse data separately by respondent group, each
group was offered the options.

Questionnaires had clear details of the date by which they had to be returned and
follow-ups of unreturned questionnaires did not yield any more responses. To help
break the pattern in answering questions, units of questions giving similar response
were not placed on the same side of the range. In addition, in trying to get shades of
opinion and strengths of preference, a rating scale was used to provide more scope
for the respondents to express opinions. This helped by providing a sufficient control
in ensuring that data were capable of being analysed [73].

One problem the researcher experienced with some of the returned questionnaires
was that they were not completed. The respondents to whom the questionnaires were
forwarded by their former institutions indicated that they had retired and/or that they
were not conversant with current practices. Some students had relocated. In
anticipation of these problems and some disadvantages of the questionnaire
methods, that is, the difficulty of getting a list of unusable responses, low response
rates and that some respondents do not answer honestly, triangulation in the form of
interviews with a small sample was made. Triangulation refers to the use of more
than one method of data collection in a single study [74; 75].
Another problem of using questionnaires is that the researcher depends on the objectivity of respondents. To overcome this difficulty, respondents were allowed to complete the questionnaire anonymously.

5.11 INTERVIEWS

One of the weaknesses of questionnaires is that they may not be flexible enough to allow for respondents' true feelings or attitudes to emerge [76]. Following on from this, the researcher felt that using questionnaires alone would overlook the qualitative context of data that would emerge out of the day-to-day activities in library and information services. Lincoln and Guba emphasise that qualitative research is concerned to ensure that context is critical. The unstructured interview, therefore 'assumes the appearance of a natural interesting conversation which guides and bends to the service of his research interest' [77].

Having used three groups of respondents, open-ended questions, (interview schedule appendix B3), allowed the respondents to air opinions and discuss library activities in their real or perceived environment. Interviews involve finding worldviews of the subjects being interviewed. Lincoln and Guba [78] indicate the centrality of interviews in field research work. They indicate the importance of talking to all those with interest in the study, so that statements can be collected that will grasp the participants' point of view. They say that the ability of the participants to converse with each other and with the investigator is so vital a characteristic of the subject matter of social sciences that it cannot be disregarded in any well-rounded study [79].

The view is also reflected by Rubin and Rubin [80] who conclude that for the greater part of their information investigators must find their own witnesses, induce them to talk, and embody the gist of this oral testimony in their sheets of notes. This is the method of the interview or 'conversation with a purpose' [81]. The interview
is presented as crucial data for the researcher, as well as being a method of investigation.

The aims of unstructured interviews have been summarised by Hutchison. She considers that it provides an opportunity for the researcher to probe deeply, to uncover clues, to open up new dimensions of the problem and to secure vivid, accurate, inclusive accounts from respondents that are based on personal experience [82]. She says they add meaning to data as they permit the researcher to verify, clarify, to achieve a full understanding of the incident and to take into account the lived experiences of participants [83]. In these terms, it is argued that questionnaires would have been far too narrow and would have restricted the perspectives of the research.

In keeping with Lincoln's and Guba's methodology, data were gathered using the respondents' verbalisations. Analytical interpretations were used to define the curriculum content. Interviews were based on the opinion of the three groups of respondents about current patterns of professional practice and library activities. The aim was to develop more depth into the data obtained from questionnaires. 'Depth means getting a thoughtful answer based on considerable evidence, as well as getting full consideration of the topic from diverse points of view' [84]. The purpose of the interviews was explained: that they would help get to information to include in the library and information science curriculum for the University of Transkei.

An interview survey was conducted with ten lecturers from the Universities of Fort Hare and Transkei. Fort Hare University was chosen because of its proximity as well as with regard to the diverse experience of Fort Hare lecturers with both the developing and more developed South Africa. A random selection of thirty practitioners and twenty graduates was made from the Eastern Cape Region of which Transkei is a constituent district. Respondents were selected from two academic, four school and six public libraries. The total number of subjects
interviewed was sixty. Considerations of cost, time, money and effort argued for limitation of the sample size [85]."

Also, as qualitative research is associated with depth rather than breadth, this means that few people will usually be interviewed, but that the interviews will take some time, allowing the researcher to reflect on what has gone before. The amount of time an interview takes also depends on the availability of the respondent and the time the investigator needs to follow up ideas and what might seem irrelevancies.

The questions were open-ended. Participants were given a list that consisted of 'essential knowledge' and 'essential skills'. The subjects were, as with the questionnaires, asked to take each area of knowledge and each area of skills as an opportunity of what librarianship programmes ought to provide. For the answers given they were asked 'why? or how extensively?' to evoke explanations or add a brief phrase justifying their choice. The questions were also used for probing not just behaviour, but also opinions, values, beliefs and feelings [86].

For professional attributes no list was given to the respondents. The employers were asked to indicate what qualities they looked for when recruiting a candidate for employment. For students, the question was phrased to enable them to indicate the qualities they regarded as important since they were in the field of practice.

On the other hand, academics were asked which attributes did they hope their students would show once in library practice. As with activities these questions were followed by the 'why and how extensively' questions to evoke explanations. The question of how these activities were performed was included. This helped to get information about whether the activities were performed manually or whether technology was applied.
In conducting interviews, some themes relating to education and professional practice had emerged. Thus interviews were extended to extract more information in the context of both education and professional practice.

Innovation and change in both practice and education, learning and teaching were crucial. A closer relationship between education and professional practice became prominent. The interview also asked lecturers to list and describe, as far as possible, the curriculum changes that had been made in the library school. Likewise librarians were asked to list and describe changes that had been made in professional practice in their libraries. The issue of the people involved in change was raised. This was to help gain information about what year of professional practice did graduates get involved in new activities. Unstructured interviews were used to encourage the respondent to relate experiences and attitudes that are relevant to the research problem and to encourage respondents to discuss their experiences naturally and freely.

The question about the level of performance was again raised with all three groups. In this respect it was hoped interviews would provide evidence about how they felt about librarianship education in relation to graduate performance.

Although these aspects chosen for in-depth study were left in the hands of the respondents, it was important for the researcher to keep control of the interview. As a control measure the researcher established a topical framework within which the interview could be conducted. Although the unstructured interview was intended to encouraged flexibility, it was also, therefore, controlled.

The importance of using triangulation for data collection has been to allow the researcher to use one technique to check or confirm another. In addition to being a procedure for organising different types of evidence into a more coherent frame of reference or relationship so that data could be compared and contradicted [87],

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triangulation encouraged flexibility in data collection [88]. It also helped add depth to the data collection [89] and thus potentially increased the validity of the data and consequently, hopefully, the analysis of them [90].

The use of multiple methods, respondents, sets of data and theories in field research can provide flexibility, cross validation of data and theoretical relevance [91].

As each research method has particular strengths and weaknesses, there is a chance that the research finding will reflect the method of inquiry, and triangulation was used to provide this study with an additional check. Denzin [92] argues that data collection methodologies should be brought to bear because each method has limitations and strengths. By using different methods one maximises the confidence s/he can place in findings. As apparent discrepancies can be the focus for further reflection and investigation, triangulation has also been used to see the case from various different viewpoints and to correlate methods with perspectives [93].

Glaser and Strauss [94] have developed a comprehensive evaluation process that enables the researchers to follow checklists that measure a study's credibility, and fittingness. By adhering to these criteria, an investigator ensures scientific rigor of qualitative research. They observe that credibility, the measurement for the degree of vivid richness and faithfulness in the qualitative research data is similar to internal validity measures of quantitative research. To ensure credibility, the researcher kept in-depth interview notes during each session. Confirmation of the notes with the respondent also enhanced credibility.

Fittingness, the qualitative measurement comparable to the quantitative measure of external validity, examines how suitable the investigator's proposals are and if they fit other contexts [95; 96]. Fittingness was assured when the investigator checked for data representativeness and was able to view the data from the context of professional practice. Fittingness was further achieved when two senior library
professionals and two senior academic checked data representativeness. Employing these measures ensured adherence to the scientific rigor the study.

5.12 SIGNIFICANCE

The significance of the study is that a curriculum based on library practice will ensure curriculum relevance. Relevance means that all stakeholders share a common purpose and work together in solving problems brought about by changes in environmental demands. The capacity to work together is crucial in an ever-changing environment.

It is important that they share their expertise. Working together to share the planning of curriculum, stakeholders will be able to fill gaps in librarianship education. Mutual trust is enhanced and all these stakeholders are open to one another’s needs and concerns whenever changes in environmental demands occur.

Library schools will advance the base of knowledge, skills and attitudes on which good professional practice is based and provide students with an education which is stimulating and fulfilling.
REFERENCES


10. Ibid.

11. Ibid.

12. Ibid.


18 Ibid.


20 Ibid.


36. Alabi, G. A. 'Statistical Significance Reporting'. University of Transkei : Department of Library and Information Science, Unpublished


137

52. Hitchcock, G. and Hughes, D. Research and the Teacher: a Qualitative Introduction to School-Based Research, 1995, London: Routledge, p. 18


60. Ofori, P. E. University of Transkei: Library

61. Nhlapho, I. E. University of Transkei: Library


63. Ibrahimah, I. M. Z. University of Transkei. Department of Library and Information Science

64. Mbhele, C. N. University of Transkei. Department of Library and Information Science
65. Morris, A. Department of Library and Information Studies, 1994
67. Ibid.
70. Ferreira, M. Introduction to Qualitative Research Module 3, Pretoria: Human Sciences Research Council, 1988
73. Hitchcock, G. and Hughes, D. Research and the Teacher a Qualitative Introduction to School-Based Research, 1995, London: Routledge, p. 25
74. Ibid.
78. Ibid.
79. Ibid.

83. Ibid.


CHAPTER SIX: DATA ANALYSIS

6.1 INTRODUCTION

The purpose of this chapter is to present the analysis of the research findings. It was indicated in Chapter One, the goal of this study is to provide a librarianship curriculum model for the University of Transkei that seems likely to benefit professionals, graduates and the society they will eventually serve. The major focus is thus on the relationship between the library activities performed by the graduates, the attitudes, knowledge and skills required of graduates and the core curriculum. Hence, the analysis of findings focuses on the following themes:

1. Graduate activities central to professional practice and to be included in curriculum.
2. The knowledge to be acquired by graduates during professional education and training.
3. The skills that a graduate should acquire during education and training.
4. The characteristics necessary to make a graduate a suitable professional.
5. The standard of graduate education and graduate performance.

It is supposed that one expects to see the interest of all the stakeholders and the institutions for which graduates are prepared to work reflected in some requirement in the core curriculum. Hence all the aspects of professional practice have reason to be included and must be integrated within the core curriculum.

Triggs [1] states that the curriculum is established through a careful examination of library activities performed to establish the knowledge, skills and attributes graduates need and which tasks occur frequently across a range of tasks. Burrell's [2] study has also upheld this view.
Also, Harbeneas [3] has argued that curriculum development is about the skills the student has to master, making sense of these skills and using those skills for future professional action. Moreover, this is what is meant by outcomes-based education. It was stated in Chapter One that outcomes-based education is a new trend that is expected in South African curricula.

6.2 GENERAL BACKGROUND TO THE GOAL OF A CORE CURRICULUM

It is assumed that to a great extent decisions made about areas to be included in curriculum will depend on the activities performed in libraries, the required skills and knowledge to perform the library activities and the needs of the employers and students.

The nature of librarianship education has invariably suggested that there is a common content relevant for beginning professionals. In South Africa, at the heart of any librarianship examination there are core courses, required of each graduate programme in an accredited programme [4]. A significant point is that core courses should be required in every student’s programme.

Core courses have been recognised to have two distinct goals:

1. To ensure and integrate diverse educational backgrounds.
2. To ensure that the commonality of libraries and information services, rather than their differences, is emphasised [5].

For these reasons, the core curriculum ensures that librarianship students, wherever they may be have an understanding of library and information activities in the widest context.
6.3 TYPES OF LIBRARIES

The first items of the self-administered questionnaire and the unstructured interviews were designed to provide the researcher with information about the activities performed and the attendant knowledge and skills, in the libraries that were surveyed. This information was essential on the one hand as it was hoped the description of numerous functions which libraries perform would help clarify the role of the librarian. On the other hand, it provided the necessary information on library activities, knowledge, skills and professional qualities for which graduates should be prepared to carry out their professional duties effectively. Further, it was hoped that such information could provide decisions about the main areas to be covered by the curriculum.

The basic assumption was that library activities in each unit of data analysed should be relevant for inclusion in the curriculum and the professional qualities were the necessary ones. This assumed a library context in which activities for all types of libraries included in the investigation would be common and that all library types included in the investigation would have common graduate performance requirements.

Task analysis involves decisions about the main areas to be covered by the curriculum. Also, the questions in Burrell’s study came from library activities carried out by graduates with up to five years of experience [6]. Thus, in order to address the need of a relevant core curriculum that takes into consideration of general libraries and information centres, a survey was based on the following organisations:

Academic libraries
School libraries
Public libraries / community libraries. Included here are also the rudimentary library service structures available to developing communities.

In South Africa, these libraries are distinguished in terms of the different categories of users they serve. The type of library generally known to the public is the public, also called community library. School and university libraries serve the students and personnel of their respective institutions. All these types of libraries are mostly general libraries. Their collections are mostly of general scope, covering many areas of knowledge. However, they differ from one another in respect of the users they serve and the level of materials they collect.

In Chapter Two it has been shown that in South Africa, library services and library education have been developed in specific social and historical contexts. The study was carried out against a background where the latest figures in 1992 show the imbalance between service points and population. Taking an area where figures are available indicates that Johannesburg with a population of 1,740,000 and 37 library service points had a figure of 0.9 books per capita. On the other hand, Soweto, a suburb populated by blacks near Johannesburg, with a population of over 2,000,000 and six library service points had 0.16 books per capita [7]. 'A similarly unequal provision of services exists throughout the Transvaal Provincial area. [now called Gauteng]: 161 main or branch libraries for whites; 60 for Africans, 23 for Indians and 22 for coloureds. Figures quoted in Parliament on women in the workforce show 2,439 qualified white librarians, 132 Africans, 123 coloured and 110 Indians’ [8].

Although such figures do not exist for the Eastern Cape Region to which Transkei belongs, by inference such imbalances exist and may even be more pronounced as in many areas library services or non-governmental informal service organisations have been non-existent. It is important to emphasise that the significance of stating these figures is none other than to show that in the majority, respondents in the study are attached to the Anglo-American model of library services.
Moreover, although the barriers in services have been removed and new library services developed, these have not made any significant improvement from 1992 to 1998. Because of these differences, the operation of the selective tradition in the content and education of librarianship may not seem to fit the core curriculum by the group that has enjoyed library services for many decades. However, responses to the library activities, including those relating to the underdeveloped areas and which are in the minority and may fail to fit the definitional requirements of activities to be performed in the Anglo-American model, have been accommodated in the study. This has been done to get respondents’ perceptions of their importance for inclusion in the curriculum as well as to try and find answers which reflected the problem being investigated. It is uncertain, however, how comprehensive coverage of such areas is in practice.

6.4 CURRICULUM AND THE NEEDS OF STUDENTS AND EMPLOYERS

Chapter Four has shown that the need and relevance of curriculum as interpreted by individuals, groups and institutions affect curriculum relevance. Consensus of stakeholders on curriculum content becomes more critical with the questioning of relevance of librarianship curriculum offered by South African library schools. Hence, the main concern in this study was to get consensus from stakeholders on the relevant library activities, skills and knowledge to be included in librarianship curriculum as well as the necessary characteristics that make a graduate a suitable professional. This was in an attempt to establish components of a relevant curriculum as viewed by stakeholders. It is assumed that the stakeholders’ views of curriculum relevance are within individual’s perceptions of core curriculum and library environment.
With respect to educators library activities are a matter of concern as the curriculum is designed with the intention of convincing the employers that the graduates are the candidates they would like to employ. A curriculum based on professional practice would help educators maintain credibility as providers of relevant education.

In total, 240 questionnaires were sent out to respondents and 130 of these were returned duly completed. These represented 54%. Six questionnaire responses were returned with no usable data, leaving a total response from 124 subjects. Therefore returned usable questionnaires represented 52% of the response rate. The response rate was adequate for this study. Babbie [9] for example, recommends a response rate of at least 50% as being adequate for data analysis and reporting of research results. In the case of this study, the response rate obtained has met that recommendation.

It was also possible to classify responses by library type. Involved in this study were 58 libraries investigated. The breakdown by library type was:

- Public libraries: 20
- School libraries: 16
- Academic libraries: 22
- Total number of responses by library type: 58

However, the figure ‘58’ does not reflect the number of respondents that were involved. It was possible to have a number of respondents in one type of library. Evidently, the academics did not represent any type of library.
TABLE 6.1 SAMPLE AND RESPONSES (N = 124)

A breakdown of usable responses

<table>
<thead>
<tr>
<th>Designation</th>
<th>Total usable responses</th>
<th>124</th>
<th>100%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Employers</td>
<td>58</td>
<td>47%</td>
<td></td>
</tr>
<tr>
<td>Students</td>
<td>24</td>
<td>19%</td>
<td></td>
</tr>
<tr>
<td>Educators</td>
<td>42</td>
<td>34%</td>
<td></td>
</tr>
</tbody>
</table>

Table 6.1 presents an analysis of usable responses from questionnaires returned by the three groups of respondents.

6.5 CODING AND VERIFYING DATA

In this study the methods chosen for data analysis were mainly determined by the type of data collected, the purpose for which the study was conducted and as an attempt to meet the set objectives. As indicated in the Methodology chapter, various methods were used to collect data, namely: diaries, questionnaires and unstructured interviews. In order to break up the responses into information bearing units for coding and classify this into mutually exclusive categories for subsequent analysis, the content analysis method was used. The questions in diaries and interviews necessitated the application of content analysis in order to reach meaningful and interpretative inferences relevant to the problem being studied.

According to Powell [10], content analysis is the systematic, objective, quantitative analysis of the occurrences of words, phrases and concepts so as to analyse the expressed content, that is, the inferences of the communication. Its operation would therefore involve the identification of the unit of analysis so as to identify, define and decide on a unit, such as a word, sentence, paragraph or theme. Krippendorf [11] observes that the identification of a unit of analysis involves defining information bearing units, separating them along their boundaries, and identifying them for their
subsequent later analysis. Such units are normally characterised by two major features. Firstly, it has to be the smallest unit of analysis bearing meaningful information, and should also have the ability to stand independently and make sense. Secondly, it should have the ability to guide the researcher to some form of understanding.

Another aspect of content operationalisation involves the creation or identification of mutually exclusive categories into which, using the unit of analysis, the coding and tabulation of data could make for subsequent analysis.

Another major technical step, and the most crucial aspect in the application of content analysis, is categorisation. This could be defined as a process by means of which the unitised data are organised or grouped into categories that should provide descriptive or inferential information about the context or setting from which the units were derived. Categorisation should normally be characterised by being able to relate or bear a close relationship to the problem as originally stated. Further, it should be exhaustive in that every recording unit relevant to the study could be classified and placed in one of the categories created and be mutually exclusive, in that no recording unit could be included in more than one category. It was therefore within these three aspects of being able to obtain and reach inferences from the textual responses, putting them in units and categorisation of data so that it could be finally analysed, that content could be conceived and applied to free-text data analysis.

In the case of this study, these technical steps to the application of content analysis were worked out and applied in data analysis. The unit of analysis considered being appropriate and suitable for this study was the theme, as it is more conceptually comprehensive. Furthermore, themes can be distinguished from each other and from the remaining portion of irrelevant materials because they possess the desired structural properties. In addition, the nature of questions asked involved explanations...
in simple sentences that could be appropriately analysed based on the themes they revealed. Berelson [12] and Holsti [13] support this view that for many research purposes, the theme is the most useful unit of analysis. This is because it can be easily identified in texts, especially in non-complicated sentences and paragraphs, or through interpretative judgements of textual responses by the researcher, which is also an integral part of content analysis.

Through these content analysis procedures, it was possible to go through the research questionnaire as well as interview and diary responses and discern common or identical themes relating to each of these questions. This was followed by placing and grouping them into related categories that were created for the purpose, followed by data analysis and presentation. The categorised data was further analysed and presented in the form of descriptive statistics.

The use of different statistical treatments in the analysis of data responses were basically determined by the different configuration characteristics revealed by the data itself, and the requirement of a particular question being dealt with in the research instruments. This applied to diaries and open-ended and categorical questions used in data gathering. Through the use of various descriptive statistical presentations it was possible to organise data into meaningful formats, summarise it into simple accounts, and emphasise those features of it that were especially relevant to the requirements of the study.

Using the statistical package for social sciences (SSPS), the questionnaire responses for three groups of respondents, as well as the responses based on the different institutions that were involved in the study were analysed by means of contingency tables. This helped create tables which placed the analysed data into meaningful and presentable formats.
This analysis has been done through the categorisation of the library activities, professional qualities, graduate performance and education values and summation via cross-tabulation. Such different kinds of categories are intended to provide a guide in developing a curriculum for librarianship in the University of Transkei.

Further, these measures were based on the Chi-square test to determine significance in questionnaire analysis. The purpose of using the chi-square test was to protect the investigator from making misleading inferences from sample data [14]. It was important to know if an effect which was apparently present in a sample was also present in the population from which that sample was taken. This is because very often effects that appear in sample data can be caused by chance characteristics of that sample and the investigator needs to control this source of error before making inferences.

Several scores were statistically significant at the p < .05 level. However, by insisting on a high level of significance only, the researcher considered that this would be an error in an exploratory study of the kind which the researcher was conducting. Statistically, such results may not be significant but conceptually they have great significance.

As indicated in Chapter 5 that the goal is to uncover a core curriculum from the diversity of repondents along their characteristics instead of exploiting any possible differences between them, the analysis sought to identify what the respondents agreed on to be included in librarianship curriculum. After the cells were collapsed to create a dichotomy of negative and positive, for example, not necessary and essential, the researcher could now look at what could be included in the curriculum (APPENDIX C.)

The Pearson's Product Moment Coefficient common measure of correlation, also referred to as Pearson's r allows the strength and direction of linear relationships
The process of interpretation in each section of this study focuses on the examination of the categorisation of variable values that have emerged from data analysis taken together with comments made on the 'And other' option. The 'And other' option was included in the list of questionnaires since the researcher felt the respondents would probably suggest a list of activities that included both current and future practices.

To answer the questions a list of variable categories were presented to each respondent to be rated on a given scale. Their rating was based on the extent to which respondents agreed that each element could be integrated in the librarianship curriculum and whether they agreed on the adequacy of graduate education and graduate performance. Likert scaling was used to increase variation in the possible scores answered identically in questionnaires and to translate responses to various numerical scales for analysis [15], for example: 1 = unnecessary; 2 = peripheral; 3 = desirable; 4 = essential.

In order to arrive at meaningful information from data, the activities were grouped into units from which the core curriculum could be built. For questionnaires, percentage ratings were calculated. The percentages in the tables were rounded off to the nearest one tenth of one per cent.

The basic limitation regarding the level of emphasis given to each variable is lack of literature having a scientific basis for drawing borderline between, for example, high or medium emphasis or medium or low emphasis. About the percentages given by Pfister and others [16] and Jowkar [17] observe that there is neither a reference to any sources for the borderline or any explanations between medium nor high or medium or low emphasis as indications of emphasis. Neither do costing models, time-recording methods and statistical techniques help indicate the level of emphasis to be given to these variables [18]. Besides these methods would exclude some respondents, for example, lecturers as they are not directly involved with professional practice.
To make a sound basis for the different boundaries, a method to integrate quantitative and qualitative analysis is used. Interview analysis entails the search for reasons for respondents considering the variables important or unimportant. This helps lead to a clearer feedback which can be used to design librarianship curriculum. What the respondents say about the variables reflects how these responses may suggest their importance for inclusion in curriculum. Thus through qualitative analysis it is possible to get information that cannot be obtained by quantitative analysis.

While the purpose of each question or group of questions or questionnaire items was given as they related to providing information on a particular research question, the general procedure adopted in the analysis of data was based on the following aspects:

(i) the grouping and, therefore, combined analysis of related questions under various sub-headings to which such questions provided answers

(ii) where (i) was thought to be inappropriate or did not make logical sense in the analysis, the chronological order of the questions or items as arranged in the self-administered questionnaire was followed.

However, in most cases related questions and items are logically combined to facilitate both the analysis and organisation of data into meaningful formats, summarise it into simpler and meaningful accounts and identify possible relationships among the variables. This arrangement also facilitates easy reading of the chapter. In situations where some questions require detailed analysis, explanations in the form of discussion are given so as to make the analysis more understandable in relation to the study.
The presentation of data involved mainly the use of tables. The chapter also presents the results accruing from the analysis of data.

Research Question 1: Which are the library activities, skills and knowledge that ought to be integrated into the professional curriculum?

This information was important on the assumption that library activities can give some indication of what needs to be included in the core curriculum. These activities could also help determine the underlying skills and knowledge necessary to perform them, as well as the weaknesses and strengths of the graduates' skills and knowledge in applying the skills and knowledge to practice. Library activities, as determinants of a relevant are therefore critical. These kinds of data included the variety of activities that graduates were assumed to perform.

To answer this question a list of activities was presented to each respondent to be rated on a five point scale based on the extent to which they agreed that each activity could be integrated into the librarianship curriculum. For the first two units of categories of activities, the scale comprised four categories: 1 = unnecessary; 2 = peripheral; 3 = desirable; 4 = essential.

The following sub-sections thus present the findings of the survey in relation to the activities, knowledge and skills required of a graduate.

6.6 DOCUMENT-RELATED ACTIVITIES

In libraries document-related activities are often assigned to the 'technical division of services'. This section is called so because it deals with receiving and processing of documents. It was thus valuable to see the importance of these activities in librarianship and education.
The range of activities constituting document-related activities was as follows:

acquire documents for collections
maintain library collections
select documents
photocopy documents
catalogue documents
classify documents
index documents
circulate documents
prepare abstracts
do shelf reading
assess and weed collections
plan and implement the building of collections
develop library collections and
mend library collections.

TABLE 6.2: Respondents and Document-Related Activities N = 124

Level of Agreement on ‘Essential’ Document-Related Activities Capable of Becoming Integrated in the First Professional Degree Level Curriculum in percentages

Legend: Employers = Em; Students = St; Academics = Ac; Public Libraries = PL, School Libraries = SL; Academic Libraries - AL
Average = Av.

<table>
<thead>
<tr>
<th>List of Activities</th>
<th>By respondents</th>
<th>By library type</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acquire documents</td>
<td>% Em St Ac Av.</td>
<td>% PL SL AL Av.</td>
</tr>
<tr>
<td>Maintain library</td>
<td>69 83 60 69 70</td>
<td>69 65 68 68</td>
</tr>
<tr>
<td>Select documents</td>
<td>78 75 74 71 65</td>
<td>68 65 68 68</td>
</tr>
<tr>
<td>Photocopy documents</td>
<td>22 42 21 21 40</td>
<td>21 40 44 32</td>
</tr>
<tr>
<td>Catalogue documents</td>
<td>83 88 79 83 75</td>
<td>83 75 81 82</td>
</tr>
<tr>
<td>Classify documents</td>
<td>78 100 79 86 60</td>
<td>86 60 81 73</td>
</tr>
<tr>
<td>Index documents</td>
<td>48 33 31 37 35</td>
<td>37 35 45 37</td>
</tr>
<tr>
<td>Circulate documents</td>
<td>28 41 21 30 35</td>
<td>30 35 44 37</td>
</tr>
<tr>
<td>Prepare abstracts</td>
<td>19 08 45 24 35</td>
<td>24 35 44 23</td>
</tr>
<tr>
<td>Do shelf reading</td>
<td>50 54 21 42 85</td>
<td>42 85 100 32</td>
</tr>
<tr>
<td>Assess and weed</td>
<td>55 54 50 53 55</td>
<td>53 55 69 56</td>
</tr>
<tr>
<td>Plan and implement</td>
<td>71 54 59 61 50</td>
<td>61 50 56 68</td>
</tr>
<tr>
<td>Develop collections</td>
<td>85 67 69 74 80</td>
<td>74 80 75 86</td>
</tr>
<tr>
<td>Mend collections</td>
<td>48 46 10 35 40</td>
<td>35 40 44 32</td>
</tr>
</tbody>
</table>

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The results on document-related activities are shown in Table 2 and are quite illuminating. These activities are considered relevant to professional practice by undergraduates and therefore are essential to be included in their initial programme of study. The majority of these activities range between 60% and 80%. This is very high considering that '4' the highest rating in this area stands for 'essential'. Library activities formed a similar pattern for library types and respondent groups.

The results have more impact when compared with the respondents' interview responses. 'Document-related activities have always been the primary tasks of librarians that help contribute to quality and relevance of collection depending on the type of user and type of library. This is irrespective of the graduate works in the developing or developed South Africa' [academic]. In a similar tone 'the activities are described as 'an excellent foundation for a graduate to enter any type of library' [employer and graduate].

'From my short experience in professional practice these activities are the soul of the library and graduates need to be equipped with the skills necessary to perform them' [graduate].

On the contrary view, to prepare indexes and abstracts according to the responses do not qualify to be included in the initial undergraduate curriculum. 'These activities need classification skills, prior subject knowledge and judgement as to what depth to index documents. It is not expected that the student will have accumulated the required subject knowledge before gaining subject knowledge during his study of the initial degree programme' [academic librarian]. Further,

'To prepare indexes and abstracts the librarian uses sources accessible at deeper level, often because of his knowledge of discipline covered' [academic]. It is implied that preparing abstracts and preparing indexes may be omitted from the first level graduate curriculum based on these skills assumed in future post-graduate education.
It is important to note that the nature of skills and knowledge to be applied with document-related activities is evidence that manual skills are not very relevant to librarianship curriculum development. Hence, 'photocopy documents', 'circulate documents', 'do shelf reading' and 'mend collections' are of no significance at all with the both sample of respondents and types of library.

6.7 READER-RELATED ACTIVITIES

As reader-related activities are characterised by a diverse user population, it is necessary to see to which activities selected below are central to professional practice and education for each population.

The range of reader-related activities include:

- Assess library and information needs for users
- Formulate policies to meet these needs
- Acquire knowledge of the wider library standards
- Plan and implement information services
- Plan and execute the promotion of policies
- Plan library systems for the implementation of policies
- Enrol users
- Conduct search interviews
- Search on-line databases
- Edit information retrieved
- Participate in interlending services
- Prepare current awareness services
- Stimulate the use of library collection
- Provide an actuality service
- Help in the exploitation and utilisation of new technology
- Organise the readership
- Plan and implement extension activities
- Co-ordinate information services

The trends in Table 6.3 below indicate the importance of reader-activities in professional practice. Several of these activities are considered essential both for graduate professional practice and for inclusion in the initial curriculum of their
education. Their average ‘essential’ level is between 50% and 70% with both the sample of respondents and types of libraries surveyed.

**TABLE 6.3: Respondents and Reader-Related Activities N = 124**

**Level of Agreement on ‘Essential’ Reader-Related Activities Capable of Becoming Integrated in the First Professional Degree Level Curriculum in percentages**

<table>
<thead>
<tr>
<th>List of Activities</th>
<th>By respondents</th>
<th>By library type</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Em</td>
<td>St</td>
</tr>
<tr>
<td>Assess library</td>
<td>74%</td>
<td>71%</td>
</tr>
<tr>
<td>Formulate policies</td>
<td>84%</td>
<td>83%</td>
</tr>
<tr>
<td>Acquire knowledge</td>
<td>64%</td>
<td>75%</td>
</tr>
<tr>
<td>Plan and implement</td>
<td>64%</td>
<td>63%</td>
</tr>
<tr>
<td>Plan and execute</td>
<td>47%</td>
<td>75%</td>
</tr>
<tr>
<td>Plan library</td>
<td>52%</td>
<td>54%</td>
</tr>
<tr>
<td>Enrol users</td>
<td>47%</td>
<td>54%</td>
</tr>
<tr>
<td>Conduct interviews</td>
<td>59%</td>
<td>63%</td>
</tr>
<tr>
<td>Search on-line</td>
<td>38%</td>
<td>54%</td>
</tr>
<tr>
<td>Edit information</td>
<td>59%</td>
<td>58%</td>
</tr>
<tr>
<td>Interlending services</td>
<td>57%</td>
<td>88%</td>
</tr>
<tr>
<td>Current awareness</td>
<td>53%</td>
<td>54%</td>
</tr>
<tr>
<td>Stimulate the use</td>
<td>60%</td>
<td>83%</td>
</tr>
<tr>
<td>Actuality service</td>
<td>85%</td>
<td>63%</td>
</tr>
<tr>
<td>New technology</td>
<td>47%</td>
<td>67%</td>
</tr>
<tr>
<td>Organise readership</td>
<td>40%</td>
<td>50%</td>
</tr>
<tr>
<td>Extension activities</td>
<td>52%</td>
<td>33%</td>
</tr>
<tr>
<td>Co-ordinate services</td>
<td>57%</td>
<td>42%</td>
</tr>
</tbody>
</table>

Interview responses highlight their importance in undergraduate education and professional practice:

‘Reader-related activities are essential for a graduate to get employment in any type of library’ [a significant number of respondents from all groups]. ‘They are at the heart and core of the library and graduates should acquire relevant skills to carry out these activities’ [academic].
On the negative side when respondents were asked to describe strengths and weaknesses in this area the comments made were:

'Use of technology including the introduction of CD-ROMs, OPACs, online databases and new formats and format integration has affected reader-related activities. It is important that students acquire computer literacy skills [librarian].'

'Technology skills are essential as vehicles of change in the competitive environment of librarianship. Library schools do not realise the importance of acquiring technology skills in librarianship education. Most institutions give lip service to the importance of students and all categories of library users. The governors of academic institutions do not provide funds and well-trained personnel to execute training in library-technology-skill programmes [librarian].'

'Students need to acquire technology skills to be able to intelligently search for information. However, they are not equipped with skills to search information using information technology. This is the case in South African institutions of tertiary education (technikons and universities) [librarian].'

The weakness of curriculum and training in technology is also supported by a survey conducted by the Public Relations Committee of SAILIS in the Eastern Cape in 1996 in reader-related activities [19]. A contrary view is that 'The vision aspect of information provision is more important than technology. What makes a librarianship course valid is for it to be taken on the basis that it covers a fundamental library function. Such a consideration makes the course a valid component of the programme objectives' [academic]. The latter statement can help explain that with all respondents and library types 'Help in the exploitation and utilisation of new technology' is not significant statistically. Also use of 'to search intelligently' by the librarian respondent also emphasis human capability more that computer capability.
The statement is not made to undermine the influence on library activities. The point made is that a course in librarianship should be taken on the basis that it covers a fundamental library function. Lor [20] has expressed the view that failure to separate the means correctly could result in either dissipation of the profession's ideals in the race of modernity.

Reasons cited for not considering 'search online' for inclusion in the curriculum at the undergraduate level were incidentally those that are associated with human capabilities.

'Online searching is very important in professional practice but lack of subject knowledge and costs involved online searching are factors that make them not to be encouraged at initial professional training. This applies to both training and practice'

As with document-related activities in 6.2 skills associated with clerical work are considered as being of much lower importance and thus not very relevant to graduate education. Hence, 'enrol users' is not important.

Also, the very high significance of most activities in school libraries can be explained by the fact each library in a school is run by only one senior qualified practising librarian who has specialised to a certain degree.

**6.8 MARKETING-RELATED ACTIVITIES**

Finding out to what extent respondents consider marketing-related activities as important or unimportant and therefore relevant or not in curriculum is central in the section.

The key range of marketing-related activities included in the questionnaire are:

Support literacy programmes
Support development programmes, e.g. Health education
Segment clientele
Identify product and service needs
Erect displays
Promote services
Publicise services
Price services
Create image

The variable values for the marketing-related activities are displayed in Table 6.4

For the following seven units of categories of activities, the scale comprised six
categories: 1 = required for many positions; 2 = highly desirable; 3 = the most
important activity for some specialists activities; 4 = required as background
knowledge for many positions; 5 = not important at entry level; 6 = not needed

TABLE 6.4: Respondents and Marketing-Related Activities N = 124

Level of Agreement on ‘Highly Desirable’ Marketing-Related Activities
Capable of Becoming Integrated in the First Professional Degree Level Curriculum in percentages

<table>
<thead>
<tr>
<th>List of Activities</th>
<th>By respondents</th>
<th>By library type</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Em</td>
<td>St</td>
</tr>
<tr>
<td>Support literacy</td>
<td>53</td>
<td>50</td>
</tr>
<tr>
<td>Support development</td>
<td>60</td>
<td>54</td>
</tr>
<tr>
<td>Segment clientele</td>
<td>53</td>
<td>50</td>
</tr>
<tr>
<td>Identify product</td>
<td>40</td>
<td>50</td>
</tr>
<tr>
<td>Erect displays</td>
<td>50</td>
<td>46</td>
</tr>
<tr>
<td>Promote services</td>
<td>53</td>
<td>63</td>
</tr>
<tr>
<td>Publicise services</td>
<td>60</td>
<td>38</td>
</tr>
<tr>
<td>Price services</td>
<td>22</td>
<td>29</td>
</tr>
<tr>
<td>Create image</td>
<td>47</td>
<td>67</td>
</tr>
</tbody>
</table>

The discrimination between importance levels for the various activities turn out not
to be very large, but the interview responses are of value. However, most of the
comments that were given considered marketing-related activities were positive,
indicating that they comprised an essential component to be included in the first
level undergraduate curriculum.

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To support development in types of libraries students require education on which to base their action. Marketing-related activities are fundamental for such performance. It is imperative that it be incorporated in the undergraduate level of study [academic].

Users are central to library practice. Marketing activities are at the centre of client services. It stands to reason that they should be included in the first level qualification of librarians [librarian].

Graduates need to understand about users of the libraries and the why of carrying out the marketing related activities. Information services must show a competitive advantage of the library and support for societal goals for users if information environments are to survive [public librarian].

Training on marketing-related activities at first professional level is a must. Training must concentrate on proactive stances that can be taken in shaping and developing strategic and planned efforts in the library environment. For that reason an appropriately focused response is needed in initial curriculum development. Determining the activities performed with respect to marketing will be used for interpretation into relevant education [public librarian].

To 'price services' received negative support from both the sample of responses and types of libraries. Not unaware of their importance, the negative response boiled down 'with underdevelopment, the key measure is providing information on a proactive basis' [librarian].

It is noted that most positive responses from public librarians were equally supported by positive comments from public librarians.
6.9 FINANCE-RELATED ACTIVITIES

Incorporation of finance-related activities in this study has been made on the basis that with limited availability of financial resources in South Africa, the effective use of funds is important and the assumption that the area should thus form part of the core curriculum. Included in the finance-related activities are the following:

Plan funding programmes
Draw up budget
Debate budget
Allocate funds
Plan control of funds
Plan financial records
Plan accounts
Prepare accounts
Prepare financial report procedures

TABLE 6.5: Respondents and Finance-Related Activities N = 124

Level of Agreement on ‘Highly Desirable’ Finance-Related Activities Capable of Becoming Integrated in the First Professional Degree Level Curriculum in percentages

<table>
<thead>
<tr>
<th>List of Activities</th>
<th>By respondents</th>
<th>By library type</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Em</td>
<td>St</td>
</tr>
<tr>
<td>Plan funding</td>
<td>33</td>
<td>54</td>
</tr>
<tr>
<td>Draw up budget</td>
<td>40</td>
<td>58</td>
</tr>
<tr>
<td>Debate budget</td>
<td>28</td>
<td>29</td>
</tr>
<tr>
<td>Allocate funds</td>
<td>33</td>
<td>50</td>
</tr>
<tr>
<td>Plan control of funds</td>
<td>36</td>
<td>41</td>
</tr>
<tr>
<td>Plan financial</td>
<td>33</td>
<td>50</td>
</tr>
<tr>
<td>Plan accounts</td>
<td>40</td>
<td>42</td>
</tr>
<tr>
<td>Prepare accounts</td>
<td>36</td>
<td>38</td>
</tr>
<tr>
<td>Prepare financial</td>
<td>36</td>
<td>42</td>
</tr>
</tbody>
</table>

Table 6.5 shows that responses are not particularly meaningful. Most of the responses were negative in addition to the negative responses noted in the table.
For example ‘Lack of financial management skills should not be an obstacle towards a graduate qualifying in librarianship’ [librarian].

‘We need versatile librarians who will make financial decision that will take heed of all factors at play in the library situation. It is such librarians who will argue intelligently and authoritatively with top management of the mother institution’ [librarian].

‘If library has to be run as a business venture then its administrators or top management should have a sound background of the principles of financial management. These are the people who will help libraries to plan in a turbulent financial climate [academic]’.

‘For those students who have a bent in management they can take it at post-graduate level as a component of library management’ [academic librarian].

The problem of including these activities is associated with the recruits that librarianship often attracts. ‘The majority of students come from humanities and they often fail to bring with them the required background knowledge on financial management’.

By all indications and frequent reference to top management, these activities although relevant to professional practice, do not qualify to be included in the initial undergraduate curriculum. Again the high significance with school libraries can be attributed to their senior qualifications.

6.10 NUMERACY-RELATED ACTIVITIES

The reason for including numeracy-related activities is to see to what extent can it be necessary in librarianship to have numeracy skills. These are the activities
Model building
Prepare and implement statistical procedures
Analyse statistics
Survey and evaluate projects

TABLE 6.6: Respondents and Numeracy-Related Activities N = 124

Level of Agreement on ‘Highly Desirable’ Numeracy-Related Activities Capable of Becoming Integrated in the First Professional Degree Level Curriculum in percentages

<table>
<thead>
<tr>
<th>List of Activities</th>
<th>Em %</th>
<th>St %</th>
<th>Ac %</th>
<th>Av %</th>
<th>PL %</th>
<th>SL %</th>
<th>AL %</th>
<th>Av %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model building</td>
<td>36</td>
<td>33</td>
<td>17</td>
<td>29</td>
<td>20</td>
<td>31</td>
<td>23</td>
<td>25</td>
</tr>
<tr>
<td>Statistical procedures</td>
<td>53</td>
<td>58</td>
<td>45</td>
<td>52</td>
<td>60</td>
<td>56</td>
<td>55</td>
<td>57</td>
</tr>
<tr>
<td>Analyse statistics</td>
<td>60</td>
<td>54</td>
<td>55</td>
<td>56</td>
<td>65</td>
<td>63</td>
<td>55</td>
<td>61</td>
</tr>
<tr>
<td>Survey projects</td>
<td>29</td>
<td>29</td>
<td>31</td>
<td>30</td>
<td>10</td>
<td>31</td>
<td>32</td>
<td>24</td>
</tr>
</tbody>
</table>

The respondent rates between respondents and library types in Table 6.6 show a high similarity between the agreement levels on which activities to be integrated in the first level curriculum. The agreement levels for ‘analyse statistics’ and ‘implement statistical procedures’ ranges between 54% and 63% by library type and by respondents.

Arguments for the importance of these activities are:

‘In library and information centres such skills are truly essential to successful performance of many activities’ [employer].

‘Graduates have to know some basics of analysis of statistics and interpretation of statistics’. These are often applied in carrying out most library functions [academic].

Line [21] has suggested that numeracy-related activities are in themselves important in that they help students to develop deeper knowledge and understanding of the subject concerned.
It can be concluded that the responses taken together with interviews indicate that the two activities indicated as important in this section should be included in the undergraduate curriculum as an integral part of the teaching process.

6.11 PERSONNEL-RELATED ACTIVITIES

Many library schools in South Africa offer courses on personnel-related activities. The question is to what extent are these activities fundamental and important in curriculum development and for graduate practice. The overall activities covered that deal with personnel are:

- Plan processes and work flow
- Recruit staff
- Assign personnel in sections
- Grade personnel in positions
- Direct personnel
- Supervise personnel
- Control production
- Control operations
- Motivate personnel
- Develop rapport

With the exception of 'plan processes and work flow', the results in table 6.7 below are not significant. Also comments clearly reflected the view that personnel-related activities were not relevant to be included in the undergraduate programme.

'Personnel related activities are an aspect of senior management. These activities are concerned with library manager's functions and are concerned with the efforts of all grades of the employees of the library [librarian]. On the other hand 'plan processes and work flow' could be fitted in with other related areas like reader-related activities.
### Table 6.7: Respondents and Personnel-Related Activities - N = 124

<table>
<thead>
<tr>
<th>List of Activities</th>
<th>By respondents</th>
<th>By library type</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Em</td>
<td>St</td>
</tr>
<tr>
<td>Plan processes</td>
<td>57</td>
<td>42</td>
</tr>
<tr>
<td>Recruit staff</td>
<td>33</td>
<td>42</td>
</tr>
<tr>
<td>Assign personnel</td>
<td>29</td>
<td>21</td>
</tr>
<tr>
<td>Grade personnel</td>
<td>22</td>
<td>40</td>
</tr>
<tr>
<td>Direct personnel</td>
<td>22</td>
<td>29</td>
</tr>
<tr>
<td>Supervise personnel</td>
<td>29</td>
<td>46</td>
</tr>
<tr>
<td>Control production</td>
<td>40</td>
<td>46</td>
</tr>
<tr>
<td>Control operations</td>
<td>40</td>
<td>38</td>
</tr>
<tr>
<td>Motivate personnel</td>
<td>53</td>
<td>46</td>
</tr>
<tr>
<td>Develop rapport</td>
<td>47</td>
<td>46</td>
</tr>
</tbody>
</table>

#### 6.12 INFORMATION RESOURCE MANAGEMENT ACTIVITIES

New technologies have increased the availability of information in an organisation. For the study, it is important to find out if it is relevant for a graduate to be trained to manage and consider information processes as well as to organise the use of both internal and external resources.

The activities recorded are the following:

- Do feasibility study
- Analyse information systems
- Design information systems
- Manage systems development
- Justify the systems
- Acquire hardware
- Acquire library software
- Install and maintain software
- Administer virus control
- Administer basic network
- Restructure existing systems
- Install, maintain and administer systems

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Direct information systems  
Manage research development  
Finance information systems  
Educate and train information workers  
Prepare data on information for use by others  
Communicate information  
Present information  
Manage information operations  
Control information systems  
Evaluate automated systems

**TABLE 6.8: Respondents and Information Resource Management Activities**  
**N** = 124

**Level of Agreement on ‘Highly Desirable’ Information Resource Activities Capable of Becoming Integrated in the First Professional Degree Level Curriculum in percentages**

<table>
<thead>
<tr>
<th>List of Activities</th>
<th>By respondents</th>
<th>By library type</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Em</td>
<td>St</td>
</tr>
<tr>
<td></td>
<td>%</td>
<td>%</td>
</tr>
<tr>
<td>Feasibility study</td>
<td>32</td>
<td>42</td>
</tr>
<tr>
<td>Analyse systems</td>
<td>33</td>
<td>33</td>
</tr>
<tr>
<td>Design systems</td>
<td>22</td>
<td>38</td>
</tr>
<tr>
<td>Manage systems</td>
<td>31</td>
<td>38</td>
</tr>
<tr>
<td>Justify the systems</td>
<td>31</td>
<td>42</td>
</tr>
<tr>
<td>Acquire hardware</td>
<td>37</td>
<td>38</td>
</tr>
<tr>
<td>Acquire software</td>
<td>33</td>
<td>38</td>
</tr>
<tr>
<td>Install software</td>
<td>33</td>
<td>33</td>
</tr>
<tr>
<td>Virus control</td>
<td>29</td>
<td>33</td>
</tr>
<tr>
<td>Administer network</td>
<td>33</td>
<td>38</td>
</tr>
<tr>
<td>Restructure systems</td>
<td>29</td>
<td>38</td>
</tr>
<tr>
<td>Administer systems</td>
<td>22</td>
<td>29</td>
</tr>
<tr>
<td>Direct systems</td>
<td>33</td>
<td>46</td>
</tr>
<tr>
<td>Manage research</td>
<td>14</td>
<td>46</td>
</tr>
<tr>
<td>Finance systems</td>
<td>29</td>
<td>33</td>
</tr>
<tr>
<td>Educate and train</td>
<td>40</td>
<td>29</td>
</tr>
<tr>
<td>Prepare data use</td>
<td>47</td>
<td>50</td>
</tr>
<tr>
<td>Communicate information</td>
<td>47</td>
<td>21</td>
</tr>
<tr>
<td>Present information</td>
<td>48</td>
<td>29</td>
</tr>
<tr>
<td>Manage operations</td>
<td>37</td>
<td>21</td>
</tr>
<tr>
<td>Control systems</td>
<td>37</td>
<td>46</td>
</tr>
<tr>
<td>Evaluate systems</td>
<td>37</td>
<td>42</td>
</tr>
</tbody>
</table>
The activities listed in Table 6.8 give a reasonable description of what a graduate is expected to do with regards to resource management. In this section it can be seen that response rates are very low even with school libraries that were in some instance high when other type of libraries showed low significance. Some viewpoints suggested reasons that the other activities be excluded in the initial graduate curriculum without being condemnatory. It is important to note that activities also apply to the support of readership such as 'train and educate'.

'An information resource manager is needed to plan and manage information resource management activities and use both internal and external data resources' [librarian].

'The problem related to information resource activities in South Africa is that the area is multidisciplinary and fragmented and cannot be truly recognised as belonging to librarianship. A student with a science background could study the course at post-graduate level [academic].

Support for the following is given: educate and train information workers, prepare data on information for use by others, communicate information, present information, manage information operations.

'With these activities it appears necessary to move towards interdisciplinary integration. It is believed that the holistic approach that would be brought about by the interdisciplinary approach would afford students the ability to more readily understand and manage information resources impacting on individual, organisational and strategic decision making' [academic].

It is suggested that these activities cannot be included in the undergraduate curriculum, but some undergraduate students with a science background they can be taken as selective courses. Also, it is important to note that the activities supported by all groups and library institutions although not statistically significant, are equally applicable to provision of readership.
6.13 RECORDS MANAGEMENT ACTIVITIES

The intention in including activities on records management was to discover if respondents would consider this area a part of the curriculum. Activities noted are:

Plan and organise new records systems
Implement new records systems
Evaluate the effectiveness of the records management systems
Determine the effectiveness of existing filing systems
Identify categories for vital records
Maintain records retention schedules
Determine and establish ways of protecting records against natural hazards
Supervise the establishment and installation of new records series
Prepare and maintain record inventories
Establishing filing methods for new records
Formulate and establishing filing procedures
Determine methods of disposition of records
Locate and design a records centre for inactive records

TABLE 6.9: Respondents and Records Management Activities N = 124

Level of Agreement on ‘Highly Desirable’ Records Management Activities Capable of Becoming Integrated in the First Professional Degree Level Curriculum in percentages

<table>
<thead>
<tr>
<th>List of Activities</th>
<th>Em %</th>
<th>St %</th>
<th>Ac %</th>
<th>Av %</th>
<th>PL %</th>
<th>SL %</th>
<th>AL %</th>
<th>Av %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Plan new records</td>
<td>36</td>
<td>33</td>
<td>31</td>
<td>33</td>
<td>35</td>
<td>38</td>
<td>14</td>
<td>29</td>
</tr>
<tr>
<td>Implement systems</td>
<td>43</td>
<td>29</td>
<td>26</td>
<td>33</td>
<td>30</td>
<td>50</td>
<td>23</td>
<td>34</td>
</tr>
<tr>
<td>Evaluate records</td>
<td>22</td>
<td>29</td>
<td>38</td>
<td>30</td>
<td>30</td>
<td>56</td>
<td>32</td>
<td>41</td>
</tr>
<tr>
<td>Determine filing</td>
<td>36</td>
<td>54</td>
<td>36</td>
<td>42</td>
<td>30</td>
<td>25</td>
<td>23</td>
<td>26</td>
</tr>
<tr>
<td>Identify vital records</td>
<td>33</td>
<td>46</td>
<td>31</td>
<td>37</td>
<td>35</td>
<td>31</td>
<td>27</td>
<td>31</td>
</tr>
<tr>
<td>Maintain schedules</td>
<td>36</td>
<td>29</td>
<td>26</td>
<td>30</td>
<td>45</td>
<td>25</td>
<td>36</td>
<td>35</td>
</tr>
<tr>
<td>Protect records</td>
<td>36</td>
<td>38</td>
<td>41</td>
<td>38</td>
<td>25</td>
<td>44</td>
<td>23</td>
<td>31</td>
</tr>
<tr>
<td>Supervise records</td>
<td>31</td>
<td>29</td>
<td>26</td>
<td>29</td>
<td>15</td>
<td>38</td>
<td>23</td>
<td>26</td>
</tr>
<tr>
<td>Record inventories</td>
<td>33</td>
<td>42</td>
<td>26</td>
<td>34</td>
<td>45</td>
<td>44</td>
<td>31</td>
<td>40</td>
</tr>
<tr>
<td>Filing methods</td>
<td>36</td>
<td>42</td>
<td>36</td>
<td>38</td>
<td>30</td>
<td>31</td>
<td>41</td>
<td>34</td>
</tr>
<tr>
<td>Filing procedures</td>
<td>43</td>
<td>38</td>
<td>40</td>
<td>40</td>
<td>45</td>
<td>44</td>
<td>41</td>
<td>43</td>
</tr>
<tr>
<td>Dispose records</td>
<td>36</td>
<td>29</td>
<td>31</td>
<td>32</td>
<td>35</td>
<td>41</td>
<td>45</td>
<td>39</td>
</tr>
<tr>
<td>Plan a records centre</td>
<td>33</td>
<td>46</td>
<td>43</td>
<td>41</td>
<td>40</td>
<td>44</td>
<td>14</td>
<td>33</td>
</tr>
</tbody>
</table>

169
Records management related activities in Table 6.9 have low importance for all respondents and library types. The interview responses help explain the low response rates.

‘With due respect, I beg to differ if you think that has to be offered towards a first professional level’ [academic].

A contrary view is expressed ‘Records management is very important as it is closely related to an organisation [academic]. They should be included in the initial graduate programme.

Also, ‘records management activities are archives’ specific and involve the education of narrowly defined knowledge devoid of librarianship’ [librarian].

There is therefore evidence of librarians’ approach that differs from those of the archivists. In this context that the question whose view accounts becomes particularly relevant and has methodological implications. It is argued that if a distinction is made between the archivist and librarian, then it becomes clear that their education should be distinct.

The view of the investigator is that a more appropriate response is to accept that different groups have different interests and provide education alternatives for these. The research that is being conducted in this study involved a clear guiding principle. It set out quite explicitly to look at broad librarianship activities performed at graduate level. In this case, priority has been given to views expressed in respect of librarianship activities and not specialisation. As a result, these activities cannot been considered for inclusion at the initial level of training.
6.14 SELF-DEVELOPMENT ACTIVITIES

The assumption here is that in a fast-changing world and competitive environment, graduates cannot stop learning. Instead, they have to update their professional knowledge continuously and improve their professional skills and performance to achieve results for their organisation.

The activities noted are:

Do research
Further one’s education
Do community work
Do continuing education
Do professional reading

TABLE 6.10: Respondents and Self-Development Activities N = 124

Level of Agreement on ‘Highly Desirable’ Self-Development Activities Capable of Becoming Integrated in the First Professional Degree Level Curriculum in percentages

<table>
<thead>
<tr>
<th>List of Activities</th>
<th>By respondents</th>
<th>By library type</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Em %</td>
<td>St %</td>
</tr>
<tr>
<td>Do research</td>
<td>64</td>
<td>50</td>
</tr>
<tr>
<td>Further education</td>
<td>60</td>
<td>50</td>
</tr>
<tr>
<td>Do community work</td>
<td>22</td>
<td>33</td>
</tr>
<tr>
<td>Continuing education</td>
<td>43</td>
<td>50</td>
</tr>
<tr>
<td>Professional reading</td>
<td>36</td>
<td>58</td>
</tr>
</tbody>
</table>

Putting research in undergraduate curriculum received a high priority with a rating of 64%. Continuing research received a favourable response from students and academics only. The interpretation for the importance of research to be included in the initial graduate curriculum is that:
Comments clearly showed that the remaining self-development activities were not relevant to be included in undergraduate curriculum. They were certainly influenced by the fact that self-development would be required to fill in gaps of what undergraduate could not have covered in their studies. Research supports self-development at post-graduate level [22].

'Self-development is a critical factor in creating a competent workforce for the future. Practitioners should take responsibility for their own personal and professional development' [academic].

'It is qualified professionals of all levels and institutions who should be involved highly in the various self-development activities' [librarian].

There is a great need for self-development to help produce skilled and specialist workforce. Self-development activities are important at all stages of employment to ensure a capability for continuing high quality performance in a changing environment' [academic].

'Employability has largely become the realistic target for the employed and that is largely dependent of self-directed development [librarian].

In addition, self-development activities have clear implications for lifelong learning as one academic argues: 'it may be fruitless to try to cover the ground in the sense of providing graduates with all the knowledge and skills they are ever going to need. In this respect the importance of self-development activities during the latter part of the career can look after the gaps'.

For this study, 'do research' can be regarded as the only activity that qualifies to be included in the initial graduate curriculum. 'A research outlook should encourage and enhance the best kinds of managerial outlook and this should appeal to practitioners'. It is important that it be included in the initial programme of training [librarian].
6.15. ACTIVITIES RELATED TO PREMISES

Professional practice and professional education assume the right environment.

Whether the activities related to premises represent an important aspect in curriculum development is investigated. Activities recorded are:

Consult teams and plan development
Consult teams and plan buildings
Plan and implement the provision of premises
Plan security
Plan safety arrangements
Plan maintenance
Plan insurance
Prepare policy documents
Order equipment
Plan and procure equipment for premises
Plan and implement the provision of vehicles
Plan and procure equipment for vehicles
Plan physical plant
Evaluate the premises

TABLE 6.11: Respondents and Activities Related to Premises N = 124
Level of Agreement on 'Highly Desirable' Activities Related to Premises Capable of Becoming Integrated in the First Professional Degree Level Curriculum in percentages

<table>
<thead>
<tr>
<th>List of Activities</th>
<th>by respondents</th>
<th>by library type</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Em</td>
<td>St</td>
</tr>
<tr>
<td>Consult teams</td>
<td>43</td>
<td>21</td>
</tr>
<tr>
<td>Plan buildings</td>
<td>47</td>
<td>21</td>
</tr>
<tr>
<td>Plan premises</td>
<td>36</td>
<td>50</td>
</tr>
<tr>
<td>Plan security</td>
<td>60</td>
<td>67</td>
</tr>
<tr>
<td>Plan safety</td>
<td>60</td>
<td>67</td>
</tr>
<tr>
<td>Plan maintenance</td>
<td>64</td>
<td>63</td>
</tr>
<tr>
<td>Plan insurance</td>
<td>88</td>
<td>38</td>
</tr>
<tr>
<td>Prepare policy</td>
<td>69</td>
<td>54</td>
</tr>
<tr>
<td>Order equipment</td>
<td>71</td>
<td>75</td>
</tr>
<tr>
<td>Procure equipment</td>
<td>59</td>
<td>46</td>
</tr>
<tr>
<td>Plan vehicles</td>
<td>47</td>
<td>50</td>
</tr>
<tr>
<td>Procure vehicles</td>
<td>36</td>
<td>50</td>
</tr>
<tr>
<td>Plan physical plant</td>
<td>40</td>
<td>21</td>
</tr>
<tr>
<td>Evaluate the premises</td>
<td>47</td>
<td>38</td>
</tr>
</tbody>
</table>
Table 6.11 shows support for some activities and the suggestion is that since there is unanimity amongst the respondents and the type of libraries they should be included in the undergraduate curriculum. Unanimity is reached on the following activities: plan security, plan safety arrangements, plan maintenance (except academics), plan insurance (libraries only), prepare policy documents, order equipment (except academic), procure equipment (by types of libraries only) and plan vehicles.

Their importance lies in that:

‘they can help students learn about the aspects of the organisation that need to be improved and how the organisation can be helped make the necessary improvements’ [employer].

The need for a policy document usually comes from the graduates who need to be initiated to library practices. It is an important activity that needs to be covered in undergraduate education’.

‘Good professionals in any walk of life should be concerned with the effective management of the library environment’. The employer will not be able to respond to the pressures and demands of the premises alone [academic].

For example, it is explained that ‘the constraints imposed by existing and perhaps inappropriate space can be a major blockage to effective library use of materials. The library manager will not be able to respond to the premises and demands alone’. Graduates working in the various parts of the library will provide much of the basic data which the librarian requires in order to improve some areas of the library. They will have a more detailed knowledge of the work associated with data being provided and will have a feel of the trends which information may or may not indicate’ [librarian].
In some structures, the degree of helping plan the premises is such that a number of staff may have responsibility for specific areas of operation. Amongst the activities that were identified as priority activities for graduates were:

Plan and implement the provision of premises
plan security
plan safety arrangements
plan maintenance
plan insurance
order equipment
plan and procure equipment for premises
plan and implement provision of vehicles
plan and procure equipment for vehicle
plan physical plant and evaluate premises.

As a component of management, these activities are thus considered important for inclusion in the undergraduate curriculum.

6.16 COMMUNICATION-RELATED ACTIVITIES

In librarianship, the ability to communicate with people is essential. The questions were designed to determine whether this is equally essential as a core component of curriculum.

Communication-related activities are concerned with the following:

Liaise with specialists in construction
Liaise with faculties
Liaise with parent body
Participate in library associations
Communicate verbally
Communicate in writing
Chair meetings
Publish papers
Do in-house library committee work
Do national committee work
Travel to attend conferences
Table 6.12 shows that the following activities are important for inclusion in the undergraduate curriculum: communicate in writing, chair meetings. do in-house library committee work, do national committee work, travel to attend conferences.

TABLE 6.12: Respondents and Activities Related to Communication N = 124

Level of Agreement on 'Highly Desirable' Activities Related to Communication Capable of Becoming Integrated in the First Professional Degree Level Curriculum in percentages

<table>
<thead>
<tr>
<th>List of Activities</th>
<th>Em</th>
<th>St</th>
<th>Ac</th>
<th>Av</th>
<th>PL</th>
<th>SL</th>
<th>AL</th>
<th>Av</th>
</tr>
</thead>
<tbody>
<tr>
<td>Liaise construction</td>
<td>33</td>
<td>20</td>
<td>07</td>
<td>20</td>
<td>35</td>
<td>13</td>
<td>18</td>
<td>22</td>
</tr>
<tr>
<td>Liaise with faculties</td>
<td>33</td>
<td>25</td>
<td>12</td>
<td>23</td>
<td>35</td>
<td>50</td>
<td>41</td>
<td>42</td>
</tr>
<tr>
<td>Liaise parent body</td>
<td>36</td>
<td>29</td>
<td>26</td>
<td>30</td>
<td>40</td>
<td>50</td>
<td>51</td>
<td>47</td>
</tr>
<tr>
<td>Participate in assoc.</td>
<td>57</td>
<td>67</td>
<td>36</td>
<td>53</td>
<td>40</td>
<td>69</td>
<td>68</td>
<td>59</td>
</tr>
<tr>
<td>Communicate verbally</td>
<td>69</td>
<td>54</td>
<td>64</td>
<td>62</td>
<td>60</td>
<td>75</td>
<td>77</td>
<td>72</td>
</tr>
<tr>
<td>Communicate in writing</td>
<td>67</td>
<td>54</td>
<td>55</td>
<td>60</td>
<td>40</td>
<td>63</td>
<td>68</td>
<td>57</td>
</tr>
<tr>
<td>Chair meetings</td>
<td>53</td>
<td>33</td>
<td>45</td>
<td>44</td>
<td>60</td>
<td>63</td>
<td>41</td>
<td>55</td>
</tr>
<tr>
<td>Publish papers</td>
<td>47</td>
<td>50</td>
<td>45</td>
<td>47</td>
<td>35</td>
<td>50</td>
<td>59</td>
<td>48</td>
</tr>
<tr>
<td>Library committee work</td>
<td>57</td>
<td>58</td>
<td>43</td>
<td>53</td>
<td>50</td>
<td>69</td>
<td>68</td>
<td>62</td>
</tr>
<tr>
<td>National committee work</td>
<td>46</td>
<td>58</td>
<td>31</td>
<td>45</td>
<td>40</td>
<td>69</td>
<td>41</td>
<td>50</td>
</tr>
<tr>
<td>Attend conferences</td>
<td>57</td>
<td>50</td>
<td>31</td>
<td>45</td>
<td>40</td>
<td>63</td>
<td>68</td>
<td>57</td>
</tr>
</tbody>
</table>

Those activities for which a substantial response was received were the same for each group, indicating that they are the most important activities for consideration in undergraduate curriculum. The high estimation of these activities is echoed the responses from the interviews.

'_verbal and written communication is the key to effective teamwork. It encompasses fundamental managing processes'. Both verbal and written communication skills should be covered in the initial student training curriculum [librarian].

'Effective communication in libraries ensures efficiency for users and written communication is essential for effective report writing. Students should learn
about verbal and non-verbal communication and how to communicate effectively and communication skills should be integrated in the undergraduate curriculum [academic].

In particular reason given for communication skills is because of the problems that are associated mostly with serving users from the underdeveloped areas of South Africa appear to be a major concern.

It is important to note that the activities favoured deal with both verbal and written communication.

6.17 ONE-OFF ACTIVITIES

The activities were included because the University of Transkei Library is involved with a number of them. To find out if these should form a component of curriculum was thus necessary. The activities composed are:

Organise a move to new premises
Start a branch library
Reclassify documents
Host a conference

TABLE 6. 13: Respondents and One-off Activities N = 124

Level of Agreement on ‘Highly Desirable’ One-Off Activities Capable of Becoming Integrated in the First Professional Degree Level Curriculum in percentages

<table>
<thead>
<tr>
<th>List of Activities</th>
<th>By respondents</th>
<th>By library type</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Em  St  Ac</td>
<td>Av  PL  SL  AL  Av</td>
</tr>
<tr>
<td>Move to new premises</td>
<td>43  38  21</td>
<td>34  20  25  41  29</td>
</tr>
<tr>
<td>Start a branch library</td>
<td>34  50  26</td>
<td>37  35  31  32  35</td>
</tr>
<tr>
<td>Reclassify documents</td>
<td>53  21  31</td>
<td>35  50  31  44  42</td>
</tr>
<tr>
<td>Host a conference</td>
<td>69  42  59</td>
<td>57  90  81  64  80</td>
</tr>
</tbody>
</table>
The only activity to receive a favourable response is that of ‘host a conference’. It can be noted that it bears a very close resemblance to communication activities. Respondents would like to see it included in the undergraduate curriculum as an institution. Relevance and innovation of professional practices and curricula are reviewed and assessed in the face of current situation to address what are perceived to be priority needs by hosting a conference. Putting it in the undergraduate curriculum would make graduates aware of the inputs they are expected to make by hosting conferences [librarian].

It is important to review long range plans periodically with the aim of revising priorities that may no longer be paramount. This is important in order to ensure that the library’s plans remain consistent with those of the larger organisation of which the library is part [librarian].

Several comments that revealed a negative response that these be included in the undergraduate curriculum were in a similar expression:

‘Activities not being used very often not all can be properly rated for inclusion in the curriculum [academic].

Research Question 2: Which are the necessary professional qualities and attributes that ought to be included in undergraduate curriculum?

6.18 THE CHARACTERISTICS NECESSARY TO MAKE A GRADUATE A SUITABLE PROFESSIONAL

The views of the respondents as to extent to which these need to be considered in education were important.
6.18.1 PERSONAL QUALITIES

The attributes have been included to determine if they are the key requirements in professional practice that needs to be included in curriculum. Responses were collected using the totally agree-totally disagree format. Because the respondent's viewpoints of professional qualities could be divergent, it was deemed acceptable to use this format.

For the last two units of categories of attitudes, the scale comprised five categories:
1 = totally disagree; 2 = disagree; 3 = undecided; 4 = agree; 5 = totally agree.

The following attributes made up the qualities:

Co-operative
Respectful
Able to maintain good relations with colleagues and users
Friendly and courteous
Motivated
Able to lead with authority
In possession of sound technical knowledge
Able to give instructions
Able to express ideas
Capable of having common sense and judgement
Capable of self-control
Approachable
Enthusiastic
Resourceful
Tactful, stable and persevering
Diligent
Responsible

The response rates for all three groups of respondents are significantly high, considering that 100 percent see them as extremely important. The effect is the same for each type of library, which allows a valid comparison. The effect has been noticed in other studies and appears to be normal [23].
### TABLE 6.14: Respondents and Personal Qualities N = 124

Respondents ratings which Reflect 'Essential' Personal Qualities Capable of Becoming Integrated in the First Professional Degree Level Curriculum in percentages

<table>
<thead>
<tr>
<th>List of Activities</th>
<th>Em %</th>
<th>St %</th>
<th>Ac %</th>
<th>Av %</th>
<th>PL %</th>
<th>SL %</th>
<th>AL %</th>
<th>Av %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Co-operative</td>
<td>64</td>
<td>50</td>
<td>45</td>
<td>53</td>
<td>50</td>
<td>75</td>
<td>45</td>
<td>57</td>
</tr>
<tr>
<td>Respectful</td>
<td>67</td>
<td>42</td>
<td>69</td>
<td>58</td>
<td>90</td>
<td>63</td>
<td>64</td>
<td>72</td>
</tr>
<tr>
<td>Maintain good relations</td>
<td>78</td>
<td>79</td>
<td>76</td>
<td>78</td>
<td>65</td>
<td>81</td>
<td>77</td>
<td>74</td>
</tr>
<tr>
<td>Friendly &amp; courteous</td>
<td>76</td>
<td>54</td>
<td>74</td>
<td>68</td>
<td>75</td>
<td>81</td>
<td>73</td>
<td>76</td>
</tr>
<tr>
<td>Motivated</td>
<td>91</td>
<td>88</td>
<td>83</td>
<td>87</td>
<td>65</td>
<td>50</td>
<td>81</td>
<td>65</td>
</tr>
<tr>
<td>Able to lead with authority</td>
<td>60</td>
<td>50</td>
<td>74</td>
<td>61</td>
<td>69</td>
<td>68</td>
<td>66</td>
<td></td>
</tr>
<tr>
<td>Sound technical knowledge</td>
<td>78</td>
<td>67</td>
<td>69</td>
<td>71</td>
<td>50</td>
<td>75</td>
<td>68</td>
<td>64</td>
</tr>
<tr>
<td>Able to give instructions</td>
<td>53</td>
<td>50</td>
<td>74</td>
<td>58</td>
<td>50</td>
<td>88</td>
<td>55</td>
<td>64</td>
</tr>
<tr>
<td>Able to express ideas</td>
<td>57</td>
<td>50</td>
<td>93</td>
<td>67</td>
<td>60</td>
<td>69</td>
<td>59</td>
<td>63</td>
</tr>
<tr>
<td>Common sense &amp; judgement</td>
<td>78</td>
<td>71</td>
<td>93</td>
<td>80</td>
<td>75</td>
<td>100</td>
<td>86</td>
<td>87</td>
</tr>
<tr>
<td>Exercise self-control</td>
<td>78</td>
<td>79</td>
<td>83</td>
<td>80</td>
<td>70</td>
<td>65</td>
<td>91</td>
<td>75</td>
</tr>
<tr>
<td>Approachable</td>
<td>71</td>
<td>67</td>
<td>93</td>
<td>78</td>
<td>65</td>
<td>69</td>
<td>100</td>
<td>78</td>
</tr>
<tr>
<td>Enthusiastic</td>
<td>78</td>
<td>92</td>
<td>77</td>
<td>82</td>
<td>50</td>
<td>81</td>
<td>86</td>
<td>72</td>
</tr>
<tr>
<td>Resourceful</td>
<td>71</td>
<td>88</td>
<td>93</td>
<td>83</td>
<td>80</td>
<td>81</td>
<td>100</td>
<td>87</td>
</tr>
<tr>
<td>Tactful, persevering</td>
<td>78</td>
<td>92</td>
<td>79</td>
<td>83</td>
<td>80</td>
<td>88</td>
<td>45</td>
<td>71</td>
</tr>
<tr>
<td>Diligent</td>
<td>71</td>
<td>75</td>
<td>64</td>
<td>69</td>
<td>90</td>
<td>88</td>
<td>86</td>
<td>87</td>
</tr>
<tr>
<td>Responsible</td>
<td>85</td>
<td>88</td>
<td>79</td>
<td>84</td>
<td>90</td>
<td>94</td>
<td>90</td>
<td>91</td>
</tr>
</tbody>
</table>

The corresponding positive comments which supported that these qualities be included in the undergraduate curriculum were:

'Personal qualities are important in the first professional qualification. They are not incidental to librarianship but are actually the vital part of professional practice and curriculum' [academic].

'Librarianship demands skills that go over and beyond those activities performed in libraries. Ability to cope with change depends on personal qualities. These should be included in the undergraduate curriculum [librarian].
From the responses at the table and from the interviews it can be concluded that there is a definite for personal qualities to be included in the first level graduate curriculum.

6.18.2 SETTING

Since these qualities are important in practice, it was important to learn if they are equally important in librarianship education. The constituents relating to setting are:

Function in an adaptable/flexible manner  
Show sense of inquiry in work done in library and related institution  
Show understanding of work  
Be willing to seek guidance where necessary  
Respond appropriately in individual and group supervision  
Demonstrate proof of capacity to establish and maintain helpful relationship with users, colleagues and superiors

**TABLE 6.15: Respondents and Setting N = 124**

Respondents ratings which Reflect ‘Essential’ Qualities Capable of Becoming Integrated in the First Professional Degree Level Curriculum in percentages

<table>
<thead>
<tr>
<th>List of Activities</th>
<th>Em</th>
<th>St</th>
<th>Ac</th>
<th>Av.</th>
<th>PL</th>
<th>SL</th>
<th>AL</th>
<th>Av.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adaptable/flexible</td>
<td>78</td>
<td>42</td>
<td>79</td>
<td>66</td>
<td>90</td>
<td>69</td>
<td>77</td>
<td>79</td>
</tr>
<tr>
<td>Sense of inquiry</td>
<td>68</td>
<td>46</td>
<td>74</td>
<td>62</td>
<td>70</td>
<td>69</td>
<td>77</td>
<td>74</td>
</tr>
<tr>
<td>Understanding work</td>
<td>71</td>
<td>54</td>
<td>79</td>
<td>68</td>
<td>70</td>
<td>81</td>
<td>86</td>
<td>79</td>
</tr>
<tr>
<td>Seek guidance</td>
<td>78</td>
<td>50</td>
<td>93</td>
<td>74</td>
<td>70</td>
<td>88</td>
<td>77</td>
<td>79</td>
</tr>
<tr>
<td>Respond appropriately</td>
<td>64</td>
<td>42</td>
<td>74</td>
<td>60</td>
<td>70</td>
<td>88</td>
<td>68</td>
<td>75</td>
</tr>
<tr>
<td>Helpful relationship</td>
<td>78</td>
<td>50</td>
<td>83</td>
<td>70</td>
<td>60</td>
<td>63</td>
<td>90</td>
<td>71</td>
</tr>
</tbody>
</table>

The results shown in Table 6.15 show a positive 100% response, indicating that all respondents and library types value qualities related to setting. The numerical values for the importance levels for these aspects of work are very high considering that the response 5 indicates extremely important.
The response rates between respondents and library types show a high unanimity between respondents and library types between the agreement levels on which activities to be integrated into the initial undergraduate programme.

These respondents have placed more importance about the qualities with which a graduate should be equipped with respect to library environment than on having useful skills. Interview responses help explain this feature.

'Flexibility, that is, meeting the changing needs is the essence of good planning. Any planning that is too rigid to accommodate change is an exercise in futility' [academic].

'Belief in one's work or role and its value to the library organisation is very important. With such a quality a graduate would make an extra effort for the library organisation though may not always be in his own interest. For example, he could be flexible with personal arrangement if circumstances require it this even without pay' [librarian].

The explanation for these qualities being highly prioritised is that 'these requirements match with the innovative nature of librarianship' [librarian]. As an important aspect of professional practice these have reason to be a component of the curriculum and must be integrated within the undergraduate curriculum.

6.19 GRADUATE PERFORMANCE AND GRADUATE EDUCATION

For graduate performance and graduate education, the scale comprised five categories: 1 = least satisfactory, 2 = less satisfactory, 3 = satisfactory, 4 = more satisfactory, 5 = most satisfactory.
TABLE 6.16: Respondents and Graduate Performance and Educational Background N = 94

Respondents ratings which Reflect Graduate Educational Background and Graduate Performance in percentages

<table>
<thead>
<tr>
<th>List of Activities</th>
<th>By respondents</th>
<th>By library type</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Em</td>
<td>St</td>
</tr>
<tr>
<td></td>
<td>%</td>
<td>%</td>
</tr>
<tr>
<td>Graduate education</td>
<td>41</td>
<td>17</td>
</tr>
<tr>
<td>Graduate performance</td>
<td>39</td>
<td>28</td>
</tr>
</tbody>
</table>

With both graduate performance and graduate educational background in Table 16.17, a significant number of respondents was undecided. Out of the 124 responses only 94 took part in this area.

With remaining sample of responses, the percentages reflected on the tables show that the degree of ‘satisfaction is very low indeed ranging between 27% and 37%.

Poor participation by respondents also reflects on the weakness indicated in Methodology that respondents may at times not be honest in answering questionnaires.

The poor quality of curriculum is summarised as 'lack of vision amongst curriculum developers' [employer].

The above comment indicates that graduate performance and graduate education are inseparable. The desired performance helps compare with the planned performance in the curriculum design. Hence, low satisfaction reflected in tables with professional practice is comparable to low degree of satisfaction with education.
6.20 SUMMARY

As a generalisation it may be expected that library activities and professional qualities may exert their influence upon the development of a relevant undergraduate core curriculum.

The assumption was that the educational programme relates very well to initial five years of graduate practice. To examine the components of a relevant undergraduate core curriculum, respondents were asked to identify library activities and professional qualities performed in libraries and indicate their relevance for inclusion in the curriculum.

Some 124 assessments were received. Ratings were differentiated according to stakeholders, that is students, employers and lecturers and by library institutions, namely, academic, school and public libraries. Inevitably, assessments of this kind are closely related to the duties undertaken and the institutions to which individuals are attached. This is often to such an extent that individuals lose sight of the balancing judgement conceived in library activities performed in a library as a whole. As a result some of the assessments of activities and professional qualities were associated with the firm views to the effect that the individual was attached to a particular type of institution or section in the library.

Collectively individual assessments and comments show that respondents agree on a number of units of activities and personal qualities to be considered in undergraduate curriculum development. The agreement by both respondents and institutions on personal qualities and attitudes related to setting was 100%. This commitment to change and mobility is supported in curriculum development.
REFERENCES


5. Grogan, D. J. 'Education for Librarianship: Some Persistent Issues'. Education for Information, 1, (1), 1983, 3-23


8. South African Barometer, 6 (Sept. 11, 1992), 268


185


19. Human Relations' Committee of SAILIS in the Eastern Cape; 'Survey of Training needs for Library and Information Services in the Eastern Cape'. *SAILIS Newsletter*, 1996, 16 (10), 4


CHAPTER SEVEN: DISCUSSION OF RESEARCH RESULTS

7.1 INTRODUCTION

This chapter interprets and discusses the findings which emerged from the analysis of data and information presented in Chapter 6. Kerlinger [1] observed that the analysis of research data does not in and of itself provide the answers to the research questions. It is therefore essential to interpret that data and information if the research questions are to be responded to fully and, at the same time make sense of what it is that is being described.

In this chapter, the discussion of the results has been based on the five major research questions. It is these questions that reflected the main purpose of the study, namely to investigate a curriculum model that is relevant and addresses the need for outcomes-based education.

In particular, the study solicited more information on what was recorded in the questionnaire regarding the following:

1. the activities, skills and knowledge that could be integrated with the undergraduate librarianship curriculum;

2. the necessary attributes and personalities with which a graduate should be equipped;

3. the strengths and weaknesses in graduates’ performance and librarianship curriculum;

4. the undergraduate curriculum model that satisfies outcomes based learning.

Chapter 5 explained in full the methodology to be used and in the process stated that grounded theory would be used. To reflect, this form of research employs a
qualitative rather than a quantitative approach. The descriptive aspect of this research forms the core since in reality this is an explorative form of research. The main research instruments included diaries, questionnaires and interviews. To supplement the main instruments, other methods included reviewing and analysing related literature. From a point of view, assessment of the reliability in this study might be criticised because the some categories were developed by repeatedly reading the original responses in order to do justice to the personal nature of the information gathered. This procedure may have biased the objectivity of the assessment, given that the researcher's familiarity with the answers may have influenced the degree of agreement between the participants. However, in response to this argument and as discussed in the Methodology, the researcher acknowledges that the categories were designed according to the guidelines suggested by Glaser and Strauss who have stressed that to meet the demand of reliability, the categories should above all fit. This means that the categories 'must be readily applicable to and indicated by the data under study' [2] and should have relevance so that the main problems and themes of investigation can be discussed by means of them.

In qualitative research 'the emphasis is on construct validity, the meaning of events or situations to participants' [3]. Reliability was also properly assessed qualitatively in terms of consistency of meaning [4]. Triangulation with respect to data gathered was used as well with data analysis. This proved to be useful. This is in consideration of its ability to increase the reliability of data and hence the research findings on the problem [5]. The researcher understood the results to be verified where different views converged so that triangulation has been a process of mutual confirmation. The researcher's argument is that for this study where the results are not statistically significant, practical and clinical significance have been noteworthy.

The tables of questionnaires thus supplemented the interview responses and helped give structure to data analysis. Data analysis has through functional analysis helped show clearly what librarianship practitioners would like to see developed through
related curriculum. Thus, in focusing on relevant education and professional practice, careful consideration needs to be taken about a curriculum model that takes into account the needs of the students and practitioners and focuses on learning outcomes.

For this study, the advantage of interview responses has helped separate out those items which received a favourable response but were unlikely to be used by graduates. For each activity, collecting relevant data such as the importance and extent of performance assisted in prioritising skills with respect to their inclusion in the initial curriculum of librarianship.

7.2 ANSWERING RESEARCH QUESTIONS

From analysis of data and information obtained from the respondents, the following were research findings from the respondents in response to each of the above themes.

7.2.1 The activities that could be integrated in undergraduate librarianship curriculum.

To answer the first question on which activities could be integrated in an undergraduate curriculum, data obtained from graduate, academic and employer respondents were categorised according to basic content areas which could be a basis of an undergraduate core curriculum. It was finally tabulated in tables 6.2 to 6.13 in order to come up with the complete picture of activities and applicable knowledge and skills at undergraduate level. The tables also cover library types that were involved in the study.
In order to answer the first research question, namely the activities, skills and knowledge to be integrated in undergraduate curriculum, the following research findings were found:

(a) The factors having the strongest influence on the development of a relevant curriculum were currency and relevance with professional practice.

The concept of curriculum relevance leads to another finding on curriculum development. When faced with the problem of curriculum irrelevance the need for identification of the activities that have a higher degree of anticipated use by graduates in libraries and workforce is great. In other words professional practice needs work-related education from library schools.

Inspection of data from tables dealing with activities and interview responses indicated that library activities could provide a professional context to undergraduate librarianship education for all students as well as help address curriculum relevance and currency. McGarry [6] concurs with the need to find a core. According to that study he observes that curriculum development is a process and one has to search for its heart.

A study by Burrell [7], for example, on the overall development of curriculum has examined the source of the problems of irrelevance with the core curriculum. According to that study it is uncertainty over the desired ends amongst other causes. The failure to base professional education upon effective, flexible educational theory and adapted to the needs of the students for whom it was intended contributed to curriculum irrelevance. Burrell’s [8] observation confirms the findings of this study and other studies by Brookes [9] and Sibiya [10] have come up with views on the kind of curriculum relevant to the real needs of the profession and of the students. It is therefore a factor that curriculum development
based upon relevant curriculum activities is a factor encouraging curriculum relevance but also graduate performance.

What is the employer's justification of the need to base curriculum development on activities? First it is that activities provide a vision from which to derive a relevant curriculum and also their focus is on outcomes of learning.

'Before curriculum developers can plan their curricula they must be able to identify 'where the students want to go', 'what employers want or what do employers want students to do'. Once library schools can identify where employers want graduates to fit in in the market, then a vision of the mission statement of the curriculum can be stated' [librarian].

The comment shows that library activities help give vision of what goes on in libraries and curriculum development should use them as a foundation. Studies focusing on activities performed in organisations have shown that the activities enable curriculum developers to plan relevant curricula. These studies include those of Burrell [11], Brittain [12] and Alaezi [13]. In these studies it was found that activities provided a concrete base on which to develop curricula.

It is argued that curricula decisions are functions of one's vision of the field, of accommodating past, current and future trends. To promote curriculum relevance and currency and to gain some clarity as to whether or not librarianship curriculum is relevant and is work-related, one needs to have an understanding of some changes and work processes occurring in professional practice. One way to approach this vision is to look at the activities performed in library and information centres.

A list of activities indicates what the graduate has to be able to do in librarianship now and in the foreseeable future. It is implied that the focus is on how one
interprets the problems. On the basis of interpreting the problems, the graduate should be able to decide which facts are relevant and construct an appropriate solution. It is reasoned that the emphasis has moved from knowing to doing 'and more often doing with other people, be they colleagues or users [librarian]. With the distinction of the courses' suitability with regard to relevance and currency with current and future foreseeable practices, the need for identification of library activities is great.

In addition, the units of activities identified would serve as a basis on which to define the content of the librarianship curriculum modules. This is supported by Large [14] who, in his study, observed that the content of the module, where it articulates with other modules contributes to a subject and course overall.

7.2.2 Professional Skills and Knowledge Graduates Might Need to Fulfil Contemplated Professional Responsibilities.

Another important finding of the study on the skills and knowledge graduates might need to fulfil contemplated professional responsibilities was that:

(b) To foster curriculum relevance and currency and to form clarity on whether or not these are addressed one needs to recognise that employers do not employ graduates for their qualifications.

While it is true that a qualification is the initial preparation for employment, employers do not employ qualifications and graduates should have more to offer than their qualifications. A statement from an employer confirms this observation.

'We are concerned about the attitude of students who seem to think that because they have a qualification, that they are going to get managerial positions without any
experience. They do not seem to be able to comprehend that one has to start at the bottom and work one's way up and that qualifications do not guarantee you a job, but assist you on your way up'.

This statement shows that graduates remain ignorant about the purpose of their time in library schools. For them the degree is about obtaining a degree and very little thought is given to its relevance.

So what is it that professional practitioners want?

'Professionals should be equipped with skills in analysis, synthesis planning, adaptation skills and solving conceptual problems based on mastery of basic principles in librarianship' [librarian].

'There should be a clear demarcation between librarianship as a discipline for professional training and library skills training. The latter will and always should be conducted within the library building where equipment and practising librarians are to be found' [librarian].

'Special subject knowledge, practical skills, personal attitudes, coupled with flexibility based on efficient methods of learning will be essential for all library types. I would allocate 80% to librarianship and 20% to special subject knowledge as the basic minimum requirement from which a librarian should build' [librarian].

Also, ‘the library school should teach librarianship to librarians. Librarians should teach library skills which are essential to improve and to equip students with relevant practical skills’ [librarian].

This analysis has brought forward an understanding of the generic skills, knowledge and attributes that might guide in determining librarianship curriculum and
instruction. The real issue is that graduates should leave library schools with a whole range of skills, knowledge and experiences gained during training. It is the lack of relevance and education that is not outcomes-based that hampers them to perform reasonably adequately far more than the nature of qualification achieved.

It is suggested that the changing librarianship environment requires students to consciously develop work-related skills while in library schools by trying out different activities and roles to gain the kinds of experiences that employers are seeking. Research has looked at what the most important aspects of training in a changing profession in South Africa should be. Rainier [15] in his study on business skills found that cost effective training, skill-based training, relevance and job relatedness were critical factors to the success of a training programme satisfying the changing environment.

This supports the findings of this study that relevant professional skills should be integrated into librarianship curricula. Related to the above another equally important finding by this study particularly with addressing relevance and changing environment is that librarianship is a discipline and not an academic subject. Research upholds this view.

7.2.3 The Need for Both Theory and Practice in Curriculum

(c) Another important finding from data analysis is that both theory and practice help address curriculum relevance.

Failure to observe the need for both theory and practice has led to criticisms by students in the concept of them graduating with their degree certificates, which provide a measure of academic and intellectual capability. There is support that in addition to these capabilities, they must also be assessed of their competence,
profession knowledge and skills area. It is implied that theory alone as characterised by traditional curricula is not sufficient.

For example:

'For the first time in my professional career, I realised that successful retrieval of information depends on work done in describing and analysing library records. Working in the library also made me aware that a lot of intellectual effort is required to make library materials accessible and easy to retrieve by users' [student].

'The abstract information learning that I had obtained in class become meaningful on working in a library' [student] emphasises the theoretical-practical gap which contributed to traditional curricula and which was identified in the literature review.

Hence:

'We propose that a gap between theory and practice should be closed' [Students, University of Transkei].

From these comments the indication is that graduate librarians fail to relate their learning to that which is based on practice. This is supported by Burrell's study which indicated that employers felt there was over emphasis on theory and not enough practical application [16]. The dissatisfaction also points to the unsuitability of the traditional curricula as a basis for librarianship education. Librarianship is a profession and not an academic degree. As such it should not be forced to fit the model of an academic degree. The employers expect graduates to possess certain skills. In addition they are expected to be educated to the level that they can direct their own course of lifelong learning as well as provide leadership in the development of the practice of librarianship. For librarianship to abandon practice in favour of theory is to dissociate itself from the profession. Hence, both theory and practice should be integrated as a basis to satisfy employers and students. It is argued
that integrating theory and practice would help the students' change from classroom learning to that of professional practitioner.

The view that graduates will more often be required to work from first principles to undertake complex functions, to assume greater personal responsibility in decision-making, and will less often be required to perform routine functions' [academic], points to a need to balance the two. From this observation one can begin to appreciate that the theoretical background appropriate for librarianship is not sufficient. Morehead [17] has found a positive relationship between theory and practice. Thus, theoretical and practical skills acquired in librarianship are just as appropriate.

What is at issue here is the conflict between short-term imperatives of librarianship education and the long-term needs of an education whose growth requires an output of suitably qualified graduates. It seemed respondents wanted students to include both theory and practice in their learning because 'theory helps the skills and competencies course not to lose the subject content of librarianship' [academic].

It is maintained that theoretical knowledge is important but the applied aspects of that knowledge are not brought out before professional practice. An important understanding is that theory and practice mutually inform each other. This is an important aspect in librarianship curriculum development since the aim is not to teach theory which is then applied. Rather it is to reflect upon practice with the aim of developing theory which may then go to inform future practice.
7.2.4 Professional Qualities, Attitudes and Managerial Skills

The objective of the research question was twofold. First, it was to find which professional qualities and attitudes were important in professional practice. Secondly, it was to establish their relevance to curriculum.

(d) The findings show managerial skills, personal qualities and attitudes are clearly perceived as a priority for integration in the initial undergraduate curriculum in the context of measures aimed at enhancing user acceptance of the library and coping with change.

With data analysis it became clear that libraries do not present only with activities but also with problems that require managerial abilities, professional qualities and abilities.

It is clear that with the expansion of libraries to underdeveloped areas as indicated in Chapter 2; librarians will be required to meet the challenge of serving the disadvantaged majority of South African population. However, there appears to be problems to provide services for users in underdeveloped South Africa. For instance:

'Users from underdeveloped communities suffer from the starting point fear. This users, unaccustomed to library buildings and services may approach the library with uneasiness' [librarian]. Further:

'It is extremely uncommon for a white librarian to be able to help black users in their mother tongue. In both public and university libraries, users will, where possible, approach a black library worker for help, even if that person is not best qualified to do so' [academic].
From these responses there is reason to believe that a certain number of students have not acquired the appropriate professional qualities and communication skills. This is despite that data analysis indicated that interpersonal skills are a priority in the context of measures aimed at enhancing user acceptance of the library. Research shows that the problem of serving clients not used to libraries is not unique to South Africa. For example, Cronin and Martin [18] have shown the importance of the development of social and communication skills to help serve the minority communities in UK.

Amongst other things, Cronin and Martin [19] in their study suggest the setting of targets and selecting skills that take into account the sectoral and client group differences in the environment in which the graduates function, that is the type of library and type of user group. From the evidence given by respondents, Cronin and Martin's survey support the findings of this study.

Discussions with the respondents reveal that communication skills relate to solution of problems. It is believed that when faced with the problem the graduate has to search for possible causes, understand the function or structure which brings about these problems and look for solutions to remove and alleviate them. Sharp [20] has shown that his type of approach involves an ability to communicate with people, to understand interaction between practitioner and user and to elicit all relevant information concerning the problem and to seek help from other sources in order to achieve a solution.

It is argued that once in the world of professional practice, graduates will often find that they need to communicate and carry confidence and integrity with a range of people and be able to communicate their professional and knowledge to users without that background. The graduates would be better equipped for these roles of responsibility if they had achieved as a student of what these skills mean, how they can be further developed.
It is implied that to meet the challenges of new library users, library schools need to train for services to special populations, for student empowerment, helping students to become involved in guiding and directing library programmes in which they participate. Knowing how to deal with ethical matters and interprofessional relations is necessary. Education ought to concentrate on professional attitudes and managerial skills in the daily activities of a graduate.

Another reason that communications are considered important for inclusion in undergraduate curriculum was that:

'Most graduates need to be team players of capable of communicating and solving problems' [librarian].

Also, 'ability in communication and social skills turns a graduate into someone likely to make the best of development opportunities leading to a senior carrier in profession since many problems are carried by a group of students it helps encourage a team approach to management issues' [librarian].

One necessity appears clear; librarianship requires graduates to use social and communication skills in their work. From the responses there appears to be general acceptance of these qualities. The goals are concerned with being able to conduct a conversation which satisfies both librarian and user. It is argued that communication and social skills are not restricted to the exchange of easily accessible factual knowledge. The skills required to accomplish this task include establishing an effective relationship, competence in communication, attending and listening to the user and addressing user's concern, explaining and checking understanding and involving the user in the decision-making process. These goals have been described by Bolton [21]. The ability of a graduate to bring communication to this level determines this aspect of professional competence.
Also, teamwork and leadership are targeted as essential for graduates. Librarianship practices need teamwork and leadership. Line [22] has demonstrated that importance is placed on those qualities of leadership concerning interpersonal relationship and exercise of authority. He states that this requires an individual to establish himself as a team leader. According to him this is done through building credibility and earning respect and the most important skills are organisational and interpersonal. This supports the findings of this study considering that factors that contribute to the effectiveness of management are 'the process of decision-making, interpersonal communication and liaising as part of decision-making' [academic].

Related to the second question of the objective of this section is that another factor affecting the curriculum process is the quality and adaptability of the programme as the respondents' comments show. Data analysis gave 100% for personal qualities and attitudes relating to setting to be included in the undergraduate curriculum.

'The problem of 'unemployability' of graduates, in so far as employability is related to the characteristics of graduates' education. The main problems are skill and knowledge transfer, in particular the transferability to work of attributes acquired by students during formal education' [librarian].

'I support an emphasis on professional qualities because they enable graduates to cope more readily with technological and professional change. They provide a base for long term personal development and improve job mobility and access to further training' [librarian].

Although personal qualities are claimed to be the most important in graduates' education, it was evident that these skills alone did not enable a graduate find work. Only one employer stated these to be a priority over other skills when recruiting graduates 'When interviewing a graduate I look for initiative'.
The emphasis put on these abilities shows that they are not incidental to librarianship but are the whole part of the students’ development in equipping them for the initial professional qualification. The fact that this study showed a pattern of high priority of personal qualities and attributes complements the Sheffield study on undergraduate curriculum development [23]. The study showed a high rating of personal qualities. Thus, the importance of personal qualities discussed in this study appears to match.

To employers, management abilities, professional qualities and attitudes are of highest importance as they would allow for graduate mobility, provide graduates with a stronger base for professional growth and innovation in the profession. From the comments, there is no doubt that, in addition to preparing students to adapt, leadership training is equally essential in librarianship education. However, the feeling is that the most basic nature of managerial skills is poorly understood and needs development.

The performance and interaction are the core of managerial skills. Skills are applied in the real world in the context of uncertainty and change. Consequently, mastery of skills in themselves is not complete preparation for use of skills in a realistic situation. In addition, there are other less performance-focused skills that support managerial activities. To illustrate:

‘Adaptability demands that sound innovation be based upon recent research and practical experience. A graduate has to be willing and wanting to take responsibility. They have to have an ability to organise and lead’ [librarian].

‘Theories of leadership, flexibility/ adaptability and creativity focus on the central activity of the profession, that is, devising responses to unique situations. These are the qualities that go beyond technical skills. The effective manager has the attributes termed ‘creative personality’ [academic].
This is to say the key success in professional practice lies not only in intellect and in knowledge, but just as importantly in the personal qualities and responses of the graduate to setting. It is reasoned that if people are aware of what is going around them, they will be able to answer future challenges confidently.

Further, 'the effective librarian has those attributes summed up by the term 'creative' personality' [librarian].

Research has shown that successful library and information organisations rely increasingly on creativity and innovation. Sharp [24] in his paper has shown that professional practice requires more than practical skills alone. He shows that understanding and insight are necessary to define and solve a problem to realise the obstacles which limit range of possible solutions.

The qualities desired reflect the rapidly changing nature of librarianship. In contrast with traditional and competency-based curricula that are often criticised because of lagging behind, students can feel more in control of the events because change is derived from professional practice. Innovation is internally generated for good educational reasons. This is supported by Burrell’s [25] study on curriculum development. He has observed that it is too late to plan and carry out a curriculum design and project for today’s conditions. It is argued that creativity and innovation are required in librarianship in generating a number of alternative possibilities.

From the respondents’ interview responses it is observed that the changing environment analysis sets up a situation in which graduates are required to tolerate uncertainty and create their contexts. Consequently, neither traditional subject-based curricula nor can competency-based education, which is based on short-term goals, help meet the requirements.
The explanation for these attributes' consideration for integration in undergraduate curriculum can be that they are particularly important in avoiding the core that raises barriers round mobility of graduates and curriculum innovation. The view that 'the technical and professional skills that graduates need change overtime' [academic]. Thus job movements in addition to calling into play skills and knowledge might be expected to require the acquisition of personal qualities, communication skills and mummary skills. When respondents are talking about personal qualities, they are referring to skills that transfer to new work situation. These happen to be as a coincident also job-relevant.

It is held that the most valuable advantage in including these qualities in undergraduate curriculum would be for the students to develop a better idea of their personal skills' ability. From employers' point of view, they would thus be able to operate at a more advanced level, helping graduates move faster to positions of challenge and responsibility.

However, it has been noted that 'most library schools focus on theoretical training for leadership roles' [librarian]. This is supported by a regional survey conducted by the Allen Public Library (University of Fort Hare) in the Eastern Cape [26].

Following concept of three components of attitude, that is effective, the cognitive and behavioural aspects that rise from the respondents views, the teaching of professional attitude will have to contain elements of motivation, general knowledge and training of skills. Evaluation of each of these elements should be in keeping with what the training intends to achieve. However, a reservation has to be made.

Traditional curricula generally show a bent for the cognitive aspects of their future graduates. This is reinforced by the structure of examinations where factual knowledge determines the student's grade. As an area with no influence on the
final result of examination, it has got little or no attention. It is argued that since the teaching of professional attitudes is not evaluated and the results not incorporated in the final examination, the students cannot be motivated to work for professional attitudes.

Thus, the teaching of professional attitudes should be integrated in the librarianship curriculum. The best way to do this would be to teach it as part of practical skills as a self-evident part of practical competence. A clear definition of the desired attitude and a reliable way of measuring it can contribute to the realisation of this ideal.

The key note in the findings is getting stakeholders participate in curriculum development of librarianship. It is to be observed here, based on the evidence from the interviews and discussions with respondents that curriculum developers cannot effectively co-operate with the stakeholders unless they involve them in decision-making to a certain extent. Burrell [27] supports this view. This study emphasises the need to realise that there is a vast difference between the word 'co-operation' and 'collaboration'. Studies by Carl [28] and Alaezi [29] have shown that to move from co-operation involves compromise. These mean library schools must be ready to compromise somehow, maybe by focusing more on the discipline than on the academic side of education. They need to be convinced about the need to do it.

7.3 Task-based Education and Curriculum Relevance

(d) Overall, data analysis has suggested that the library’s success largely depends on the expertise of human resources. To achieve the goal of
(e) ensuring the student has relevant educational prerequisites for professional practice, a curriculum has to explain the relevance of content to the methods of teaching and learning.

One of the objectives of this study was to identify a curriculum model that addresses curriculum relevance with respect to both training of students and their subsequent performance on graduating. A number of points have emerged which during the process of investigation and from the findings of the study have implications for curriculum development.

As pointed out in Chapter Two and literature review, much criticism is levelled at the South African traditional structure of librarianship education. It is perceived to be inflexible, not providing articulation between different types of institutions, elitist and culturally biased, serving the interests of the dominant class. The formal framework of the traditional curriculum described in the literature review and on which the South African curriculum is based is also criticised for emphasising professional accreditation.

'A reason for successful training is that students are given an understanding of the big picture of a work the graduate will perform on graduating and in the foreseeable future [librarian].

'At recruitment the job specification defines the education, experience and skills an individual must have in order to perform effectively in the position. This should form the basis on which the graduates are trained' [librarian]. This can be explained to mean that education in librarianship means to be goal-oriented and interested in results, flexible, in possession of good understanding of the working environment' [librarian].
The above comments provide an explanation as to why academic curricula have not been successful in training librarians in South Africa. Burrell [30] has indicated relevancy is the limit that influences learning. From the responses and literature review, the indication is that with traditional relevancy in learning is hampered. Because of the abstract nature of traditional curricula learning does not make sense to the learner, nor is it related to the learner's needs.

The need for properly trained librarians has been reflected in much of the literature review as being a critical factor in fostering quality performance amongst graduates. Jowkar [31] indicated that poor performance as a particular problem was attributed to the lack of or inappropriate training.

From the respondents' comments, it is clear that students need to be part of the decision making process regarding what is learned. Also data analysis shows that the pull of the library environment is a very strong force in curriculum development. This is a drift towards vocational education to meet the needs of library and information services. Burrell [32] echoes this point. A vocational approach to education demands that graduates achieve education related to knowledge of the discipline, specified skills and working ability, their position in attitude and professional value. The contents of such a curriculum model are output centred.

Two examples of outcomes based curricula discussed in literature review are competency-based and task-based curricula. However, given an understanding that it is the graduate's performance that is at issue implies a curriculum that goes beyond competencies.

Research [33] has demonstrated that attaining competencies is not a legitimate aim of education. This is because competencies alone are unlikely to be effective for performance. It is argued that to develop a curriculum that goes beyond...
competencies implies curriculum developers must attend to the question of what is it that professional practice wants. This concurs with Burrell's [34] findings.

The clarification of the goal is based on the need of education to equip graduates with relevant skills, knowledge and attitudes in order that perform effectively when they graduate. It is believed that skills, attitudes and knowledge help provide a strong base of knowledge from which students can continue their studies in relation to future functions applicable to libraries.

In his study on crafts and technology in curriculum Alaezi [35] asked a sample of respondents what kinds of skills they would like to have included in curriculum. He concluded that the skills identified as relevant to the needs of the students and professional practice should be integrated into curriculum programmes. Thus this study and Alaezi's [36] points to the importance of skills in curriculum development.

It is also held that improving the quality of library services for the users rests on the ability of librarianship education to advance constantly in its expertise. Rainier [37] agrees with this finding. In his study he has illustrated that while focussing on what the graduates will do, the need for continuous change in professional education demands commitment to flexibility. He maintains that flexibility is important guarding against short-term consideration that is unavoidably present in formulating certain immediate employment needs and interests as noticed with competency-based education. In this study data analysis has also demonstrated that graduates that are adaptable to changing environments are increasingly needed. In addition, the view held in literature review was that with librarianship change is permanent.
It is argued that if librarianship education is to reflect the sort of changes that are occurring, the graduates will need to have high levels of broadly based skills. Such skills involve comprehending the innovation, communicating, evaluating its educational quality and relevance. Further, they become the basis on which to weigh the impact on professional practices and examining its adaptability to local conditions.

This is consistent with Hoosain's [38] findings that a traditional system structured around textbooks and self-contained classroom activities is faced with a difficult enough task in preparing students to live in the present, let alone in preparing them for the future. It is held that with change being a constant factor in librarianship, a commitment to outcomes-based education becomes an absolute necessity. It is therefore a factor that task-based education also appeals to the process of adaptation.

The researcher believes that Kolb's [39] active-reflective experience linked steps toward effective curriculum development increases the likelihood that lasting change will occur. This corresponds with task-based education as it sees the process of curriculum as a process of reflective interaction and development, provides for innovation in librarianship education and subsequent graduate performance.

Problems of methods of teaching and learning and their influence on graduate performance are another matter that is more real. Although professional practice has a considerable influence on training of graduates, literature review has shown that the academic approach that is currently used in South Africa is content intensive. This confirms this study's finding the major purpose of education is to develop both conceptual and procedural knowledge.

It is maintained that procedural knowledge related at different levels of abstraction is required for professional action. The criticisms by students that what they learned
was abstract points to the curriculum's failure to take heed of the challenge to adjust curriculum to practice. This has resulted in learners' lack of contextualised knowledge. This interpreted to mean that librarianship education emphasises learning of academic, rather than practical knowledge and skills. On the evidence from respondents and literature review, there can be little doubt that traditional curricula are ineffective. One sees an education that is abstract and that emphasises theory. It is argued that given appropriate teaching and learning methods most students will be receptive. In daily experiences, no one is in a better position to observe the curriculum in action. Only the lecturer can really close the gap between theory and practice.

A descriptive scheme developed by Kolb [40; 41] is based on two basic dimensions, abstract concrete and active-reflective experience suggests two important facts of learning. First the need to accommodate for individual differences. Second that learning is a skill, itself open to training.

More specifically, in librarianship education it essential to take into account the emphasis on concrete and active modes of learning and it would be beneficial to also find ways to integrate conceptual work within the concrete experiential learning. In his investigation on curriculum development, Saracevic [42] has shown that in addition to practical performance, curricula should observe theoretical knowledge that underlies continuous profession growth. Such requirements of curriculum relevance can be understood to describe task-based education which in this study has been found to recognise theoretical knowledge.

On the basis of evidence from the respondents there is a need for practical objectives to achieve practical skills and theoretical educational objectives. Saracevic [43] in his study on curriculum development supports the finding of this study. He goes on to explain that theoretical educational objectives call for a good deal of abstract
thought and analysis on the part of the student. In one way this requirement directs the course to becoming more academic. Yet the practical objective of increasing the student’s ability to perform has been retained. The strategy’s subject matter is the graduate than the subject.

It is argued if the student is central to learning, students’ ability to appropriate the use of skills in their own experience and social context would involve the ability to justify any claim made to particular skills by pointing to the performances and activities through which they have been educated. On the other hand, in theoretical education the instructive approach is to pinpoint the subject context and practical features of applications, thus fostering skills in abstraction. In this sense, task-based curriculum might lead to a very relevant curriculum. It is believed the ability to think in abstract and conceptual terms and translate to and practical situations would be both satisfying and useful to the student, as it could be profitable to the future employer.

Squires [44] has explained that one reason for ineffective learning habits become implanted in student’s mind is the direct result of educational teaching methods provided for them. While for many years the importance of independent learners has been acknowledged, traditional approaches to meet these aims appear to have had limited success. Indication from data analysis is that one of the limits that affect learning relevancy points to the need that students assume responsibility of their learning.

Jowkar [45] outlines self-directed learning as meaning that lecturers encourage and train students to take charge of and manage their own understanding, skills, knowledge and motivational states. In addition, Bhikha [46] found the predominance of the active experimentation mode was the single best predictor of students’ success in professional practice. However, research in the area of
individual differences in learning styles has found that highly significant differences in learning were found especially on the abstract/concrete dimension.

It is maintained that it may be advisable to direct teaching methods according to the predominant learning styles in a group and professions, yet include alternative methods to address the differences. Task-based education claim of relevance is based on the fact that it provides a scene that helps broaden student experience in a way that offers opportunity to all students to participate in a more constructive, participative and less theoretical instruction. Understanding and accepting the purpose of an activity improves both the teaching and learning situation. According to the National Commission on Higher Education [NCHE] 'The more completely a purpose is accepted and understood and a goal recognised, the more efficient the learning will be' [47].

Walker [48] has shown that despite the recognition that education for librarianship must succeed in equipping graduates with communication and numeracy, they are also not catered for in curricula in South Africa.

Roberts' study found positive relationship between research orientation curriculum and curriculum relevance [49]. Cronin and Martin [50], Line [51] has also called attention to be paid in the development interactive interpersonal communication skills, social skills and cultural skills and numeracy skills and curriculum relevance. The findings of this study suggest that the skills identified by these authors be incorporated in the undergraduate programmes.

Roberts' [52] has suggested that the students can be helped appreciate techniques and methods like statistical methods, communication and research through a research orientation in the curriculum. It is maintained that an experiential curriculum could help deliberately foster research, communication, social and
numerical skills in practice. The learning environment is an experiential platform in and of itself. As a group, exercises in research engage students in active learning environment that produces team work, team leadership, oral and written communication and fosters the talents needed to develop critical thinking and problem-solving skills [53].

The rationale for this is the preparation for professional life, of which experiential learning is part. Shifting to practice and performance means emphasising increasing students interpersonal awareness combined with the development and practice of interpersonal and team skills within a professional context.

The more a student can become an active part of the learning process, the more effective will be his development of these skills. Data analysis has shown that these skills are associated with management. Hence, if the student is geared to his skills, he should have enough opportunity to unfold the classroom experience. This is especially true as the respondents state some of the graduates' requirements as the ability to lead, the ability to work co-operatively, the ability to give and accept responsibility and the ability to identify and solve problems. Task-based education relates very well to the personal, social and research components of the curriculum.

It is believed that as students who experience some of the techniques of research experience they gain some benefits that they carry out into practice. This implies building research-based units into the undergraduate curriculum. It is argued that broad-based education that sees practice and research as mutually supportive may assist future professional development.

It has been indicated in 7.1.1 above that the units of activities in data analysis would serve as a basis of librarianship curriculum modules. Experiential learning has been an approach to provide greater flexibility an access to learning based on
modularization. The flexible undergraduate programmes, modular schemes and credit transfer that are the basis of task-based curricula demonstrate that this model facilitates access. The NCHE [54] agrees with the findings of this study. The Commission holds that with modules many of the skills that graduates require are bound in curriculum and incorporated into modules and added to courses.

The White Paper on Education and Training [55] describes modularization as a process of redefining and reorganising into units in order to produce sections of work that have recognisable boundaries, objectives, content, self-assessment items, formal assessment and prior knowledge and experience that are necessary to complete the module successfully. Content in terms of modules leads to the notion of packaging content into standard, more or less self-contained units and making it available to a student who wishes to have access to the material in question.

Some form of equivalence can be established for such modules between some institution and another. Such consideration opens up a dimension in which credit transfer arrangements, mentioned to me necessary in Chapter One, can be developed. In theory a student might make several institutional moves in the course of studying a degree. However, in UK where this facility has been created in most universities, the take up of this possibility by students is undocumented and it is thought to remain small [56].

If modularity can be seen to promote credit transfer agreements, it is also a favourable element in the arrangement of curriculum from terms to semesters. Modules enable courses to be put at various times in the year, so allowing for more flexibility in student intake arrangements. Since each module is required to contain its own provision for assessment, there is an administrative assurance that the content of one semester's work will not spill over into another's, thus enabling staffing commitments to be clearly predicted and controlled.
The NCHE [57] identifies four characteristics of modular learning.

1. The contents are output centred, designed to relate to the precise learning needs of the students.

2. Teaching and learning are dictated by the uses to which learning will be put.

3. It is learner centred with emphasis on learning rather than teaching.

4. Lecturers are used as facilitators rather than teachers.

While these are not disputed, and indeed this present study lends support to all of them, the first is of particular importance. If curriculum relevance is supported it is likely as many of the respondents explicitly stated it should be output-centred.

Other writers have noted the link between outcomes-based education and quality graduate performance. For example Vermaak [58] and White Paper on Education and Training [59] identified that outcomes-based curriculum is committed to performance without being too narrowly vocational.

It is not expected that this assessment will be similar to that applied to academic ability. These practical skills could be built specifically into both the teaching and assessment of student progress. Task-based education provides a curriculum with a built in mechanism for evaluation and orderly change as the professional knowledge and skills require. Jowkar [60] agrees as he shows that assessment is criterion-referenced. It is argued that assessment is vital to maintain academic standards but it also helps students appreciate the importance of the process of learning as distinct from the content. This is also a criticism of a curriculum that has emphasised professional accreditation.
7.4 Summary

This discussion of results and other studies demonstrate that curriculum development in librarianship has unique features that have to be incorporated in undergraduate curriculum. A graduate requires:

The acquisition of knowledge and understanding of the discipline.
A set of skills for carrying out certain procedures.
Practical understanding and direct immediate access to facts, findings and methods.
Justification for procedures.

It is understandable that curriculum development may have followed academic subject fields by trying to develop academicised curricula. In doing so some critical distinctions between professional disciplines and academic subjects in institutions of higher education have been overlooked. This meant that librarianship curriculum has been irrelevant.

The indication is that in the development of relevant librarianship curricula, it is necessary to give close attention to the unique features of professional practice. Vocational context is educational because it is develop from and set out within professional practice. Curricula should pursue the goal for education to address the outcomes of student learning. This implies that a particular slant to relevance and the real working world. Experiential learning is inevitably integrated into ongoing practices and is therefore able to make strong claims of relevance. The courses use a situational approach that addresses skills in a holistic manner. A major benefit of experiential learning exercises is that they can help maximise student learning by combining practice-oriented exercises with outcome-oriented information for evaluation purposes.
REFERENCES

8. Ibid.
13. Alaezi, C. 'Crafts and Technology in the Curriculum of Primary Schools in Plateau State, Nigeria'. *The Vocational Aspect of Education*, April, 1988, 27-33
19. Ibid.
20. Sharp, G. Post-Fordism, the Vocational Curriculum and the Challenge to Teacher Preparation. Journal of Vocational Education: The Vocational Aspect of Education, 147
22. Line M. B. 'Requirements for Library and Information Work and the Role of Library Education'. Education for Information, 1983, 1, 28
23. Employment Department, Prospectus for the Provision of Careers Services. Sheffield: University of Sheffield, Employment Department, 1996
26. Allen Public Library (University of Fort Hare) Eastern Cape Region Survey To Assist Library Schools and Library Managers in Exchanging Information and Training in Managerial Skills, [Sl. : sn.], 1977

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29. Alaezi, C. 'Crafts and Technology in the Curriculum of Primary Schools in Plateau State, Nigeria'. *The Vocational Aspect of Education*, April, 1988, 27-33


35. Alaezi, C. 'Crafts and Technology in the Curriculum of Primary Schools in Plateau State, Nigeria'. *The Vocational Aspect of Education*, April, 1988, 27-33

36. Ibid.


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41. Ibid.
43. Ibid.
51. Line M. B. 'Requirements for Library and Information Work and the Role of Library Education'. Education for Information, 1983, 1, 28


58. Vermaak, E. Paper Presented at a Seminar on Outcomes-Based Education. Held at the University of Durban-Westville, 1996


CHAPTER EIGHT: SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

8.1 Introduction

This chapter presents a summary of the investigations, discusses important conclusions derived from the research and offers recommendations for further meaningful research.

8.2 Summary

The literature review revealed the importance of outcomes-based curricula in realising effective graduate education. It indicated that the curriculum is the display of many composite parts which together enable the achievement of librarianship educational goals.

The literature review indicated that graduate performance was intimately linked to graduate education that was based upon a relevant curriculum. Irrelevant curricula have been greatly responsible for the poor quality education of graduates. Graduates are expected to acquire some skills, knowledge and professional attitudes in order to perform effectively in libraries. Therefore the curriculum needs to be developed and pragmatically organised to provide a goal-oriented education.

Reference has been made to library activities or 'doing' as the core aspect of professional knowledge and skills. Burrell [1], Brittain [2] and Melton [3] have agreed on the need for such an approval as well as emphasising the vocational approach to curriculum development.
In the same vein, Bevis [4] stated that activities have a goal and organisational structure that enables the goal to be achieved. Skill is regarded as the ability to use the activities, professional knowledge and professional qualities. However, it is the researcher's view that the curricula through which graduates are currently prepared do not equip them with these abilities.

Comments such as 'the abstract nature of librarianship education', 'the theory and practice divide' and 'training to obtain a qualification' support this view.

Such comments stress the need for careful attention to the nature of professional practice on which to base curriculum development so that goals are efficiently and reliably achievable. This then was the reason for the investigation. Attention was also taken of such factors as innovation and the level at which the curriculum would apply. In this respect, it is important to note the views of Line [5] and Squires [6] who argued that traditional curricula have placed lecturers in the unreasonable position of teaching to a built-in obsolescence. Therefore curriculum innovation is needed to improve librarianship education effectiveness while making it more responsive to current professional practices.

Furthermore, the literature review cited writings by Burrell [7] and Dudley and others [8] which emphasised concern in the UK for inadequate curricula models at the initial professional level of education. So it was decided to focus this study at undergraduate level in South Africa. The choice of undergraduate level was made because it was more readily applicable to identifiable core areas.

This research therefore examined core components that could be included in the initial professional undergraduate curriculum to enable graduates to perform effectively in libraries and library related services.
8.3 Conclusion

It is important to know that diaries completed and interviews conducted were all completed before the questionnaires were reviewed. This was in order to ensure a range of ideas from the respondents on what was considered important to be included in the core curriculum and what their opinions were of librarianship curricula and graduate education and graduate performance.

8.3.1 Sample of Respondents

In planning data collection, the researcher had a number of considerations to take. The researcher needed very detailed data on professional library activities, professional qualities, graduate education and performance, because of the kinds of issues the investigator wanted to study.

Obviously, there was a limit to the amount of such data the researcher could handle. As indicated in Chapter 3 it seemed clear that the investigator's interest would be best served by subject purposive samples of employers, lecturers and students who are often excluded from curriculum development. In Chapter 4, these respondents and stakeholders were identified as one of the theoretical framework constructs. The groups who are potential participants are placed into three categories: the student, who is the focal point of the curriculum; the lecturer, who is responsible for providing actual learning situation, will largely determine the success of the curriculum and the employers who will employ the graduates. Ensuing from this fact, the researcher aimed at ensuring that all concepts, hypotheses and variables referring to these three groups were derived from accessible professional practitioners.

The study has provided evidence that, to ensure curriculum relevance, curriculum decisions should be made relevant to the extent that agreements, compromises and
the importance of the needs of employers, graduates and students are taken into consideration.

It is stressed that relevant curriculum development is a co-operative endeavour. With traditional, curriculum development was often limited to the experts. In this study, it is argued that stakeholders are encouraged to participate in a sense of genuine cooperation.

The challenge is for stakeholders to reach a consensus on a curriculum under which most graduates receive training that will equip them with suitable professional qualifications. The possible contributions of the three groups suggest a major curriculum principle that curriculum development anticipates a co-operative undertaking on a broad basis.

The criticism of curricula address the key issues as being the need for agreement on basic professional education, its adaptation to changing societal needs, and setting the pace for change through educational innovation. These issues remain central to South Africa where societies differ in terms of educational and economic development and resources development.

8.3.2 Library Institutions

Reference has been made to professional practice as providing realistic guidelines for curriculum decisions and as providing the background for and the curriculum meaning. Saracevic [9] has shown that anything within professional practice that influences graduate performance is appropriate subject matter for the conceptual representation for librarianship education and practice.

As libraries and information centres change their practices, so should the curricula for librarianship education programmes. The structural components of the
curriculum framework are the context of libraries and information centres. Furthermore, libraries and information centres context provides the conceptual framework with realistic guidelines and direction for curriculum development.

Library institutions help provide background for and meaning to the curriculum. Anything within an environment that influences the performance of graduates is appropriate subject matter, concepts and conceptual constructs for librarianship education. Some of the structural components that relate to library institutions are:

- the current and projected professional practices viewed within the context of the library functions that will be performed by the graduate on completing the first level degree programme.
- the demography of the community in which the library school is situated.
- the characteristics, ethnicity and the needs of the users and the library services.

In summary an analysis of the present and future practices becomes part of the theoretical framework of bases on which a librarianship curriculum is based.

8.3.3 Diaries, Questionnaires and Interviews

Diary recordings by graduates, opinions recorded on the questionnaires and comments made during the subsequent interviews, clearly showed that to achieve relevant librarianship curriculum, an outcomes-based curriculum permits library functions to be broken into definitive activities. In this respect, a task-based curriculum clearly showed that such activities could become consistently and specifically operational with a high degree of success.

Graduates' comments in diaries related to the skills that they had achieved by the end of the course by describing the incidents where the knowledge, the knowledge, skills and attitudes were learnt on the course. Comments indicate that
some were put into practice successfully while others were not. The graduates' concern was that the current curricula were not preparing them adequately for performance.

With employers, the concern was that graduates were prepared for a qualification and not professional practice. Most of the employers' comments related to the expectation they have of students. They also comment on knowledge, skills and attitudes specifically related to the learning outcomes of the course. In addition, lecturers indicated that they could not teach the curriculum well since it was either adopted from other countries or not derived from professional practice.

A summary of the diaries, questionnaires and interview replies related to curriculum development, indicated in detail that the current traditional curricula for undergraduate librarianship students need to be reviewed, mainly because of the unsuitability of their academic nature. The data generated by this research does indicate an acceptance of the main hypothesis, that is, the observation that the current librarianship curricula are irrelevant.

8.3.4 Integration of Skills in Curriculum

The interview also focused on how the identified skills, knowledge and attitudes could be integrated in teaching and learning. Personal qualities are the key requirements respondents expect of graduates. As library activities are a prerequisite for library services these in turn inform the process for knowledge and skills and what kind of graduates should be educated. These factors lead to a need to define the general intellectual and personal qualities required in employment.
Contrary to the belief that employers need just a minimum level of skills, the study suggests that they want graduates for their intellectual ability as well and a capability to learn rather than their immediate background.

8.3.5 Graduate Performance and Education

The responses relating to the levels of graduate education and performance were of great value. In some instances, significant gaps in educational background that are not met by the traditional curriculum were revealed by interview responses.

For example, with traditional curricula the failure with the end product has been 'a lack of transfer to work of what had been learned'. In other words graduates could not apply what they had learned from library schools to the various types of libraries. Further, with traditional curricula, 'librarianship has been taught in the same way in which academic subjects have been taught, that is, identifying the knowledge and needs to have to practice'. The present librarianship curriculum is based on the so-called educational or academic achievement which does not focus on graduate performance. The application of theory to practice is left to graduates to plan in the real situation. If the student has difficulty in applying theory to practice, something is obviously wrong with the student.

The literature review showed that one of the weaknesses with competency-based education resided in the fact it focused attention purely and simply on competencies that students should acquire. It ignored the relevance of knowledge and attitudes, which were generally perceived as no more than a factor on which the development of competencies depended. This approach seriously underestimated the importance of knowledge and professional qualities, particularly with regard to the development of relevant curriculum.
Finally, on the question of how the skills, knowledge and attitudes could be integrated in librarianship education, the interview opinions confirmed the unsuitability of academic curricula and competency-based curricula in equipping them with the necessary skills, knowledge and personal qualities. On the other hand, literature review indicates that task-based education presented itself to be the basis for quality preparation for graduates. Task-based education takes notice that librarianship as a professional discipline, requires a different form of teaching from academic subjects. These differences are reflected in the purposes and objectives. In task-based education, the objectives do not reflect so much what the graduate will know as what the graduate will do.

Taken in conjunction with the level of graduate performance, the educational level indicated where action needed to be taken. This could be either to improve or design curriculum for the training of librarians. The latter was indicated in this study.

8.4 Recommendations

One of the objectives of this study is to develop a curriculum that is work-related. The sources of such a curriculum are associated with professional practice, innovation and negotiation.

8.4.1 The System Currently Being Used For the Award of an Undergraduate Professional Degree

Year One
1. Information Environment and Users
2. Management of Information Centres
3. Information Resources and Services
4. Organisation of Information Materials
Year Two

1. User Studies
2. Information Services Management
3. Information Analysis and Retrieval
4. Bibliographic Description

Year 3

1. Management Techniques and Research Methodology
2. Educational Information Services in Developing Countries

Year 4

1. Publishing, Printing, and Book Trade Technology *
2. Origins and Uses of Information for Databases
3. Information Use and Users *
4. Social Impact of Information Technology *
5. Computers in Library and Information Services
   * = Anyone of the above

8.4.2 Designing Task-Based Curriculum for the University of Transkei

As indicated in Chapter One and in 8.4.2 below the new requirement in the country focuses on career output programmes. In order for the curriculum to fit into the NQF requirement, the curriculum model that has emerged to be relevant from this study is depicted under 8.4.5 below. Task-based education suggests a clear break with the traditional curricula. Such a break is characterised by its ability to give teachers an opportunity to do what they are meant to facilitate learning. This means that teaching is not to be presumptuous and that learning will take place after the lecturer has gone through a particular process. Hence, it also gives the learner opportunity to develop to the full extent.
8.4.3 Principles

The process of curriculum development also involved the reassessment and subsequent restatement of the principles and goals of outcomes-based education of National Qualifications Framework (NQF) as well as the goals of the initial professional librarianship curriculum.

The basic principles that underpin the NQF include equity, access, flexibility, development, institutional autonomy and efficiency. Outcomes-based education arises from an examination of a form of education which existed in South Africa for decades and is an attempt to outline a new model in a new education system.

The key concern was the fragmentary nature of educational divisions, and dead-end education in South Africa. NQF emphasises the need to deal with questions about relevance of education, the purpose of education, the kind of training which is necessary to advance completely different sort of social goals, an entirely new vision of South African society [10].

NQF seeks to remove the barrier between education and training, skill and knowledge, shift emphasis from rote learning to an emphasis on understanding, interpreting, evaluating, applying and thinking. 'The formal system of education is the classroom scenario as well as the outside world, outside the classroom situation should be similar' [11].

The curricula direction, requirements, structure and content are directly and recognisably related to the NQF principles. In addition, in the definition of goals of the curriculum consideration was given to McGarry's [12] mention that three related questions be answered, namely:
1. What is the purpose of librarianship education?
2. What knowledge and skills are of most importance in order to achieve this purpose?
3. What kind of person do we require?

8.4.4 Objectives

Against the background of the NQF principles and the preceding chapters of this study and with a view to the proposal for task-based curriculum for the University of Transkei, the researcher recommends the following librarianship goals:

The objective is to develop a curriculum that can realise the goal of outcomes-based education through identifying explicit goals necessary to function in the profession and design learning activities to achieve the goals.

To plan and offer librarianship programmes which are focused on professional practices by designing learning activities necessary to achieve these goals. The reason in specifying these objectives becomes one of identifying skills, knowledge and attitudes that are necessary to the functions of librarianship.

At the completion of this study programme, the end product as demonstrated by graduates' education will comprise of performances, library services, roles, functions, skills and knowledge of librarianship. These attributes attain the goals of library services.

8.4.5 Rationale

Professional practices are the target of curriculum development. Hence, the research seeks to develop a curriculum that can realise the goal of outcomes-based education.
through identifying explicit goals necessary to function in the profession and designing learning activities necessary to achieve those goals.

The primary task in specifying the objectives in this curriculum design is one of analysing the desired outcomes out of the predicted graduates' performances and content outlines produced by lecturers.

Secondly, since the emphasis on librarianship curriculum is on practice and doing, it is necessary to spell out objectives' function at all levels. Content and learning are geared towards the graduates' performance by basing them on experiences.

8.4.6 Structure

Organising courses into a curriculum pattern holds a key place in curriculum development. The reason is that it is actually the real implementation of the theoretical framework, outcomes and content selection.

What the respondents are suggesting as they respond to questions is that, librarianship education must address a given topic specifically and in appropriate time frame. The structure of this curriculum model outlines the content areas. As to the requirements the curriculum incorporates the core.

In organising courses it is also important to choose a format that has greatest potential for fulfilling the curriculum commitments. If the content areas are to be taken further, the kinds of skills that should be acquired by graduates are listed.

Both McGarry [13] and Burrell [14] have shown that if library activities are to be met and if graduates are to acquire skills, they will clearly need knowledge which will assist objectives and skills.
A. Information Area

Information Environment and Users

Skills to be developed

1. Ability to plan information services
2. Ability to access user needs related to relevant information services
3. An understanding of ownership and control of information sources and access to information
4. The possession of an awareness of social responsibilities of librarians

Information Resources and Users

Skills to be developed

1. Ability to evaluate and use information sources for reference work
2. Ability to examine types of reference services
3. An understanding of the principles of reference services
4. An understanding of the reference interview
5. An understanding of reference collections

Organisation of Information and Materials

Skills to be developed

1. An understanding of bibliographic organisation and control
2. Ability to organise, describe and analyse information
3. Ability to classify and catalogue the diversity of documents in a library for storage and retrieval of information
4. Ability to search and retrieve information for users
5. Ability to evaluate information retrieved
6. Ability to evaluate manual systems

Students will have direct experience with the use of one or more systems.

B. Technology Area

Skills to be developed

1. Ability to apply computers to the various functions of the library.
2. Skills in information processing

C. Management Area

Management of Information Centres

Skills to be developed

1. An understanding of the functions and purposes of different types of libraries
2. An understanding of information centres for underdeveloped communities
3. An understanding between education and libraries
4. An understanding of a librarian as a consultant

Information Services Management

Skills to be developed

1. Ability to plan and understanding objectives of information services
2. Ability to assess user needs
3. Ability to market customer services
4. Ability to disseminate and use information
5. Ability to prepare current awareness services
6. An understanding of training, education and roles of library managers
7. Ability to evaluate trends and impact of library management

**Research Methods**

This is a research-oriented course. Skills to be developed are:

1. An understanding of research methods.
2. Problem-solving skills, communication skills, social skills, numeracy skills, working with others, personal qualities, intellectual skills. All these are deliberately fostered through an understanding of research methods.

Various forms of categories of knowledge have been used in education. For example, Bloom [15] sees knowledge as a recall of specifics and universals, the recall of methods and processes or manipulation of patterns, structures or settings. McGarry's basis of knowledge selection is based on human attributes that have communicative value [16]. The selection is based on the premise that human beings are the core studies in information sciences [17]. The classification that is considered more realistic for this study is that offered by Eraut [18]. The following is the outline of the classification:

1. Knowledge of situations
2. Knowledge of people
3. Knowledge of practice
4. Conceptual knowledge
5. Process knowledge
6. Control knowledge
The reasonable direction to knowledge and education implicit in the goal of outcomes-based education is the adoption of vocational curriculum. This forms a basis to teach concepts needed to understand situations, the skills needed for education and flexibility needed for expertise in the changing environment.

The lack of development of conceptual understanding, specific skills, knowledge and personal qualities which disturb transfer is a powerful reason to contextualise the aspects of development of attributes needed to secure the goal of effective education and subsequent quality performance.

8.4.7 Core Areas

While only a few schools completely revise their curriculum in any given year, almost all add courses, delete some old ones, or review specific areas of the curriculum each year. New additions in the proposed curriculum include courses that focus on professional attitudes, leadership and personality skills. The user-centred courses include problem-solving skills, communication skills, social skills, working with others, personal qualities.

A student would require one core course in all these the core areas identified in the proposed curriculum in 8.4.6 above. However, technology, numeracy skills, intellectual skills and services in underdeveloped communities are infused with other activities to avoid isolating them as separate entities. For example, students learning the use of Dewey Decimal Classification, will have access to both hard copy and electronic versions. Learning to assess and collect library materials will be based on both developed and underdeveloped communities. The content of the research methods is combined with Information Environment and Users.
8.4.8 Differences

The differences between the proposed curriculum and the current one are both in content and preparation of students. With the curriculum that is currently in use, professional development has focused on academic credit. There has been a lack of systematic needs assessment, consistent data collection and standards for measurement of knowledge and skills. The curriculum does not define the role of the professional, establish skills, knowledge and attitudes and standards related to practice, or measure content and quality of curriculum offered.

As the lecturer manages learning, the curriculum is compartmentalised, encouraging students to think of courses in very bounded ways. Data analysis has shown that with such a curriculum students may develop a short-term view of classes and think primarily of what they have to do to finish the programme. Hence, once the course is completed, the text is sold and the notes are put away and the students move on to other activities.

The proposed curriculum intends to encourage students to transcend this frame of mind and to view the course as the onset of lifelong learning, ongoing and self-managed developmental process. Also the contextualised task-based framework and levels of curriculum content and individual modules are based on expected performance levels identified collaboratively by the stakeholders. This takes care of the concern for quality and performance demands for competence frameworks and practice standards.

8.4.9 The Kind of Person a Graduate Should Be

The kind of person that a graduate should be identifies the selection of learning experiences. Teaching is used for theoretical concepts, experiential-based learning is used for practice related activities. Theory that is selected to be included in
librarianship curriculum is chosen with its practice implication as the most essential criterion.

The knowledge and skills included in the core curriculum are of two types. The first emphasise the theoretical and relatively stable base of knowledge that underlies continuous professional growth. The second emphasises the practical and changing professional environment that affect the immediate employability of graduates. This is a compromise between long and short-range goals. The first is important to the overall intellectual growth and lifelong learning necessary for professional advancement. The second is important for immediate employment upon graduation.

In considering a teaching, learning and assessment framework which would take account of the knowledge, skills and attitudes identified in Chapter 7 and in the curriculum outline in 8.4.5 above, the taxonomy of educational objectives of Bloom and others [19] is regarded suitable. These objectives may be based in planning activities that provide a concrete structure from which to adopt an assessment process which would achieve the aims of outcomes-based education.

Adopting Bloom's taxonomy, students could be expected to achieve knowledge, conceptualisation and application levels. The practical cognitive knowledge is coupled with the interpretive approach. The basic orientation of this interpretive approach [20] is to generate knowledge through an understanding of meanings.

Whilst the traditional curriculum requires that educational outcomes be produced through the action of the lecturer, the practically informed curriculum as described in this study, concerns itself primarily with practices which involve the meaning-making of students.
In terms of the relationship between theory and practice, the task-based curriculum will give the lecturers and students a much greater degree of control of both theory and practice. Theoretical statements assume the statues of plans whose meaning may be worked in classroom situations where attempts are made to make the material relevant to students' experiences. Both lecturers and students are given more opportunities for decision-making. The skills identified can be used to foster critical skills necessary to analyse theory with reality.

The three levels of competence identified in the curriculum outline, that is, knowledge, conceptualisation and application, represent a progressive structure through which a student might proceed in order to achieve competence in a given area of the curriculum. A framework should be applied to the general objectives, thus identifying exactly what the student must achieve in order to achieve competence. An example is given below.

Objective: An ability to search information for users and to understand the difference between manual and on-line information searching.

To achieve knowledge level, definitions of knowledge, information, communication, data and document can be reproduced. Secondly, features of information searching and interpersonal interactions in observed searching performance.

For conceptualisation, the students would be allowed to discriminate between information searching and interpersonal interactions in observed searching performance.

At the application level, the students would be required to report a specific use of a search interaction identifying its value.
Each assignment on course is designed to test specific objectives and students are given profile forms on which progress is recorded across the range of competencies. In the case of the objective illustrated above, all students would be expected to reproduce definitions that are related to information searching. This would provide evidence at level of knowledge of the objective. In order to meet conceptualisation level, the students need to differentiate between search and other forms of helping activities such as reference work, linking their experience to the stated definitions.

At application level the students would be required to give case examples of their information searching thus demonstrating the ability to apply the concepts learned to the needs of the users.

Assignments in written form would be complemented throughout by formative assessment of competence achieved through final supervision, and peer and tutor evaluation during practical sessions. All the evidence collected would be recorded on the students' profiles. Where achievement would be identified as only partial re-establishing action could be taken to promote further development in particular areas. In this sense, task-based curriculum regards deliberation, judgement and decision-making as central.

8.4.10 Serving the Emerging Needs

Data analysis has revealed that one of the key responsibilities in librarianship curriculum development is to ensure that professional learning equals or exceeds the rate of change, otherwise it will be outdated.

Thus analysing the knowledge and skills required to perform professionally is an effective way to establish the current and emerging needs. This gives an evidence of the specific skills, knowledge and attitudes required at first level graduate
curriculum. In addition, through respondents' participation in curriculum development a performance gap is objectively established by assessing the current/future knowledge and skills to be possessed by a graduate. These considerations are a basis for the development of the curriculum that is effective in accommodating emerging needs. Also the curriculum will help serve the emerging needs because it recognizes the need to develop flexibility and transferability of skills and knowledge as an outcome of training.

In brief, serving the emerging needs is based on the principles of key activities, skills, knowledge and attitudes that:

- support life long learning;
- are transferable;
- build on existing professional practices;
- are integrated in all aspects of training and performance is variable between contexts.

8.4.11 Integrating The Unexpected

During the course of this study, some unexpected responses were obtained. For example, responses indicated that underdeveloped communities have collected a wealth of locally produced information that is often highly valuable and pertinent to the unique problems distinctive to their needs, though inaccessible and not widely known.

From this observation, it is maintained that a wider study of production, distribution and consumption of information products and services should be offered in education that accommodates the needs of disadvantaged communities. The reason given is that an appreciation of the material conditions that frame this complex of
activities provides the preparation of librarians to work in a variety of manufacturing services. In turn, this emphasises encouraging media literacy than information literacy.

The opportunity indicates that the knowledge of how mass media and communication technologies work can be used to empower librarians in distributing information. Also compiling a bibliography under the supervision of a media specialist can help to develop students to independently assemble the knowledge they need for the communities they serve. In this respect, literacy programmes were not supported as an important element in serving the needs of the developing countries. Such programmes would overlap or duplicate other literacy programmes offered in adult education.

8.4.12 Strengths and Weaknesses

As this qualitative research is exploratory, it made sense to include those respondents with the experience and knowledge of the aspects under investigation. In some cases a number of accounts produced consensual opinion. Where consensual opinion could not be reached, for example, as with the literacy programmes, given the evidence from the perception of views from the range of opinions an attempt was made to draw the more acceptable translation.

The purposive selection of respondents not only ensured representation of respondents along their characteristics, but it also provided a wide range of experience and diversity in the profession. Collaboration has provided an efficient means for providing core skills, knowledge, attributes and curriculum content and determining level of professional development, prerequisite criteria and measurement and evaluation arrangements.
The examination of a framework of activities, skills, knowledge and attitudes also protects the interests of practitioners wishing to define their area of practice and obtain public and professional recognition for achievement and performances. Detailing the necessary skills, knowledge and attitudes provides a foundation for students' development that can be used to guide teaching objectives and design outcome evaluation methods. In summary, the content satisfies all stakeholders because the content both inside the educational institution and professional practice from which the graduates come and subsequently return is reflected.

8.4.13 Implications for Teaching and Learning and Resources

Academic curriculum model is open to beginning and advanced students alike without any sense that some things must be learned first or that experiences within librarianship itself makes one a more advanced learner. However, as Chapter One shows, growing demands to support professional practice have resulted in pressure for outcomes-based education and performance measurement to demonstrate quality and accountability. Outcomes-based instruction is a means to achieve accountability through teaching activity-based preparation based on clear conceptual designs that contribute to the acquisition of knowledge, skills and attributes. The mastery of these builds the foundation for individual programme evaluation.

The professional development of librarianship requires task-based instruction to increase the graduate's ability to address complex and changing demands. Types of understanding which librarians have expressed as important in studying form a learning scheme. This learning scheme includes levels of understanding, knowledge, comprehension, application analysis, synthesis and judgement.

To link changes in course structures to their impact on the effectiveness of assessment methods requires an explicit modelling of the assumed learning scheme.
Hence, lifelong learning is supported by stating it as a goal of a course and as part of the vision of a competent graduate by providing relevant resources. The teaching activities and assessment are described in terms understandable of the demands of learners, set in the contents of the general requirements and resources demanded by the profession. Lawson [21] provides some materials helpful to learners in developing their own going learning process as well as assessment and these materials are relevant for the teaching and learning of the proposed curriculum. To foster the different aspects of learning tutorials, seminars, lectures, textbooks, programmed learning and original sources can be used. By linking these resources to levels of understanding, different approaches will impact differently on different students. For example, a seminar can be an efficient device to develop application skills, while successful use of original sources like papers and documents can encourage application and analytical skills. Students' synthetic and judgement skills can be developed through individual interaction with staff during project or small groups working together on a project. Some part of the activity-based learning is put under individual learner responsibility and group learner responsibility. The technical and practical aspects of librarianship dictate that active modes of learning will be particularly effective.

Common assessment methods that can be used include project, essay, essay-based examination, multiple choice, problems and oral to test knowledge and comprehension. The indication for teaching, learning and resources is that if there are different aspects of understanding, and if different modes test different skills, the optimum method would expose students to a wide range of these modes. In brief for effective learning it is necessary for a student to be exposed to a wide range of instructional and assessment experiences.
8.4.14 Integrating Changes into the Current Curriculum Development Process

In the Methodology Chapter and subsequent chapters, it was indicated that job analysis provides a sound basis for an effective professional librarianship curriculum. Being inclusive of the diverse professional undertakings reflects attention to the wide institutional societal contents in which the professionals work as well as the changing needs of the profession.

Using the information obtained during job analysis and integrated process can be introduced linking skills, knowledge with the curriculum development process and the determination of objectives. The established goals would help guide the process of learning and training as well as serve as criteria for evaluating learning. Accordingly, changes can be realistically incorporated with other core areas of the curriculum. Linking individual objectives to professional practices, the new curriculum can thus help align individual performance with institutional changes and strategies. Additionally, the performance foundations help incorporate changes in that they provided clarity with regard to the performance required.

Distinctive new processes are natural outputs for libraries that continually develop and improve competencies the means by which professionals can better serve their users. A positive outcome is the concern on how things are done as opposed to a results only focus. Hence, employers are key players in the change to new forms of work arrangements for graduates. Their support in professional practice helps the goals of education to the changing nature of the profession. The developed new competencies can be incorporated on department's strategic options to redefine its competitive areas, allowing lecturers to pursue new markets and users where students' competencies are valued.
The benefits of using task-based curriculum are that curriculum developers can use the framework to develop and refine curriculum competency lists and content. Also the framework can be used to develop needs assessments and performance standards and to include educational outcomes. It is a curriculum framework to be continually refined and evaluated to ensure its continued relevance to professional practice.

8.4.15 Further Recommendations

This study focused on curriculum development with particular reference to the initial professional graduate level. The aim was first to evaluate the respondents' opinions towards the suitability of the existing curricula for achieving skills, knowledge and attitudes which would be adequate for performance of newly qualified librarians.

It was obvious once the researcher began to analyse the respondents' opinions about the relevance of current curricula, that there was a need for a curriculum that is career-oriented. In the world of professional practice, quality graduate education is a key factor since it is needed to ensure quality performance. As Saracevic [22] so aptly commented, quality performance is a valued characteristic to be sought by curricula.

Further, McGarry [23], found that a curriculum determined what was taught and how it was taught. Comments by respondents indicated that what was taught did not correspond with teaching and learning. This also raised the question about the suitability of the curricula and a suggestion that the changing perspectives in professional practice and education which are taking place, require a more meaningful curriculum.

This research has answered a number of opinions about curriculum irrelevance of the present librarianship curricula for initial professional qualification. At the same time it has raised others in related areas such as teaching and learning.
Librarianship education might be seen as keeping close contact with library and its ever changing needs if library schools were concerned about providing quality teaching based activities for graduate employment.

The statement of differing respondents' views addresses such critical issues as need for agreement for basic professional education. These issues remain central in South Africa where societies differ in terms of ability, education and academic development and resources for development. For both academics and employers this has meant building partnerships and understanding each other to achieve some common goals.

The building of curriculum to be work-related implies that the joint efforts of educators and employers must bear responsibility for providing students with the knowledge, skills, and attitudes. These qualities are needed to equip students with capacity, adaptability to cope with rapid changes in the profession.

The researcher's hope is that this study and its findings will encourage curriculum developers to ensure seeking the help of stakeholders in curriculum development so as to come up with a relevant curriculum.

Because of the respondent selection, that is non-probability sample, in this study, it is not possible, at this time, to conclude that this model would explain professional practices and changes of the entire South Africa. As it stands, the current study explains professional practice within limited individuals and, therefore, must be constrained accordingly.

This study, therefore, calls for future investigation of the proposed curriculum model. As with the current study, such research should use multiple methods and should include all possible dimensions of participant diversity. For years, research in
curriculum development has over-emphasised quantitative research. This only gives half the picture. Qualitative research shows that libraries are the context in which professionals work and interact. Thus, relevant curriculum must be equally developed from phenomena pertaining to professional work and human interaction. This suggests a need to redefine normative categories to represent diverse participants and their experiences. In turn this means lessening control that academics and government exert on professionals to define themselves in some academically prescribed fashion. When it is accepted that quality education relates to graduate performance, curriculum relevance might be successfully addressed.

Unlike quantitative research where the goal is to produce a replicable study, one in which two researchers working with same methodology would arrive at the same conclusions, with qualitative analysis, the researcher intended to produce a unique theory grounded in the situation and event under study.

It is also hoped that the University of Transkei will take notice of opinions put forward in this research and act upon them.
REFERENCES


5. Line, M. B. 'Requirements for Library and Information Work and the Role of Library Education'. *Education for Information*, 1983, 1, 28


12. Ibid.


14. Ibid.


17. McGarry, K. J. 'Curriculum Theory and Library and Information Science'. *Education for Information*, 1987, 5, 139-156


23. McGarry, K. J. 'Curriculum Theory and Library and Information Science'. *Education for Information*, 1987, 5, 139-156
<table>
<thead>
<tr>
<th>BIBLIOGRAPHY</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Aina, L. <em>The Concept of Curriculum Development</em>. Paper Read at University of Fort Hare: Department of Library and Information Science Workshop on Curriculum Development, 30th November - 1st December 1995</td>
</tr>
<tr>
<td>2. Alabi, G. A. 'Statistical Significance Reporting'. University of Transkei: Department of Library and Information Science, Unpublished</td>
</tr>
<tr>
<td>3. Alaezi, C. 'Crafts and Technology in the Curriculum of Primary Schools in Plateau State, Nigeria'. <em>The Vocational Aspect of Education</em>, April, 1988, 27-33</td>
</tr>
<tr>
<td>4. Allen Public Library (University of Fort Hare) Eastern Cape Region Survey To Assist Library Schools and Library Managers in Exchanging Information and Training in Managerial Skills, [Sl. : Sn.], 1977</td>
</tr>
<tr>
<td>10. Barron, C. 'South Africa Falters as Science Slips to the Bottom of the Class'. <em>Sunday Times</em> (SA), 1996, April 14</td>
</tr>
</tbody>
</table>

252


30. Coetzee, J. A. 'CALICO (Cape Library Co-operative) and Western Cape Libraries. *Cape Librarian*, 1996, 40 (2), 8-11


38. Dean, J. Planning Library Education Programmes: a study of the Problems Involved in the Developing Countries, London: Andre Deutsch, 1972


44. Department of Library and Information Science. University of Transkei Prospectus, 1995


49. Du Pre, R. H. *Outcomes-based Programme Development*. Umtata University of Transkei, 1999


60. Fokker, D. W. Library Curriculum Needs in the Context of South Africa. Paper Read at the University of Fort Hare: Department of Library and Information Science Workshop on Curriculum Development, 30th November - 1st December, 1995


66. Frylinck, J. H. The Possible Adaptation of Library and Information Services to the Needs of Developing Communities in South Africa, 1984, Unpublished


73. Grazier, M. H. 'The Curriculum Consultant Role of the School Library Media Specialist'. Library Trends, (Fall), 1979, 263-275


75. Grogan, D. J. 'Education for Librarianship: Some Persistent Issues' Education for Information, 1, (1), 1983, 3-23


82. Havard-Williams, 'Appropriate Education'. SAILIS Newsletter, 1992, 12 (9), 1-2

83. Hermann, G. Developing Occupational Courses, Sydney: Macquarie University, 1990

84. Higher Education Act of No. 101 of 1997


88. Human Relations’ Committee of SAILIS in the Eastern Cape. ‘Survey of Training needs for Library and Information Services in the Eastern Cape’ *SAILIS Newsletter*, 1996, 16 (10), 4-6


93. Ibrahimah, M. I. Z. University of Transkei. Department of Library and Information Science

94. Interview with Jonas, S. University of Transkei Library, 1994

95. Interview with Magwentshu, V. V. University of Transkei, 05 May, 1998

96. Interview with Malotana, V. N. Transkei National Library, Umtata, 04 February, 1994

97. Interview with Mbhele, C. N. University of Transkei, 05 May, 1998

98. Interview with Mrara, A. Department of Geography, University Transkei, 12 November, 1996

99. Interview with Niklaas, F. University of Transkei Library, 1994

100. Interview with Potelwa, B. University of Transkei, 1998


107. Kabamba, J. 'Position Paper'. Paper Read at the University of Fort Hare: Department of Library and Information Science Workshop on Curriculum Development, 30th November - 1st December, 1995


116. Kukubo, R. J. ‘Resource Management as a Core Component in Librarianship Curriculum’. Paper Read at University of Fort Hare on Curriculum Development. 30th November - 1st December


130. Mbhele, C. N. University of Transkei. Department of Library and Information Science

131. McGarry, K. J. 'Curriculum Theory and Library and Information Science' *Education for Information*, 1987, 5, 139-156


138. Minister of Education. Speech of the Minister of Education at the Launch of the Library and Information Association of South Africa (LIASA), (1997 Jan. 8-10: Pretoria), Unpublished


141. Morris, A. Department of Library and Information Studies, 1994


157. Nhlapo, E. I. E. University of Transkei: Library
158. Ochogwu, M. G. Producing the Basic Competencies in Information Science Education in Nigeria. Education for Information, 1993, 11, 147-154
159. Ofori, P. E. University of Transkei: Library
160. Olen, S. 'Education to Empower Media Teachers'. Mousaion, 1996, 14 (2), 81-88
164. Poole, M. 'Job Choice and Advice'. The Vocational Aspect of Education, 35, (90), 1983, 131-135


168. Rainier, M. 'The Myth of Graduate Unemployability: a Different Perspective'. *The Undergraduate Qualifications*, *Newsletter of the HSRC Register of Graduates*, 1999


172. Reid, B and Brown, P. 'Asking Practitioners' *Library Association Record*, 1995, 97 (9), 488-489

173. Report of Boyer Commission on Educating Undergraduates in the Research University


190. South African Barometer, 1992 (Sept. 11), 268


265


197. South African Qualifications Authority Act, No.58 of 1995

198. Springveldt, R. Overview of Library School Curriculum in South Africa Paper Read at University of Fort Hare: Department of Library and Information Science Workshop on Curriculum Development, 30th November - 1st December, 1995


202. The Standing Committee for Formal Education. ‘Rethinking LIS Training and Education’. SAILIS Newsletter, 1994, 14 (1), 5-6


208. Tamir, P. ‘Professional and Personal Knowledge of Teachers and Teacher Educators’. Teaching and Teacher Education, 1988, 6, 15-22

209. Tau, C. Co-operation Between Library Schools and University Libraries in the Training of Library Professionals. Paper Read at the University of Fort Hare: Department of Library and Information Science Workshop on Curriculum Development, 30th November - 1st December, 1995


213. Tyler, R. W. Basic Principles of Curriculum and Instruction, Chicago, University of Chicago Press, 1969


220. Van Brakel, P. A. and Boon, J. A. ‘Structural Changes to the Basic Degree Courses in Information Science and Library Science’. In Education in Library and Information Science ..., 1985


224. Vermaak, E. Paper Presented at a Seminar on Outcomes-Based Education, Held at the University of Durban-Westville, 1996


228. Walker, C. Communication Skills in Librarianship, Unpublished


268

232. Watson, K. 'Technical and Vocational Education in Developing Countries: Western Paradigms and Comparative Methodology'. Comparative Education, 1994, 30, 85-98


224. White, R. V. The ELT Curriculum: Design, Innovation and Management. [Sl. : s.n.], 1988

225. Workshop on Curriculum Development Held at the University of South Africa, 1997


227. Zaaiman, R. B. Differences in Educational Programmes for Libraries and Information Officers. Education for Information, 1984, 2, 97-105


A1 Proforma letter from the researcher
Dear Sir

REQUEST FOR INFORMATION/DATA ON ACTIVITIES PERFORMED IN LIBRARIES

I am a Ph.D. student at Loughborough University (UK) in the Department of Information Science. Currently I am conducting research in order to gather relevant information and data pertaining to my research topic: The Relationship between Curriculum, Learning and Teaching with Special Reference to the University of Transkei. Your institute is one of the subjects due to graduates from the Department of Library and Information Science, University of Transkei working in your library. I would therefore kindly request for assistance by allowing the graduates fill in the diaries which could be returned to me in the self-addressed envelope (enclosed).

I also do hope to visit your institute to find out more through the interviews as per attached schedule.

I will appreciate your assistance in this.

Thanking you in advance

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271
SURVEY QUESTIONNAIRE

Employer, Graduate and Academic Questionnaire of Categories of Library Functions at Professional Level of Work

The primary purpose of this survey is to identify activities performed by professionals and to attempt to establish consensus on important library activities for possible inclusion in a first level curriculum for professional librarians.

Please try to answer all questions and be as complete as possible.

1. Please mark by a cross (x) the appropriate designation that indicates your position.

   Practitioner □
   Student/Graduate □
   Academic □

2.1 Library Activities and Underlying Attitudes for Qualified Library Professionals.

Below are categories of library activities, drawn from library institutions and university programmes. Each function indicates what librarianship programmes ought to provide in student education. You are not asked to record whether in your experience the opportunity has actually been provided. Instead, take each activity as conveying an opportunity which should be available on educational programmes.

2.1 Then rate each category of activity in A - B below in order of its importance, by assigning a number from numbers 1-4 to indicate:

1 = unnecessary; 2 = peripheral; 3 = desirable; 4 = essential

Example: Select documents [2]
A. Document-related Activities

- Acquire documents for collection
- Maintain library collections
- Select documents
- Photocopy documents
- Catalogue documents
- Classify documents
- Index documents
- Circulate documents
- Prepare abstracts
- Do shelf reading
- Assess and weed collections
- Plan and implement the building of collections
- Develop library collections
- Mend library collections

And other please specify

B. Reader Related Activities

- Assess library and information needs of users
- Formulate policies to meet these needs
- Acquire knowledge of the wider library and its standards
- Plan and implement information services
- Plan and execute the promotion of policies
- Plan library systems for the implementation of policies
- Enrol users
- Advise and counsel users
- Teach users
- Conduct search interviews
- Search online databases
- Edit information retrieved
- Participate in interlending services
- Prepare current awareness services
- Stimulate the use of library collection
- Provide an actuality service
- Help in exploitation and utilisation of new technology
- Organise the readership
- Plan and implement extension activities
- Co-ordinate information services

And other (Please specify)

2.2 Please indicate by assigning a number the extent to which performance of these activities is required now and in five years time.

1 = required for many positions
2 = highly desirable
3 = the most important activity for some specialists activities
4 = required as background knowledge for many positions
5 = not important at entry level
6 = not needed

Example: Promote services  [4]

C. Marketing Related Activities

Support literacy programmes  
Support development programmes, e.g. Health education  
Identify product and service needs  
Segment clientele  

Erect displays
Promote services
Publicise services
Price services
Create image

And other (Please specify)__________________________

D. Finance Related Activities

Plan funding programmes  
Draw up budget  
Debate budget  
Allocate funds  
Plan control of funds  

Plan financial records  
Plan accounts  
Prepare accounts  
Prepare financial report procedures

And other (Please specify)__________________________

E. Numeracy Related Activities

Model building  
Prepare and implement statistical Procedures  

Analyse statistics
Survey and evaluate projects

And other (Please specify)__________________________

F. Personnel Related Activities

Plan processes and work flow  
Recruit staff  
Assign personnel in sections  
Grade personnel in sections  
Direct personnel  

Supervise personnel
Control production
Control operations
Motivate personnel
Develop rapport

And other (Please specify)__________________________
### G. Information Resource Management Activities

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<tbody>
<tr>
<td>Do feasibility study</td>
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<tr>
<td>Analyse information systems</td>
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<tr>
<td>Design information systems</td>
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<tr>
<td>Manage systems development</td>
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<tr>
<td>Justify the systems</td>
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<td>Acquire hardware</td>
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<td>Acquire library software</td>
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<tr>
<td>Install and maintain software</td>
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<tr>
<td>Administer virus control</td>
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<td>Administer basic network</td>
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<tr>
<td>Restructure existing systems</td>
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<tr>
<td>Install, maintain and administer systems</td>
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<tr>
<td>Direct information systems</td>
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<tr>
<td>Manage research development</td>
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</table>

<table>
<thead>
<tr>
<th>Related Activities</th>
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</thead>
<tbody>
<tr>
<td>Finance information systems</td>
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<tr>
<td>Educate and train information workers</td>
<td></td>
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<tr>
<td>Prepare data on information for use by others</td>
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<tr>
<td>Communicate information</td>
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<tr>
<td>Present information</td>
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<tr>
<td>Manage information operations</td>
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<tr>
<td>Control information systems</td>
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<tr>
<td>Evaluate automated systems</td>
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### H. Records Management

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<td>Plan and organise new records systems</td>
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<tr>
<td>Implement new records systems</td>
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<tr>
<td>Evaluate the effectiveness of the records management systems</td>
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<tr>
<td>Determine the effectiveness of existing filing systems</td>
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<tr>
<td>Identify categories for vital records</td>
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<td>Maintain records retention schedules</td>
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<tr>
<td>Determine and establish ways of records against natural hazards</td>
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<tr>
<td>Supervise the establishment and installation of new records series</td>
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</table>

<table>
<thead>
<tr>
<th>Related Activities</th>
<th></th>
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<tbody>
<tr>
<td>Prepare and maintain record inventories</td>
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<td>Establish filing methods for new records</td>
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<tr>
<td>Formulate and establish filing procedures</td>
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<td>Determine methods of disposition of records</td>
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<tr>
<td>Locate and design a records centre for inactive records</td>
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<td>And other (Please specify)</td>
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</tbody>
</table>
I. Self-Development Activities

- Do research
- Further one's education
- Do community work
- Do continuing education
- Do professional reading

And other (Please specify)

2.3 Please identify and report by making a cross (x) on the degree to which each topic listed in J-L is considered important for inclusion in librarianship curriculum at the first professional level of study.

1 = not important
2 = somewhat important
3 = important
4 = very important
5 = extremely important

Example: Order equipment

J. Activities Related to Premises

- Consult teams and plan development
- Plan and implement the provision of premises
- Plan and procure equipment for premises
- Plan and implement the provision of vehicles
- Plan and procure equipment for vehicles
- Plan physical plant
- Plan security
- Plan safety arrangements
- Plan maintenance
- Plan insurance
- Prepare policy documents
- Order equipment
- Evaluate the premises
- And other (Please specify)

K. Communication Related Activities

- Liaise with specialists in construction
- Liaise with faculties
- Liaise with parent body
- Participate in library associations
- Communicate verbally
- Communicate in writing
- Chair meetings
- Publish papers
- Do in-house library
- committee work
- Do national committee work
- Travel and attend conferences
- And other (Please specify)
L. One-Off Activities

Organise a move to new premises □
Start a branch library □
Reclassify documents □
Host a conference □
And other (Please specify)

3. Please indicate your view of relative importance of the following professional attitudes/qualities for librarians.

3.1. Personal Qualities

A librarian should be:

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<td>Respectful</td>
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<td>Able to maintain good relations with colleagues and users</td>
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<td>Friendly and courteous</td>
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<td>Able to lead with authority</td>
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<tr>
<td>In possession of sound technical knowledge</td>
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<td>2</td>
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<tr>
<td>Able to give instructions</td>
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<td>2</td>
</tr>
<tr>
<td>Able to express ideas</td>
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<td>2</td>
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<tr>
<td>Capable of having common sense and judgement</td>
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<td>2</td>
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<tr>
<td>Capable of exercising self control</td>
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<td>2</td>
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<tr>
<td>Enthusiastic</td>
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<tr>
<td>Resourceful</td>
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<td>2</td>
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<tr>
<td>Tactful, stable, persevering</td>
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<td>2</td>
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<tr>
<td>Diligent</td>
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<td>2</td>
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<td>Responsible</td>
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3.2 Setting

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<td>Show sense of inquiry in work done in library institutions</td>
<td>1 2 3 4 5</td>
<td></td>
</tr>
<tr>
<td>Show understanding of work</td>
<td>1 2 3 4 5</td>
<td></td>
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<tr>
<td>Be willing to seek guidance where necessary</td>
<td>1 2 3 4 5</td>
<td></td>
</tr>
<tr>
<td>Respond well in individual and group supervision</td>
<td>1 2 3 4 5</td>
<td></td>
</tr>
<tr>
<td>Demonstrate proof of capacity to establish and maintain helpful relationship with users, colleagues and superiors</td>
<td>1 2 3 4 5</td>
<td></td>
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<td>And other (Please specify)</td>
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4. Performance Level of Newly Qualified Librarians

If you have recruited/educated newly qualified librarians please indicate your satisfaction with them in terms of educational and preparation and performance on scale 1 to 5 (1 least satisfactory to 5 most satisfactory).

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<tbody>
<tr>
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</table>

5. Personal Information

| Position title | |
|----------------||
| Type of Institution/Library | |
| Main/Branch Library | |
| Division/Department | |
Please send the questionnaire in the attached stamped addressed envelope to:
M. N. Titi
University of Transkei
P/B X1
UNITRA, 5117

By January 15, 1996

Thank you very much for your help
INTERVIEWS

KNOWLEDGE, SKILLS AND QUALITIES IN LIBRARIANSHIP.

The interview seeks to build on the responses you gave in the survey questionnaire you completed some weeks ago. Through it, the research hopes to gain a greater insight into the subject under investigation. The purpose is to examine knowledge, skills, activities and professional qualities South African Libraries call for from library school graduates.

1.1 What essential knowledge should graduates acquire in their education? Please consider:

(a) General knowledge
(b) Special subject knowledge
(c) Library science or practical knowledge
(d) Theoretical knowledge
(e) Other example(s) of knowledge

1.2 What are the graduates deficiencies in the above?

2.1 What essential skills should graduates acquire in their education? Kindly think of the following:

(a) Practical skills
(b) Technological skills
(c) Transferable skills
(d) Other skills

2.2 What are the graduates deficiencies in the above?

3. (a) What new activities, and what advances in the present activities, can be expected in the next five years of librarianship work?
(b) What added knowledge in librarians will these require?
(c) What new phases of skill will they demand?
(d) What personal qualities will they demand?

4. Do you believe the knowledge and skills under 1 and 2 above are needed generally in library work? If so how extensively.

5. Assuming for knowledge and skills of a higher order, or other intellectual attributes deserving emphasis. If so what are they?

6. How best can library schools ensure what you have identified be integrated in librarianship curriculum for graduates to be adequately prepared?
APPENDIX - RESPONDENTS AND LIBRARY TYPE

Q2.A  Document-related activities; Q2.B Reader-related activities N = 124

Legend: Q2A1 - 14 = Document-related activities; Q2B 15 - 32 = Reader-related activities

Peripheral = Peri; Essential = Ess; Employers = Em, Students = St, Academics = Ac.
Public libraries = PL, School libraries = SL; Academic Libraries = AL.

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Q3. C Marketing-related activities; Q4. D Finance-related activities; 
Q5. E Numeracy-related activities; Personnel-related activities N = 124  

Legend: Q3.C33 - Q3.C41 = Marketing-related activities; Q4D42 - Q4D50 = Finance-related 
activities; Q5E51 = Q5E54 = Numeracy-related activities; Q6F55 - Q6F64 = Personnel-related activities. 
Highly Desirable = H. Des; Not Necessary = N. Nec
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| Ac        | 17  | 25  | 40.5 | 59.5 | AL  | 05  | 17  | 22.7| 77.3|
| Q8.H94 Em | 18  | 30  | 31   | 69   | PL  | 03  | 17  | 15  | 85  |
| St        | 07  | 17  | 29.2 | 70.8 | SL  | 06  | 10  | 37.5| 62.5|
| Ac        | 11  | 31  | 26.1 | 73.9 | AL  | 05  | 17  | 22.7| 77.3|
| Q8.H95 Em | 19  | 39  | 32.7 | 67.3 | PL  | 09  | 11  | 45  | 55  |
| St        | 10  | 14  | 41.6 | 58.4 | SL  | 05  | 11  | 31.2| 68.8|
| Ac        | 11  | 31  | 26.1 | 73.9 | AL  | 08  | 14  | 36.3| 63.7|
| Q8.H96 Em | 21  | 37  | 36.2 | 63.8 | PL  | 07  | 13  | 35  | 65  |
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| Ac        | 15  | 27  | 35.7 | 64.3 | AL  | 09  | 13  | 40.9| 59.1|
| Q8.H97 Em | 25  | 33  | 43.1 | 56.9 | PL  | 09  | 11  | 45  | 65  |
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| Ac        | 17  | 25  | 40.4 | 59.6 | AL  | 10  | 12  | 45.4| 54.6|
| Q8.H98 Em | 21  | 37  | 36.2 | 63.8 | PL  | 07  | 13  | 35  | 65  |
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| Q8.H99 Em | 19  | 39  | 32.7 | 67.3 | PL  | 08  | 12  | 40  | 60  |
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| Ac        | 18  | 24  | 42.8 | 57.2 | AL  | 05  | 15  | 22.7| 77.3|
| Q9.100 Em | 35  | 23  | 60.3 | 39.7 | PL  | 10  | 10  | 50  | 50  |
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| Ac        | 23  | 19  | 54.7 | 45.3 | AL  | 15  | 07  | 68.1| 31.9|
| Q9.101 Em | 35  | 23  | 60.3 | 39.7 | PL  | 10  | 10  | 50  | 50  |
| St        | 12  | 12  | 50   | 50   | SL  | 06  | 10  | 37.5| 62.5|
| Ac        | 19  | 23  | 45.2 | 54.8 | AL  | 04  | 18  | 18.1| 81.9|

292
Q9.102  Em  17  41  29.3  70.7  PL  09  11  45  55  
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Ac  13  29  69.1  30.9  AL  17  05  77.3  22.7  

**Q10.J  Activities related to premises; Q11. K Communication-related activities; 
Q12. L One-off activities N = 124**

Legend: Q10J05 - 18 = Activities related to premises; Q11. K19 - 29 = Communication-related activities; Q12. L30 - 33 = One-off activities; Not important = N. Imp. Very Important = V. Imp.

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### Q3.1 Personal Qualities

Legend: Totally Agree = T. Agree; Totally Disagree = T. Disagree

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| Q3.1.37 Em | 45 | 13 | 77.5 | 22.5 | PL | 15 | 05 | 75 | 25 |
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| Ac | 31 | 11 | 73.8 | 26.2 | AL | 16 | 06 | 72.7 | 27.3 |

| Q3.1.38 Em | 53 | 05 | 91.3 | 08.7 | PL | 13 | 07 | 65 | 35 |
| St | 21 | 03 | 87.5 | 12.5 | SL | 08 | 08 | 50 | 50 |
| Ac | 35 | 07 | 83.3 | 16.7 | AL | 19 | 03 | 86.3 | 13.7 |

| Q3.1.39 Em | 35 | 23 | 60.3 | 39.7 | PL | 12 | 08 | 60 | 40 |
| St | 12 | 12 | 50 | 50 | SL | 11 | 05 | 68.7 | 31.3 |
| Ac | 31 | 11 | 73.8 | 26.2 | AL | 15 | 07 | 68.1 | 31.9 |

| Q3.1.40 Em | 45 | 13 | 77.5 | 22.5 | PL | 12 | 12 | 50 | 50 |
| St | 16 | 08 | 66.6 | 33.4 | SL | 12 | 04 | 75 | 25 |
| Ac | 29 | 13 | 69.1 | 30.9 | AL | 15 | 07 | 68.1 | 31.9 |

| Q3.1.41 Em | 31 | 27 | 53.4 | 46.6 | PL | 12 | 12 | 50 | 50 |
| St | 12 | 12 | 50 | 50 | SL | 13 | 03 | 81.2 | 18.8 |
| Ac | 31 | 11 | 73.8 | 26.2 | AL | 12 | 10 | 54.5 | 45.5 |

| Q3.1.42 Em | 33 | 25 | 56.8 | 43.2 | PL | 13 | 07 | 65 | 35 |
| St | 12 | 12 | 50 | 50 | SL | 11 | 05 | 68.7 | 31.3 |
| Ac | 39 | 03 | 92.8 | 07.2 | AL | 13 | 09 | 59 | 41 |

| Q3.1.43 Em | 45 | 13 | 77.5 | 22.5 | PL | 15 | 05 | 75 | 25 |
| St | 17 | 07 | 70.8 | 29.2 | SL | 16 | 16 | 100 | 100 |
| Ac | 39 | 03 | 92.8 | 07.2 | AL | 19 | 03 | 86.3 | 13.7 |

| Q3.1.44 Em | 45 | 17 | 77.5 | 22.5 | PL | 14 | 06 | 70 | 30 |
| St | 19 | 05 | 79.1 | 20.9 | SL | 11 | 05 | 68.7 | 31.3 |
| Ac | 18 | 04 | 81.8 | 18.2 | AL | 19 | 03 | 86.3 | 13.7 |

| Q3.1.45 Em | 41 | 17 | 70.6 | 29.4 | PL | 13 | 05 | 65 | 35 |
| St | 16 | 08 | 66.6 | 33.4 | SL | 12 | 04 | 75 | 25 |
| Ac | 39 | 03 | 92.8 | 07.2 | AL | 22 | 22 | 100 | 100 |

297
| Q3.1.46 Em | 41 | 17 | 70.6 | 29.4 | PL | 10 | 10 | 50 | 50 |
| St | 22 | 02 | 91.6 | 22.8 | SL | 13 | 03 | 81.2 | 18.8 |
| Ac | 17 | 05 | 77.2 | 22.8 | AL | 19 | 03 | 86.3 | 13.7 |
| Q3.1.47 Em | 41 | 17 | 70.6 | 29.4 | PL | 15 | 05 | 75 | 25 |
| St | 21 | 03 | 87.5 | 12.5 | SL | 13 | 03 | 81.2 | 18.8 |
| Ac | 35 | 23 | 83.3 | 16.7 | AL | 22 | 22 | 100 | 100 |
| Q3.1.48 Em | 43 | 13 | 77.5 | 22.5 | PL | 16 | 04 | 80 | 20 |
| St | 22 | 02 | 91.6 | 08.4 | SL | 14 | 02 | 87.5 | 12.5 |
| Ac | 33 | 09 | 78.5 | 21.5 | AL | 10 | 12 | 45.4 | 54.5 |
| Q3.1.49 Em | 41 | 17 | 70.6 | 29.4 | PL | 18 | 02 | 90 | 10 |
| St | 18 | 06 | 75 | 25 | SL | 14 | 02 | 87.5 | 12.5 |
| Ac | 27 | 15 | 64.2 | 35.8 | AL | 19 | 03 | 86.3 | 13.7 |
| Q3.1.50 Em | 48 | 10 | 82.7 | 17.3 | PL | 18 | 02 | 90 | 10 |
| St | 21 | 03 | 87.5 | 12.5 | SL | 15 | 01 | 93.7 | 6.3 |
| Ac | 37 | 05 | 88 | 12 | AL | 20 | 02 | 90 | 10 |

**Q3.2 Setting**

Legend: Totally agree = T. Agree; Totally disagree = T. Disagree

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Ac 31 11 73.8 26.2 AL 15 07 68.1 31.9
Q3.2.56 Em 45 13 77.5 22.5 PL 07 13 65 35
St 12 12 50 50 SL 11 05 68.7 31.3
Ac 35 07 83.3 16.7 AL 20 02 90.9 09.1

Q4 Educational Background and Performance Level of Graduates N = 94

Legend: Least Satisfactory = L. Satis, Satisfactory Satis = Satis

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Note: Some respondents did not check any item. Questionnaire responses after collapsing empty cells and thus creating a dichotomy between negative and positive responses