

**The role of public libraries in enhancing information literacy skills (ILS) of senior secondary school students in the Central District in Botswana.**

Presented by

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Submitted in accordance with the requirements for the degree of

**MASTERS OF INFORMATION SCIENCE (MINF)**

at the

**University of South Africa**

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January 2018

## **SUMMARY**

Modern day society is characterised by the availability of technology and the abundance of information in all formats that require all individuals using it to poses information literacy skills (ILS).ILS enable people the ability to locate, analyse, evaluate access and retrieve the desired information to satisfy a need. Research on IL in academic and school libraries has gained momentum in the field of Information Science where as little has been documented concerning public libraries and IL. This therefore calls for more research on IL in public libraries. Public libraries serve a wide and diverse community of which students are a part. In instances where school libraries are either non-existent or not developed, students seek assistance from the public library within their community. This study sought to investigate the role of public libraries in enhancing the ILS of senior secondary school students in the Central District in Botswana. The fact that school libraries in Botswana are underdeveloped to produce competent and confident students equipped with ILS that could be used in the work environment and continuous lifelong learning, motivated the study. A concern that there exists a gap in research concerning public libraries and IL within the Botswana context necessitated this study.

The study used a survey research design where both quantitative and qualitative research approaches were adopted. This involved the collection and analysis of quantitative and qualitative data. The purpose of a mixed methods approach was based on the idea that qualitative results could assist in explaining and interpreting the findings of a quantitative study. Data collection involved three sets of closed ended questionnaires and observations in all schools and public libraries. The population of the study consisted of public librarians, teacher librarians and students. Quantitative data were analysed using the Statistical Packages for Social Sciences (SPSS) to generate statistics.

The findings of the study revealed that the public libraries in the Central District in Botswana are above average in terms of materials and use. It brought to light that senior secondary school

students use the public libraries for school purposes and get assistance when they seek for it. Public librarians do not have special classes aimed at enhancing the ILS of students. The public libraries offer IL in the form of computer training, they do this as, and when students register, just like the other members of the community. The library's contribution to enhancement of the students' ILS, (study skills, reading skills and use of reference works) is somewhat limited. Limited resources, lack of reading culture, low budgets, and lack of support from government negatively challenge the full potential impact of IL enhancement.

**Keywords:** Information literacy skills; public library; senior secondary school; senior secondary school student; Botswana.

## **ACKNOWLEDGEMENTS**

A number of people have helped me carry out this research and write this thesis. I must express my thanks to my supervisor Prof T. B. van der Walt for his comments from the initial stages of this study right through to the end.

I also wish to thank the University of South Africa for the fee remission and research grant awarded to me and which enabled me to undertake the fieldwork that culminated in the completion of this thesis. I also thank the National Library of Botswana and the Ministry of Education for granting me permission to carry out this research within the sampled public libraries and schools in the Central District in Botswana.

I am also thankful to my editors, Dr Archford Musodza for proofreading and editing my thesis. The other people who assisted with editing include Dr Kudzai Chatiza, Dr Nelson Marongwe and Tonderai Chanakira. Special thanks go to Patience Viriri, Renza Sibolile and Alice Pearce for encouragement and support.

I also wish to thank all the individuals who facilitated my data collection process. Many thanks go to all respondents: public librarians, teacher-librarians and students who completed the questionnaires.

The loving support of my family was ever present when I was about to throw in the towel. My sincere and heartfelt gratitude goes to my husband and friend Tiisetso Dube who stood by me through thick and thin. Tiisetso, you are my pillar and support. Thank you for being there for me. Thank you to my dear daughter, Keratiloe Dube who believed in me as her role model. Above all I thank the Almighty for having taken me this far.

## DECLARATION

I, Sibongakonke Dube (Student Number 40973522), declare that **The role of public libraries in enhancing ILS of senior secondary school students in the central District of Botswana** is my own work and that all the sources that I have used or quoted have been indicated and acknowledged by means of complete references.

A handwritten signature in black ink, appearing to read 'Sibongakonke Dube', written over a horizontal dotted line.

Sibongakonke Dube

A handwritten date '12/01/2018' written in black ink, with vertical lines separating the day, month, and year, and a horizontal dotted line underneath.

Date 12<sup>th</sup> January 2018

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## LIST OF ACRONYMS

<b>AASL</b>	American Association of School Libraries
<b>ACHAP</b>	African Comprehensive HIV/AIDS Partnerships
<b>ACRL</b>	Association of College and Research libraries
<b>ALA</b>	American Library Association
<b>ALSA</b>	Australian School Library Association
<b>BA + PADE</b>	Bachelor of Arts plus a Postgraduate Diploma in Education
<b>BIDPA</b>	Botswana Institute of Development Policy Analysis
<b>BILS</b>	Bachelor in Library Science
<b>BIS</b>	Basic Information Science
<b>BLA</b>	Botswana Library Association
<b>BLS</b>	Botswana, Lesotho, and Swaziland
<b>BNLS</b>	Botswana National Library Services
<b>BTC</b>	Botswana Telecommunication Corporation
<b>CLS</b>	Certificate in Library Science
<b>CRLF</b>	College and Research Libraries Framework
<b>CSLP ISIS</b>	Centre for the Study of Learning and Performance, Integrated Student Information System
<b>DSE</b>	Diploma in Secondary Education
<b>EIFL</b>	Electronic Information for Libraries
<b>ERC</b>	Education Research Centre
<b>FAVL</b>	Friends of African Village Libraries
<b>ICT</b>	Information and Communication Technology
<b>IFAP</b>	Information for All Programmes
<b>IFLS</b>	International Federation of Library Association
<b>IL</b>	Information Literacy

<b>ILS</b>	Information Literacy Skills
<b>ISTE</b>	Information Society of Technology in Education
<b>IT</b>	Information Technology
<b>ITEA</b>	International Technology Education Association
<b>KPMG</b>	Kaiser Permanente Medical Group
<b>LIS</b>	Library and Information Science
<b>MIL</b>	Media and Information Literacy
<b>MYSC</b>	Ministry of Youth, Sports, and Culture
<b>NCLIS</b>	National Commission on Libraries and Information Science
<b>OBE</b>	Outcome Based Education
<b>OECD</b>	Organization for Economic Cooperation Development
<b>RCLS</b>	Resource Centers for Libraries
<b>RNPE</b>	Revised National Policy on Education
<b>SPSS</b>	Statistical Packages for Social Sciences
<b>UASF</b>	Universal Access and Service Fund
<b>UCL</b>	University of California Library
<b>UK</b>	United Kingdom
<b>UN</b>	United Nations
<b>UNCRC</b>	United Nations Children’s Rights Centre
<b>UNESCO</b>	United Nations Educational Scientific Organization
<b>UNISA</b>	University of South Africa
<b>USA</b>	United States of America

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## CHAPTER ONE

### INTRODUCTION TO THE STUDY

#### 1.1 Background

Botswana is a small country in terms of population which is estimated at 2,230,900 people in an area of 581,730-km<sup>2</sup> (Central Statistics Office 2016). The country is a former British protectorate, which gained independence in 1966 (Radijeng 2013). According to the Botswana Literacy Survey of 2013, (this survey is reviewed every 10 years), the literacy rate of the country is currently at 83%. This high standard literacy level attainment confirms that many people in the country are able to read and write. In addition, Government made primary to junior secondary school compulsory and continuous, i.e., without a break. (Revised National Policy on Education (RNPE) 1998:87). The government strengthened education through the provision of additional infrastructures such as public libraries as per recommendations of the RNPE. The RNPE advocates resource based learning and identified school libraries as key agents in imparting these skills. Public libraries support education in a number of ways. Public libraries are significant contributors to education and they have earned the respect of communities they serve. (Raju 2010:4). The UNESCO Public Library Manifesto (1994) states that the provision of information is a core function of library and information services. According to the UNESCO Manifesto (1994:1), the public library is a “living force for education, culture and information”. Statements No 11 and 12 of the Manifesto clearly indicate that the public library should:

- ‘Facilitate the development of information and computer literacy skills; and
- Support and participate in literacy activities and programmes for all ages. It should initiate such activities, if necessary’ (UNESCO Manifesto, 1994:1).

According to Van der Walt (2015:3), the IFLA/UNESCO Public Library Services Guidelines for Development supports the above. The guidelines set out in this document empower public libraries to facilitate the development of communities through education, information, recreation and cultural support. Section 1.3.1 of the document recommends that public libraries should provide materials that will support formal and informal education. In relation to the educational role of the public library, the document also indicates, as cited in section 3.4.2 that “children should be taught skills that ensure the effective use of information” (IFLA 2006:26). Van der Walt (2015:3) argues that the document advises public libraries to provide children with activities related to the understanding and use of information resources. Section 3.6 of the document further recommends that public libraries should assist library users to develop skills to use library resources effectively. Both documents create a platform for public libraries to support the educational needs of children.

Botswana has a national document that supports the UNESCO Manifesto. The Botswana National Vision 2016 was formulated in 1996. It has seven pillar templates of which pillar one states that “Botswana should be an educated and informed nation as they plan for the 21<sup>st</sup> century (information age) and the corresponding rise in demand for highly qualified labour by ensuring a high quality education for all citizens”(Botswana National Vision 2016). Hart (1998:36) and Zaaiman (1987) as cited by Van der Walt (2015:12) conclude that the public library has accepted the educational role of becoming an IL-training provider. Public libraries support education through basic literacy, cultural awareness, formal learning support, IL and life-long learning (Van der Walt 2015:4). With the public library being the provider of information to the local community, it is therefore a substitute for school libraries. However the public libraries are facing challenges in guiding the children in using information effectively for the advantage of the child’s educational and social development (Van der Walt 2015:2).

In order for libraries to be relevant to their African users, they need to develop information services aimed at making a positive and meaningful impact in the socio-economic development activities taking place at both local and national levels (Brown 2004:115). The United Nations Educational Scientific Organisation (UNESCO) initiated a major breakthrough in the growth of public libraries in Africa in 1962, through a regional seminar held in Ibadan, Nigeria. The seminar focussed on three main areas namely;

- organising public library services on a regional basis,
- provision, selection and use of publications and audio-visual materials in African public libraries; and
- professional training for public library services (Bukenya 2014:22).

According to Bukenya (2014:25), the seminar advocated library legislation to ensure functional libraries through adequate financial backing and efficient administration in line with national standards. It also set up a model public library in Enugu, Nigeria. The public library was a step in line with UNESCO's efforts to create educational and cultural institutions in Africa. The library was a teaching and learning centre that functioned as a model for what good practices, facilities and services in a public library should be. Other countries in Africa emulated it. The library became the designated venue for the second African public library development seminar. The seminar reviewed public library developments in Africa and refocused the goals, development principles and directions that public libraries in Africa were to follow. The stated Africa public library seminar re-affirmed the following issues, namely;

- adoption of national legislation,
- establishment of centralised library services,

- emphasis on children's library services,
- education and training of professional librarians,
- establishment of national professional library services; and
- production of suitable literature (Bukenya 2014:29).

These seminars, (particularly the one held in Enugu), were a turning point for a number of African countries in terms of library services development and the endorsement of good practices.

The establishment of the Botswana National Library Service (BNLS) was in September 1967 through an Act of Parliament (National Library Service Act No 29; 1967) with the mandate of providing information and library services to the nation for educational, recreational and capacity building purposes in all formats. The first public library was officially opened by the first president of the Republic of Botswana, the late Sir Seretse Khama, on the 8<sup>th</sup> April 1968 (Radijeng 2013:1). The establishment of public libraries did not however meet the needs of the people because they were based on the historical British-American model where books were the dominant library resources regardless of the oral orientation of the African societies. Moreover, most books were in English, which became a barrier, as most people were illiterate. Public libraries were established for political and administrative purposes and later for the privileged elite (Bukenya 2014:22). The emphasis was on promoting the culture of the colonial master in their colonised countries. This was achieved through public libraries, which were cultural centres open to the public under certain arrangements. Alegbeleye (2008:97) shares the same sentiments when he argues that public libraries are imports from the western world and are not given much appreciation by African communities, hence their struggle for recognition.

Despite the guidelines, set by the African Public Library Development in 1962, Botswana still lagged in terms of meeting the needs of the users in its communities. According to Serema, (2011:115), communities in Botswana blamed public libraries for collecting information sources mostly in foreign materials that were not useful, especially for people in the rural communities. Public libraries in Botswana failed to address the information needs of the communities due to unsuitable materials. For a long time, public libraries did not make an effort to help the community with information that could make them understand and appreciate the value of libraries. As a result, the community did not see the relevance of the library as it had failed to attract the users, particularly the illiterate (Muthewa, 2008:18). All this was attributed to libraries that had a lot of bias towards the western culture and lacked proper physical infrastructure.

The changes that were expected to bring value, meaning and recognition to the libraries in the context of Botswana came later, after four decades. These were attributed to the Sesigo Project, which will be briefly discussed in the following paragraphs.

The Sesigo project (2009-2013) is a global development funded by Global Libraries Initiative of the Bill and Melinda Gates Foundation. The plan of the Sesigo project was to deal with physical infrastructure and equipping libraries in the first two years (2009-2010); followed by the transitioning from a project to a public library service to be managed by the Botswana National Library Service (BNLS) in the last two years (2012-2013). According to Maswabi (2011:413), Sesigo sought to:

- enable public access to computers and Internet services (to facilitate research in some traditional practices) in public libraries and ensure they are widely used;
- empower library staff to be effective library champions and information workers in the communities they serve;

- build partnerships that strengthen the library system and information society programming in libraries;
- position libraries as agents of change for the individual and communities they serve;
- satisfy the Batswana's information needs and ensure useful information is available to improve their quality of life and to;
- position libraries as strong cultural partners for the preservation of Botswana's cultural heritage.

Through the Sesigo project, new library structures were constructed across the country and some old libraries were refurbished. The Sesigo project (2009-2013) saw several libraries equipped with computers and Internet connectivity for use by members of the public on free access basis. At the end of the project period in June 2013, 78 of the 98 public libraries throughout the country were equipped with computers and Internet connection, 435 library staff were trained, 420 computers were deployed and 40 000 members of the public were trained by library staff with ICT skills. The Central District benefited from this project, as all its 15 public libraries were equipped with computers and Internet connection. Four of its public libraries in Serowe, Gweta, Tonota and Sebina were demolished and reconstructed.

Through the transition implemented by the Sesigo Project, the public libraries were able to include collections written in indigenous languages spoken in the country namely Setswana and Khalanga in addition to the English collections. The Sesigo project brought vast developments that changed the outlook and value of public libraries. The National Library Service supported the Sesigo Project by putting in place activities and programmes through the public library system which are aimed at helping all members of the public with information and skills to improve their lives. The programs in place at public libraries include

reading clubs, homework assistance for primary schools, basic computer training, brail literacy, health education and Sesigo innovation programmes.

The Sesigo innovation programmes have however drawn criticism from the Botswana Library Association (BLA) as a project, which had not put emphasis on IL training in public libraries (BLA 2013:20). BLA's criticism is premised on the argument that public libraries are normally expected to be on the forefront when it comes to IL training. Public libraries have moved from being seen only as repositories of information, to being agents for opening opportunities for lifelong learning, community engagement and social capital building (Leininger 2012:1).

The role of providing IL training by public libraries is highlighted as an essential service and the most important goal of libraries with some scholars even suggesting that no other entity - government or private - is as appropriate to take on this growing need, has the skills necessary, or can do it as inexpensively as the public library (Barber 2011:15; Leininger 2012:1-3). It must be noted that the public library community in Botswana has not done enough to realise this role, as IL is commonly seen within the library and the information profession as a concern of academic libraries not public libraries. This is despite the fact that lifelong learning is both an integral element of IL and a core concern for public libraries. The public library professionals are well placed in a sphere to recognise and use reader development opportunities to support the building of their customers' ILS (Harding 2008:179; Pieper 2010:11; ALIA 2012:2).

IL education is viewed as a set of abilities to seek and use information in purposeful ways related to the task, situation and context in which information practices are embedded (Limberg & Sundin 2006:78). It also encompasses not only the traditional skills of reading and writing but also concepts of media literacy, computer literacy and others (Julien &

Genius 2008:112). Public libraries are well placed institutions which can address IL among their patrons and this field is seen as a logical extension to what was formerly called bibliographic instruction or user education (Harding 2008:65). However, available literature suggests that public librarians are uncomfortable with the increased levels of instruction coupled with new and modern technologies they are called to provide in their jobs (Julien & Genius 2008:115).

The fact that information technologies are changing rapidly requires librarians to have a general understanding of IL and to be open to the diversity of information sources that can be utilised by their patrons (Stern & Kaur 2010:28). Research findings suggest that public libraries have an important role to play in raising the IL profile within communities. De Groot (2009:89) finds public libraries to be very active proponents of childhood literacy growth and argues that public libraries faced increased demands as school libraries suffer low funding, lack of infrastructure, lack of qualified librarians and in extreme cases, they face elimination.

In recent years, there has been an increased awareness of public libraries as important civic spaces (Julien & Hoffman 2008:75). Harding (2008:179) posits the best description regarding the influential position of public libraries within the communities they serve. Harding lists a broad client base, staffing by information experts, the ability to provide instruction at the time of need and other factors that embrace a public library as an ideal provider of IL instruction. However, Harding's list raises some questions, as it is not guaranteed that all librarians are necessarily experts in their field. The researcher's observation is that most librarians cannot even provide customer care to their clients when they visit the library. Lai (2011:38) notes that many public libraries put emphasis on adult learning and lifelong learning which enables libraries to reach out to people who have not received IL instruction through the formal means of education.

Lai (2011) infers that in the Botswana context, IL is not incorporated into the school curriculum. This results in many students at various levels of education being unfamiliar with a variety of information sources and services within and outside the library (Lwehabura 2009:220). Botswana's situation is further worsened by a shortage of librarians and resources in government schools. According to the IFLA 2010 report, all the 32 government senior secondary schools have libraries but only 16 have qualified librarians who hold a Diploma or Degree in librarianship. Three of these 16 libraries are situated at mission (private) schools (Baffour-Awuah 2008:74). The other 13 with library qualifications are deployed by the Botswana National Library Services (BNLS) to public schools. These 16 librarians are all working fulltime at the local schools. The problems affecting the education sector in Botswana are caused by the lack of coordination between the Ministry of Education and the Department of National Library Services.

In Botswana, the responsibility for school libraries has been shared by the Ministry of Education and the Department of National Library Services, a situation that is impacting negatively on Botswana's school library development (Thobega 2015:26). The Ministry of Education provides library structures, stock and equipment in educational institutions while the Department of National Library Service is responsible for staffing. It also helps schools to start school libraries, lends books on request, holds training courses for teacher-librarians and student assistants, and provides bibliographies and catalogues to assist teachers in book selection. The National Library Service staff members visit schools to inspect libraries and provide advice. However, as a predominating cultural rather than educational institution, the National Library Service is first concerned with the development of its public library network. The current director states that the National Library Service cannot continue to carry the load of running and professionally staffing the educational libraries (Thobega 2015:18).

The director's statement does not put much value and emphasis on the importance of school libraries. Equipping the school libraries would largely lessen the burden of workload on the public libraries and create a healthy working relationship between the public and school libraries. It is important to point out that school libraries are of utmost value as compared to public libraries. Dent and Yannotta (2005:102) state that school libraries are especially important in developing countries because of the ratio of children to adults, and the reality that the children are active learners. These scholars further argue that the school library is the heartbeat and first point of reference of access to reading material. Dent and Yannotta (2005:115) argue that school libraries can make up for other inadequacies in the classroom such as lack of textbooks and other teaching aids. Dent and Yannotta (2005:120) further imply that access to reading materials such as those provided through libraries; encourage students to read and re-read books, which improves their reading competencies. This may be relevant in other developing countries but is not viewed within the same context in Botswana as previously mentioned.

The problems affecting the education sector in Botswana therefore challenges the public libraries to take up an enhancement role on IL. This is because public libraries are viewed as the only source of information, especially in the rural communities.

In addition to libraries being of obvious importance in terms of supporting literacy, rural libraries in the Central District of the country play an increasingly important role by providing reading materials and interaction with community members. The role of the rural public library goes far beyond just provision of reading material. Public libraries in the Central District serve those literate community members who may not have any other means of obtaining information. Rural libraries have three functions; that is to provide information to those individuals responsible for rural development, to serve as centres for community education and culture and to support rural educational programs and rural schools.

This discussion is relevant to the functioning of public libraries in the rural areas of the Central District in Botswana.

In instances where school libraries are not well developed and suffer low funding as discussed above, public libraries in Botswana have faced increasing demands and have been noted to take an active role in IL enhancement. There are four arguments why public libraries in Botswana should take on this mission, namely:

- The availability of physical facilities and infrastructure in public libraries to serve schools;
- The fact that IL education is not incorporated into the school curriculum;
- The demands of the local economy for information literate learners reflected in Botswana's curriculum blue print of 1998, which puts so much emphasis on independent learning which could be accomplished through projects, continuous assessments and examinations. This Blueprint lists information skills as a critical outcome (Botswana Curriculum Blueprint, 1998:65).
- The shortage of qualified librarians and resources in Botswana's government senior secondary schools (Radijeng 2013:175). As argued above, only 48% of government senior secondary schools have qualified librarians.

In view of the above, the major question is: Is it possible for the public libraries to take up a teaching role to enhance the ILS of senior secondary school students in the Central District in Botswana?

The capacity of librarians to teach has been questioned (Bruce & Lampson 2002; Clyde 2005; Peacock 2008). Elsewhere in South Africa, Hart's (2004) study of pupils' use of two public libraries in a disadvantaged community in Cape Town documents the level of usage but raises

questions over its quality (Hart 2004:90). Furthermore, Hart's (2006) study on IL education of public libraries in the Mpumalanga province of South Africa indicates that public libraries in Mpumalanga are indeed heavily involved in serving school learners whilst librarians are not sure that their services to school learners are legitimate (Hart 2006:178). Against this background, this study intended to interrogate the central challenge of IL education in public libraries—especially on issues of how to integrate it into the learning programme for students.

## **1.2 Problem statement**

Based on the above discussion, it is clear that Botswana's school libraries, particularly in the rural Central District, are not fully developed. It has been hampered by the fact that there is no Ministry responsible for the development of school libraries. The National Library Services is concerned with developing public libraries and has indicated that it cannot continue assisting school libraries with resources (collections and staffing). School libraries are lagging behind in terms of development. The emphasis on the ineffectiveness of school libraries was reflected by the Botswana Library Association (BLA)'s conference theme for 2013, 2015 and 2016 that was dubbed "School libraries and IL: Key to the attainment of an informed and educated nation". From the conference discussions, it was clear that despite the recommendations by the Revised National Policy on Education (RNPE) and the UNESCO/IFLA School Libraries Manifesto, school libraries in Botswana do not take that centre stage in education where they can be linked to the students' academic performance. It is against this background that the Botswana Library Association (BLA) has taken a position to lobby for the recognition of the teacher-librarian and the school library as a means of improving academic results in secondary schools as it has been evident during the past years that the results are declining.

School libraries are perceived to equip schoolchildren with ILS. However, considering the increasing challenges that school libraries face, this may be a fallacy. Besides each country has circumstances that differ. Schoolchildren, senior secondary students graduate from high school without ILS as school libraries fail to respond to their specific needs due to a poor or non-use of school libraries. Secondary school graduates entering university education in Botswana have been found to lack critical IL competencies for them to effectively pursue university academic programmes Molebatsi (2002) and Mutula (2010). With the above as background this study sought to investigate the role of public libraries in enhancing ILS of senior secondary school students in the Central District of Botswana.

### **1.2.1 Aim of the study**

The aim of the study was to investigate the role of public libraries in enhancing the ILS of senior secondary school students in the Central District in Botswana.

The concern that there are no studies done examining IL programs in public libraries in Botswana, motivated this study. Studies examining IL are mainly on academic and school libraries and there exists gaps in the area of IL in public libraries hence the need for conducting this research.

The purpose of the study was to explore the degree of public librarians' involvement in enhancing IL skills of students and the relation between the degree of involvement and the professional perceptions within the public library community in the Central District of Botswana. The study aimed at determining the role of the public library in IL enhancement based upon sampled libraries and schools. The focus was to establish the role of the public library in fostering the students to use information technology to access the information they need, to reach and use the library information resources effectively and to suggest solutions.

### **1.2.2 Objectives**

The study therefore sought to address the following objectives:

- To investigate facilities and resources available in Botswana's public libraries and school libraries for effective IL training;
- To establish the content of IL taught in public libraries and school libraries in Botswana;
- To ascertain the roles, of public libraries and schools libraries in promoting IL of senior secondary school students in Botswana;
- To determine the level of cooperation between the public libraries and schools libraries in Botswana;
- To identify the level of experience and training of the public librarians and school librarians who offer IL; and
- To identify the strategies that might promote as well as the barriers and problems of IL implementation in the Botswana's public libraries.

### **1.2.3 Research questions**

The following research questions guided this research:

1. Do the public libraries and school libraries in the Central District in Botswana have the facilities and resources to run effective IL programmes in a formal or informal way?
2. What IL programmes involving public librarians and senior secondary school students are run at present in Botswana's public libraries and school libraries in the Central District?

3. What are the public librarians and school librarians' roles, attitudes and perceptions of IL education in the Central District in Botswana?
4. What are the relationships at present between public libraries and senior secondary school libraries in Botswana's Central District?
5. What experience and training in IL theory and practice do public librarians and school librarians in the Central District have?
6. What strategies might facilitate or inhibit IL training programs in Botswana's public libraries in the Central District?

### **1.3 Significance of the study**

This section discusses the significance of the study to developing the library profession in Botswana and the developing world. The results of the study make a small contribution towards library and information service provision to rural children in the following ways:

- It contributes to the building of knowledge in a relatively uncharted field.
- It provides useful insights in meeting the challenges that are being experienced by public libraries in Botswana.
- The research may be useful to the Central District Community Library and other community rural libraries in terms of helping them to have a better understanding of how students use the library, the kind of materials that might be most useful information in libraries, type and kinds of programmes and services students are likely to need.
- The research may be useful to the Ministry of Education and the Ministry of Youth in providing information of the current relationship between public and school libraries and what needs to be done for the benefit of the secondary school students.

- The research may bring to light the importance and success of providing appropriate reading materials to rural communities in the Central District.

#### **1.4 Study limitations**

Although the research has reached its aims there were some unavoidable limitations such as;

- This study was limited to investigating the role of public libraries in enhancing IL skills of senior secondary school students the Central District in Botswana.
- Six public libraries and six senior government secondary schools in the Central District were included in the study. Public libraries were included in the study because they offer IL programs to all community members (Republic of Botswana Vision 2011, 2016). Schools were selected on the basis of being actively involved in IL programs in their school libraries. The respondents were confined to public librarians, teachers in charge of school libraries and form five students. The students were included in the study because the focus of the study was on them.
- The questionnaires and observation used to collect data may have given useful information; it seems these did not provide enough evidence. More methods of data collection could have been used.
- The research was conducted on a small size of the population. The sample size was small so it was difficult to find significant relationships from the data as statistical tests require a larger sample size to ensure a representative distribution of the population. To generalize the results for larger groups, the study should have involved more participants.
- Fluency in a language; the researcher was not fluent in Setswana and this limited the researcher from being able to speak with the respondents in their primary language.

## **1.5 Definition of terms**

This section will define the most important terms referred to in this study.

### **1.5.1 Information literacy**

IL may be defined as “the ability to access, evaluate and use information from a variety of sources” (Wijetunge & Alahakoon 2005:78). Growing out of this definition, is a range of more specific actions or skills that contribute directly to a more effective role for information in our personal and professional lives (Sayers 2006:40). IL may be described therefore as “knowing when and why you need information, where to find it, how to evaluate, use and communicate it in an ethical manner” (Wijetunge 2000:13).

IL refers to one’s ability to know:

- A need for information.
- The resources available.
- How to find information.
- The need to evaluate the results.
- How to work with the results
- Ethics and the responsibility of use
- How to communicate the findings (UNESCO 2008)

To summarise: IL is an individual’s capability to know why information is needed and the strategies on how the need will be satisfied. It involves the application of cognitive skills that will assist in the exploration, analysis and critical evaluation of available sources in any format within an information environment.

### **1.5.2 Public library**

UNESCO has provided the acceptable definitions of a public library and the present study is devoted to these. In this regard, a public library is defined by UNESCO (2013) as a democratic institution, established under clear authority of law to provide facilities to pursue education as a lifelong learning process. The public library is described as the ‘People’s University’ ‘where self-education is encouraged and which acts as a centre for informal education’ (UNESCO 2012). It is a place where the young and the elderly can have free access and equal rights to information. It is equally available to all members of the community regardless of race, nationality, age, gender, religion, language, disability, economic and employment status as well as educational achievements.

In 1972, UNESCO declared and defined a public library as “a living force” for education, culture and information. UNESCO put a lot of emphasis on cooperation between libraries in a country and considers the public library as a centre for communication and information. The public library should respect the languages of the people in the local community and operate the book box library to serve the population who are in remote areas. The public library should also supplement the facilities of the libraries in schools (UNESCO 2012).

In 1994 UNESCO defined a public library as ‘An agent for fostering peace and spiritual welfare of the community people’ (UNESCO 2008:12). A public library was viewed as an institution established to meet the new demands that arose due to the advent of new technology and to prepare the community to face the challenges of the 21<sup>st</sup> century. The challenges of the 21<sup>st</sup> century added another responsibility to the public libraries, that of imparting computer literacy skills to the local communities. The public library was also entitled to carry out outreach and user education programmes (UNESCO 2008:16)

To summarise: a public library is a place, building or room set apart for the keeping and use of a collection of different types of information sources within a community where it is located. It caters for the needs of all members of the community regardless of age and background, from pre-primary school going children to pensioners. It offers activities such as homework assistance, outreach, user education, small medium enterprises guidance, IL, computer training and Internet surfing to all members of the community free.

### **1.5.3 A public librarian**

A librarian is defined as someone having the task “to improve society through facilitating knowledge creation in communities” (Lankes 2011:31).

The librarian is an active intermediary between users and resources. Professional and continuing education of the librarian is indispensable to ensure adequate and professional service to the local communities (IFLA/UNESCO Public Library Manifesto 1994)

A public librarian is also seen as a person who works professionally in a public library and may hold a degree in librarianship. The role of the public librarian is continually evolving to meet the social and technological needs of the users. A public librarian may provide other information services including computer provision and training, coordination of public programs, basic literacy education, and assistance with equipment for people with disabilities and help with finding and using community resources (Van Fleet 1990:105).

To summarise: a public librarian is a qualified professional offering his or her services in a public library. The librarian acts as the mediator between the users and the information found in various formats. A librarian is expected to guide and teach the users so that they may

satisfy their information needs. A librarian of the 21<sup>st</sup> century must be knowledgeable in current affairs so that she or he may pass it on to the community when needed.

#### **1.5.4 Senior secondary school student**

In Botswana, senior secondary school begins at form 4 and ends at form 5. Students study for 2 years at the end of which they write form 5 examinations. All students have to sit for a Botswana Senior Secondary Certificate Examination (BSSCE). Senior secondary schools are for students from the ages of 17 to 18. For students to be considered as senior, they have to pass the junior secondary school certificate and proceed to the senior secondary schools.

To summarise: a senior secondary student is a learner of the class considered as the highest level at secondary school. Within the Botswana context, these are form 4 and 5 students.

#### **1.6 Literature review**

Cheung and Waldeck (2016:10) define a literature review as an evaluative report of information in the literature related to the selected area of study. The review should describe, summarise, evaluate and clarify the literature. It should give a theoretical framework for the research and help the author determine the nature of the research. The purpose of a literature review is to convey to the reader what knowledge and ideas have been established on a chosen topic and what their strengths and weaknesses are. A literature review must be guided by the research objectives. In this part of the study a preliminary review of literature on the public library's role in enhancement of IL to the students, is provided. It will discuss the literature on the involvement of the library in helping students develop their ability to find and use information effectively within the public library. The review of the related literature is important in summarising points from previous research that make the public library a role player in enhancing students' ILS.

The reviewed literature reveals that public libraries have risen to the challenges born from ongoing social, digital and economic changes (Lison & Reip 2016:20). The development of the digital society has changed public libraries and the profession of librarians. Additionally, public libraries, as key community stakeholders represent an effective partner network to provide support in meeting the demands of education and of skills development in the digital age. Lison and Reip (2016:20) argue that although digital communication is becoming the predominant avenue of personal interaction, people still need opportunities for direct personal exchange and physical relationships, a need that social media cannot necessarily substitute.

According to the Norwegian Ministry of Culture (2009:58), public libraries are a unique “third space” after home and school, where children and adults alike can make use of physical and digital resources to improve literacy and other basic skills and receive informal consultations from a trained librarian. Additionally, Helle (2010:87) notes that public libraries, offer a plethora of services that are necessary in a knowledge society, such as learning, studying, creation and inspiration. Their service provides access to educational, recreational, cultural and information activities to improve the quality of life for all citizens (Lison & Reip 2016). The public library’s role as an educational institution has also been confirmed and documented by the work of the UNESCO Public Library Service Manifesto (1994); IFLA (2006); UNESCO Bangkok (2011); UNESCO Institute for Lifelong Learning (2015) and additionally Zaaiman (1987) cited in Van der Walt (2015:3) argues that the public library has to offer three types of education embracing formal, informal and non-formal.

Non-formal and informal learning are an important part of lifelong learning which helps people of all ages to develop skills and knowledge in a tailored way. Lison and Reip (2016:25) argue that only libraries can accompany people through their entire educational journey. The work of Eastern (2014) and Farmer (2016) further confirm the important function of public libraries to provide a literate environment that brings about literacy gains.

The above-mentioned literature portrays the library as a learning centre that provides all types of education. IL is part of formal learning, which the libraries are obliged to offer to the users. The work of Bruce and Lampson (2002); Harding (2008) and Hall (2010) also confirm that public libraries have an important role to play in raising the IL levels within their communities. Lai (2011:87) indicates that people who have not received IL instruction through formal means of education could be reached out to by public libraries in the form of adult learning and lifelong learning.

The public library has always remained a first port-of-call when people access information. With the emergence of IL, it is therefore natural that the library takes an active role, as indicated in the work of Harding (2008); Demasson, Partridge and Bruce (2010). According to Rasaki, (2009:1) ILS are skills that enable students and individuals to identify, locate, evaluate, organise, create, use and communicate information to address issues and problems. These skills include computer, technology, reading and library skills. Extant literature reveals that the purpose of IL in the library is to find effective ways to assist patrons in the process of searching for information. The work of Spiranec and Zorica (2009); Lai (2011:25); Adeleke (2015:120) and Ajedarifu (2015:87) indicate that IL has become necessary because of the information and communication technology (ICTs), which have also led to the explosion of information and information sources.

According to Adeleke (2015:120), this development makes information users to “increasingly become overwhelmed by and frustrated with the quantities of information available”. Ejedarifu (2015:75) argues that public libraries have to re-asses their role and redefine their tasks in order to ensure that all citizens, irrespective of locality, have access to information. Lison and Reip (2016) argue that today the role of librarians is much broader than to merely store information. They have become the so-called one-stop-shops for informal learning and they have had to continuously develop new services that exploit the possibilities of digital

interactivity. Information organisation, its availability and most importantly its accessibility are powerful concerns that the public library needs to take into account (Ejedarifu 2015). People can only make valuable decisions, achieve set goals and be relevant in this era by possessing ILS (Julien & Hoffman, 2008; Adeleke, 2015). The public library is a place that supports lifelong learning and has the capacity to narrow the digital divide by providing free computer, Internet access and offering training courses to improve people's IL skills as attributed through the work of Hart (2006); De Jager and Nassimbeni (2007) and Lai (2011).

The reviewed literature indicates that public libraries have been involved in helping the public acquire ILS, especially in the developed world with a few exceptions in the developing world. According to Hart (2006:180), IL in public libraries depends on a more dynamic leadership and new vision of a modern public library. Robertson (2012) explored the digital ILS of frontline public library staff in Aotearoa (New Zealand) and found that staff faced financial barriers to achieve digital ILS in their own time to remain up to date. Similar challenges are confronted by the public libraries and senior secondary schools in Botswana as noted above.

In another study, Hepworth and Costa (2011) investigated the effectiveness of participatory research and actions as a methodology to help citizens in Candangolandia (Brazil) develop their IL abilities. The authors found that the participants were able to identify, classify, and prioritise information needs and use information to find solutions to their problems. It was found that the study helped to develop collaborative problem solving skills among users. In a similar way, IL can help the Botswana people in the Central district to solve their problems.

In another study, Lai (2011) explored the IL training and identified strategies and methods used by Canadian public librarians in improving ILS for their staff and patrons. She found that Canada's public libraries valued their roles as IL providers. The author also indicated

that Canadian public libraries also built partnerships with other organisations to extend their IL teaching responsibilities. As noted above there is a serious shortage of trained librarians in Botswana as such the strategy used by the Canadian public librarians can help to address the need in Botswana.

Koltay (2011) examined the role of IL and digital literacy and challenges of the Web 2.0 environment in Szombathely in Hungary. Koltay indicated that users require literacies similar to services traditionally offered by academic and special libraries as well as public libraries. De Jager and Nassimbeni (2007) undertook a study in Mpumalanga Province in South Africa and found that the study gave the public librarians an opportunity to develop their ILS, which they could apply in their libraries. The authors indicated that the public library personnel had indeed made a difference in the IL of their respective communities. In another study, Julien (2006) surveyed IL in Canada with the aim of assessing whether Canadian public libraries lived up to the expectations in terms of developing the public's ILS. Julien identified the ways in which public libraries approached IL as well as challenges that prohibited the implementation of IL programs.

Bruce and Lampson (2002) investigated the attitudes of librarians in Washington State in the USA towards IL. The authors identified factors that affected the librarians' approach to the task of IL instruction. The above studies indicate that various authors agree that IL has received attention in public libraries although there are some challenges that prohibit the full execution of this important program. Schoolchildren who are part of the communities served by public libraries also have information needs that may be satisfied through IL instruction programs.

The work of Hart (2006); De Jager and Nassimbeni (2007); Van der Walt et al (2007) and Lison and Reip (2016) indicate that public libraries are heavily used by schoolchildren.

Additionally, the Vermont Agency of Education, USA (2016:15) indicates that public libraries complement school libraries and assist students in identifying quality resources for school assignments and projects. De Jager and Nassimbeni, in their (2007) study noted that schoolchildren received more attention than any other group in the public library because of their educational focus and their use of the library that suggested a ready link with IL.

Public libraries assist schoolchildren because they are the communal providers of information sources and a substitute for school libraries. Hart, in her (2006) study asserted that students are expected to build their knowledge through engaging with a wide range of resources as they are assessed on projects and portfolios. Projects and portfolios require high-level cognitive skills (searching and critical skills) which would assist them to solve problems. These have created many demands in the public library for information and technical skill instruction as drawn from the works of Rader (2002); Sapro-Ficovic (2014) and Ajedarifu (2015). It is this set of skills that librarians, in their capacity as information specialists, are uniquely qualified to enhance (Grafstein 2012:201). The public library is facing the challenge to guide students to use information effectively (O'Brien 2006:44; Nutefall 2001:32).

The reviewed literature indicates that public librarians need both the governmental and technical competence, in order to embrace themselves in the educational criteria (Nutefall 2001; O'Brien 2006; De Jager & Nassimbeni 2007). Therefore, in the context of formal learning environments, teaching IL can permit students to navigate the technology effectively and become efficient users of information (Riedling 2009). Lai's (2011) study revealed that students' ILS needed to be enhanced and careful attention needed to be paid to these skills in primary, secondary and even higher education sectors. It is in this context that Bruce (2002) and Hart (2006:190) argued that the idea of a teaching role seemed to be a challenge to the public librarians who could not assume the day-to-day contact with students. Public

librarians saw their role as the provision of resources for projects on demand and the prevailing IL education is a once-off library orientation (Hart 2006:190).

Furthermore, the design of proper IL courses is a very challenging issue for public libraries and their staffs' IL skills are considered a "significant factor in determining the effectiveness of users' training" (Lai 2012:82). Hart's (2006) study revealed that public librarians in South Africa (Mpumalanga) were not prepared for a teaching role. Goulding and Spacey's (2004) study also indicated that librarians in the United Kingdom (UK) were not prepared for a teaching role. Grafstein (2012:197) argued that the role of librarians as instructors was not new. In the United States librarians offered library instruction in various forms before the civil war of 1861-1865. O'Brien (2006) and De Jager and Nassimbeni (2007) argued that public librarians must accept the enhancement role as IL is an important component of information provision in a modern public library. A study conducted by Julien and Breu (2005) in Alberta in Canada revealed that students needed IL training whereas public librarians were not prepared for that role. These studies indicate that IL enhancement is not a new development in the public library though librarians express different attitudes and feelings about their roles.

The above reviewed literature indicates that some public libraries have acknowledged and accepted the valuable role of providing ILS enhancement education to schoolchildren who are part of the communities they serve. The work conducted by Shrem (2012:120) has established that there have been a series of activities where public libraries are heavily involved with students. Shrem indicates that from 2008-2010 there has been an increase in public library training opportunities available to all students in Colorado in America. Shrem (2012:120) reports on a number of public libraries that offered informal point-of-use assistance that increased from 52% to 79%. The number offering formal training classes increased from 35% to 38% and those offering online training dramatically rose from 3% to

30%. Many public libraries in Canada also voiced similar concerns stating that they lacked funding, trained staff and appropriate physical space to effectively provide access, information and digital literacy support. These activities have also been confirmed in the African context by the work of De Jager and Nassimbeni (2007); Demasson et al (2010); Lai (2011) and Ajedarifu (2015).

Another study conducted by Quagraine (2015) in Ghana revealed that the Ghana Regional library in the Volta region embarked on hands on computer classes for students attending poorly resourced schools. The project started in 2012 and ended in 2016. The study revealed that by the end of the project 3800 students were taught Internet skills. The project further contributed to a remarkable improvement in ICT exam pass rate. In 2015, the average ICT pass rate in participating schools was 45%. In 2016, the ICT pass rate was 65%; an increase of 20%. The project improved ICT teaching in 25 rural schools, building teachers' skills and enhancing classroom practice. The project won the respect of parents and recognition for the libraries.

In another study by Kinyanjui (2014), results revealed that in Kenya public libraries, with the help of the Electronic Information for Libraries (EIFL) and the Public Library Innovation, designed a computer skills and education project to help students in Kibera- a slum in Nairobi (Kenya). The public libraries in Botswana may use the same techniques of collaborating with the educational sector to enhance the ILS of students. The library collaborated with the Kenyan Educational Agency "eLimu", which taught the librarians how to integrate the tablets and contents into a learning programme. The Kenyan Educational Agency "eLimu" also taught librarians how to pass on the skills to the students. Results revealed that librarians were able to teach 120 students to use tablets, research using the Internet and access educational materials.

The above discussion indicates that public libraries understand the necessary and important role that they play in the field of information and digital literacy skills development. Information and digital literacy is one of the most important goals of public libraries and is an essential service that is not on offer in other entities (Harding 2008; Lison & Reip 2016). Therefore, public libraries have embraced and are meeting the new challenges of the 21<sup>st</sup> century by becoming modern community, creative and educational hub centres. Creelman (2012) and Giles (2013) cited in (Lipson & Reip 2016:28) believe that many public libraries have adapted to change and have been transformed to information hub centres and learning spaces for sharing advice and guidance. They further argue that technology based service demands from students; teachers and young people are still emerging rapidly to the current trends. Creelman (2012: 128) argues that the value of libraries in the future will no longer be based on their physical collections, but will be validated on the skills levels of their staff to provide services both in the building and online. On the other hand, Nygren (2014:115) notes that librarians do not always have all the necessary skills “in order to satisfy the digital learning needs of all groups”. He postulates that public libraries can adopt a “connected learning approach” and act as empowering community hub centres that promote users’ collaboration and participation in IL training through peer learning.

Despite the widespread acceptance of IL enhancement in public libraries and their willingness to accept the challenges, there is limited research documenting IL activities in public libraries particularly with students. This limited documentation is confirmed in the work of Hart (2006); Walter (2007); De Jager and Nassimbeni (2007) and Harding (2008) who suggest that there were three papers dealing with IL in 2003 and four in 2004. Three years later, Demasson et al (2010) in their study revealed that between 2000 and 2005 only 2% of published evidence dealt with IL within the context of the public library. Lai’s (2011,

2012) studies also revealed that there was still little documentation on the public library regarding IL.

Recent studies also reveal that there is still a lack of research on public libraries providing instruction on IL. This has been confirmed through the work of Lai (2012); Sapro-Ficovic (2014); Maina (2014); Soylu and Yilmaz (2014); DelaVega (2014); Khatum (2013, 2016); Ejedarifu (2015) and Adeleke (2015). This information on public libraries is purely from the point of view of academic researchers in academic institutions. There is absolutely nothing from the point of view of the public librarians. Lai (2006, 2012) and Sapro-Ficovic (2014) confirm this by noting that public libraries are not included (but only implied) in the guidelines for IL, of the International Federation of Library Associations and Institutions (IFLA), and the Standard and Guidelines for the American Library Association (ALA). Additionally, the concept of IL, particularly in the context of public libraries, needs a clearer understanding of what IL is and what skills and abilities it encompasses (Harding 2008; Lai 2011; Sapro-Ficovic 2014). Most public libraries, whether in the developed or the developing world, do not have institutional IL policies and strategic plans in place.

There is substantive literature on public libraries promoting IL in developed countries. Examples include the work of Bruce and Lampson (2002) in the USA , Spiranec and Zorica (2010) in Croatia; Hepworth and Costa (2011) in the United Kingdom .It also includes the work of Harding (2008); Hall (2010); Demasson et al (2010); Koltay (2011) and Grafstein (2012) in Australia. The other researchers include Robertson (2012) in New Zealand; Julien (2006); Lai and Wang (2012) in Taiwan; Leininger (2012) in Canada; De la Vega (2014) in Peru; Soylu and Yilmaz (2014) in Turkey; Sapro-Ficovic (2014); Jovic (2014); Khatum (2016, 2013) in Norway and Cheung and Waldeck (2016) in the Netherlands. Relevant literature dealing with public libraries' enhancement of the students' IL is rather scarce with some few exceptions being Goulding and Spacey (2004); Clark and Hawkins (2010) in the

United Kingdom; Lai (2011) in Canada; Shrem (2012) in the USA and Nielsen and Borlund (2011, 2013, and 2014) in Denmark.

In Africa, IL education is still evolving in higher education as reflected in the work of Ojedokun and Lumande (2006). Lwehabura and Stillwell (2008) observe that implementation of IL programmes in African libraries was not being seriously pursued. Recent studies by Maina (2014) in Kenya, Adeleke and Ejedarifu (2015) in Nigeria indicate that IL in public libraries is still at the formative stage and is not implemented. South Africa's contribution in documenting IL instruction to students in public libraries is noted dating to as far back as the 1990s to date. Examples include the work of Hart (2004, 2006a, 2006b, 2009); Selematsela and Du Toit (2007); Van der Walt, Cloete and Jacobs (2007); De Jager and Nassimbeni (2007) and Van der Walt (2006, 2015). Public libraries in South Africa are involved in IL enhancement programs. However, in Botswana research on IL is still at its formative stage. It is important to note that South Africa, nearly all academic institutions have IL policies.

The available literature reveals that Botswana is a developing country with a well-developed ICT infrastructure because of its economic and historical ties with South Africa as outlined in the work of Radijeng (2013) and Kgathi (2013). Public libraries in Botswana have taken large strides towards supporting the government to realize the National Vision that envisaged an informed nation through quality education that will adapt to the changing needs of the country (Radijeng 2013:23). The introduction of computers in libraries improved their recognition by users and the usage of libraries has increased. The report by Sesigo (BIDPA, 2013:25) contains testimonies that show how successful library programmes have been with the introduction of computers and Internet access. Many of the people sharing their stories have been successful in business, education and employment.

Despite the recorded successes and the governments' investments in the empowerment of the information environment, a careful look at the library literature revealed that IL regarding public libraries is not a recognised field for research. Other than a presentation paper at IFLA in 2010; where a proposal was made to train librarians in Botswana, Lesotho and Swaziland (BLS) there is nothing else that has been documented regarding public libraries and IL within the Botswana context.

However, some meaningful research has been documented in school libraries and higher institutions of learning (universities). Isaac (2002); Isaac and Jorosi (2008) and Onen (2015) investigated the ILS of senior and junior secondary school students in Botswana. Lumande (2005); Rasaki (2009); Mutula (2010); Toteng, Hoskins and Bell (2010); Mologanyi (2014) and Kgosiemang (2014) explored the ILS of first year students at the university of Botswana.

Researchers from academic institutions (University of Botswana and Teacher Training Colleges) have documented these studies. This particular study will contribute to the field of IL in that it is a pilot study in Botswana from a public library environment. The consulted literature revealed that mixed methods (qualitative and quantitative) and case studies are prevalent in IL research as such this study also used the mixed method approach. A more detailed discussion on related literature regarding public libraries and IL enhancement to students will be dealt with in chapter 2 of this study.

## **1.7 Research methodology**

The research methodology used in this study is summarised briefly below. Research methodology is a systematic way to solve a research problem. It is a science of studying how research is carried out. It entails the procedures, by which researchers describe, explain and predict phenomena. It is the study of methods by which knowledge is gained. Its aim is to give the work plan for research (Rajasekar et al 2013). The study of research methodology is

important for this study because it provided the researcher with the necessary skill that enabled her to choose the best methods, materials; scientific tools and training in techniques relevant for addressing the research question of this study (Rajasekar et al 2013:5).

The study used the survey research design where both quantitative and qualitative research approaches were applied though the dominant method was the quantitative research approach.

### **1.7.1 Quantitative research approach**

This study adopted a quantitative research approach. A quantitative research approach is based on the measurement of quantity. The results of a quantitative approach are a number or numbers (Kellet, 2016:32). Quantitative research includes the use of statistical analysis (Newman, 2006: 40). The use of quantitative methods is prevalent in IL. Allen (2007) used a quantitative approach in a study of IL of high school and college students in the United States of America. In this regard, the quantitative approach enabled the researcher to measure accurately the research participants' knowledge and experience on IL strategies in secondary schools and public libraries in Botswana. The quantitative approach helped to describe, predict, and explain statistics related to IL in public libraries and senior secondary schools in the Central District of Botswana.

### **1.7.2 Survey**

This study also applied a survey as the research design. A survey, as defined by Mouton (2001:78), is a study that is usually quantitative in nature and aims to provide a broad overview of a representative sample of a large population. It is as an empirical design as it deals with numeric data. This research design enhances the validity of research findings by controlling potential sources of bias that may distort findings. It entails quantities, sampling, generalisation, numeric data and the use of structured questionnaires (Mouton, 2001:90).

Having adopted the quantitative approach and structured questionnaires, the survey helped to close some gaps that had a potential to distort the research findings, since it required the physical visit to the sampled schools and libraries for interaction with librarians, students, teacher librarians and to see the physical structures in situ.

### **1.7.3 Structured questionnaires and observations**

Structured self-administered questionnaires and non-participant observation were used to collect data from the respondents. A questionnaire is a structured instrument, which is prepared by the researcher to gather information intended to answer the research questions. It is administered to collect data by making respondents complete it. In this instance, respondents completed questionnaires. The study gathered comprehensive data from the three groups of subjects namely students, public librarians, school librarians or teachers responsible for libraries in schools. Data was also collected by way of observing the state of school libraries and the activities that took place in the public libraries in the research field.

Statistical analysis of quantitative data collected was carried out using the Software Program for Social Sciences (SPSS) computer software. Data was coded and analysed to interpret lessons learnt from the data gathered. Tables and charts were used to allow the researcher to systematically examine relations in the data gathered, as well as communicate results to the readers.

The population refers to the people who have the answers to the research questions. Brink, Van der Walt and Van Ransburg (2012:131) define a population as the entire group of persons or objects that is of interest to the researcher.

The target population was 144 subjects comprising of 120 students (Form 4 and 5 students aged between 17–18 years), 12 public librarians and 12 school librarians. Only secondary school students who had attended the same school from form four (4) qualified for the study.

Thereafter the random sampling fishbowl draw technique determined those students who qualified to respond to the questionnaire. The researcher wrote even numbers 2 to 40 on 20 pieces of paper and the other 10 pieces bore the odd numbers. The researcher placed the papers in a container and mixed. Twenty students randomly selected each picked one. Those students who picked even numbers answered the questionnaire and those who picked odd numbers did not take part in the study. This occurred in all six sampled schools to select students to participate in responding to the questionnaires.

The aim was to ensure a (100%) completion and return of questionnaires. Out of 120 questionnaires for students, 108 were completed and returned giving a (90%) turnover. Out of 12 questionnaires for school librarians, 9 were returned giving a (75%) turnover and out of 12 questionnaires for public librarians, 11 were returned giving a (95%) turnover. The results indicated that the subjects were interested in taking part in the survey, (see Chapter 3 for a detailed discussion on the research methodology that was employed in this study).

### **1.8 Research ethics**

Du Ploy (2009) refers to ethics as a set of standards for conducting research in a morally acceptable manner by respecting the respondents' privacy, confidentiality, and institutional or professional control. This study followed the rules laid down by the University of South Africa Ethical Protocol. According to the Unisa Guidelines for Ethics Review (2012), researchers may not undertake research involving human beings without prior approval of the Education Research Centre (ERC).

Once the research proposal was approved, the researcher completed the Ethical Clearance Application of the University of South Africa. In order for the researcher to carry out this study, permission was sought from the National Library in Botswana and the Ministry of

Education to conduct research at the six schools and six public libraries in the Central District of Botswana, (*see* Appendix E and F). The researcher submitted application letters requesting to conduct research in the institutions and attached proof of registration at Unisa, the ethical clearance, the proposal and part of the marked chapters of the thesis to the Ministry of Education and the National library. Once permission was granted, the district Education Officer in Serowe wrote letters to the principals of the six sampled schools to the effect that the researcher had been permitted to conduct research as part of the completion of a Master's Degree program. The National Library in Gaborone also granted permission by writing to the six sampled libraries. This was done in accordance with Unisa revised Guidelines of (2012).

The study involved children as participants as the researcher was interested in hearing their voices. Article 12 of the (United Nations Children's Rights Centre) UNCRC provides some useful guidelines on the rights of children and this study took cognisance of the provisions of this Act. According to Deborah (2011:420), Article 12 of UNCRC stipulates that "parties shall assure to the child who is capable of forming his/ her own views the right to express those views freely in all matters affecting the child, the views of the child being given due weight in accordance with the age and maturity of the child". In this context, the children were the senior secondary students whose school libraries were not developed and who were directly affected.

The researcher balanced the interests of the individual child with the best interests of the children as a group (Unisa Research Involving Children Policy 2009) by allowing them to express their views freely and by virtue of being part of the study. As permission had already been granted, students had to complete the assent form (*see* Appendix A), (Unisa Research Policy 2012) which indicated their willingness to complete the questionnaires (*see* Appendix

D). Permission to use children in this study was granted by the Ministry of Education and the Principals of the concerned schools since in Botswana any research that involves schools and students is controlled by those two entities.

The children who participated in the study were aged between 17 and 18 years, which was way above the minimum of 7 years, the age at which children can be involved in research as set out by the Unisa Research Ethics Committee (Unisa Research Policy Involving Children 2009). The researcher explained the aims and purpose of the research to the students, and asked if the research topic mattered to them and whether the outcomes would have an impact on their lives. The researcher further observed autonomy, beneficence, nonmaleficance, justice, trust and respect as explained in the Unisa basic moral principles (Unisa Guidelines and Examples 2015). The researcher emphasised that their participation was voluntary, as such they were not forced to take part in the study and could opt out at any time should they wish to do so.

Even though the librarians were adults who could make independent decisions, the provisions of the Unisa Research Policy (2012) that stipulates that premises cannot be entered into without permission from the governing body, was adhered to religiously. In this case, permission to enter public libraries and senior secondary schools under study was sought and granted prior to entering such facilities, (*see* Appendix E and F). The librarians and teachers who took part in the study also completed the assent form as an indication that they were happy to be part of the research team, (*see* Appendix B and C). The participants' privacy was respected and the information that they provided was treated confidentially and anonymously as they were told not to write their names on the questionnaires. In this way, one can safely say that the study fulfilled Unisa's Research Ethics as the researcher followed all the procedures as outlined in the Unisa Guideline.

## **1.9 Structure of the study**

The study adhered to the structure described below:

Chapter 1 is the introduction to the study. It provides the background and motivation to the public library's role in enhancing students' IL. It lays down the groundwork for the discussion in the rest of the dissertation. The factors that put the public library as an ideal institution in promoting IL are elaborated in detail. The research problem is defined and the research questions outlined.

The second chapter is a review of relevant literature. This part helps to answer the set objectives and research questions dealt with in chapter 1. It deals with the most important previous studies on IL enhancement and the role played by public libraries to enhance IL. Review of relevant literature also provides supportive information that helps to address the objectives and research question of this study.

Research methodology is discussed in chapter 3. Issues that receive attention include the research methodology itself, which encompasses the research approach, research design, data collection tools, data analysis, population and sampling.

Chapter 4 presents the findings of the study. Information collected from the respondents in the Central District in Botswana during the investigation is presented.

Chapter 5 presents an analysis and interpretation of the data. It provides a summary of the research. It focuses on an overview of the study as a whole and the findings and implications based on the findings.

Chapter 6 focuses on the conclusion; recommendations and suggestions for further research.

References and appendices complete the dissertation

## **CHAPTER TWO**

### **LITERATURE REVIEW**

#### **2.1 Introduction**

The purpose of the review of literature has been extensively discussed in research studies. Stilwell (2000) points out that the literature review needs to be accurately portrayed when interpreting and discussing findings and should cover in-depth, a survey of previous research related to the study. Similarly, Bearfields and Eller (2008) point out that the literature review should be tailored to address the only scholarly subject directly linked to the research question.

The purpose of the study was to investigate the role of public libraries in enhancing IL skills of senior secondary school students in Botswana. This chapter therefore covers empirical and theoretical literature in books, book chapters, journal articles, conference proceedings, dissertations, thesis, databases and more. The chapter is organised around the objectives and research questions underpinning this study that were discussed in chapter 1. The literature reviewed in this chapter covers the following themes: the role of the public library in IL enhancement, programmes involving public libraries and students, the library's educational role. The other aspects include: the public librarians' roles, attitudes and perception in IL; the role of librarians as instructors, their skills, competences as well as users of public libraries. Furthermore the role of the school library in IL is looked into in detail. Additionally the resources, facilities that promote IL enhancement in public libraries and school libraries in developed and undeveloped countries is also an area of interest that needs to be attended to. The relationship between the public libraries and school libraries is also looked into. Finally the strategies that public libraries can adopt to assist students acquire IL are elaborated.

## **2.2 The role of the public library in IL enhancement.**

A review of relevant literature on IL in Europe (Virkus 2003; Moreira 2010) points to the establishment of the main trends for the concept on IL usage and discussion among European scholars. Virkus (2003) identified the relationship between IL and libraries. In addition, Crawford (2013) suggests that public libraries are expected to supplement efforts in school settings and can be central to developing higher levels of IL required for lifelong learning.

Although the role of public libraries has been established as being key in IL, recent studies however show that public librarians do not have a clear understanding of what IL entails. Soylu and Yilmaz (2014) found that the Ankara Adnan Otuken Provincial Public library in Turkey did not have a significant contribution to the development of users' ILS skills. Additionally, De la Vega (2014) found that in Lima (Peru) IL was still not a recognised and permanent activity in public libraries.

Lai (2012) studied the public librarians' IL, self-directed learning and eLearning in Taiwan. The research results showed that the public librarians' perceptions towards IL, self-directed learning and e-learning readiness attitudes were positive. In the same vein Demasson, et al. (2010) undertook a study on how public librarians constitute IL in Queensland in Australia. The author found that there had been failure to address the way in which IL operated within the public library. The author believes that there were very few resources devoted to the way in which IL was experienced, understood, organised and arranged in public libraries. These authors agree that IL was recognised in the public library because it is a core activity of the public library.

The public library's role in education is strengthened by IFLA and UNESCO in their "Public library Manifesto" of (1994, 2001, 2004; Balapanidou 2015; Van der Walt 2015 and Lison & Reip 2015). These scholars point out that IFLA and UNESCO identified twelve (12) key missions that highlight

the importance of the role of public libraries in maintaining and expanding IL, education, culture and learning opportunities.

Three key issues that relate to this study include:

1. Reading and strengthening reading habits in children from an early age
2. Supporting both individual and self-conducted education as well as formal education at all levels; and
3. Facilitating the development of information and computer literacy skills (IFLA/UNESCO, 1994:1).

Van der Walt (2015) argues that the concept of IL is an international skill endorsed by IFLA and UNESCO. In his study (2006), Van der Walt concluded that the public library must be involved in education. Researchers such as Zaaiman (1987); Hart (1998) and Leininger (2012) conclude that the public library has accepted the educational role of becoming an IL-training provider. In addition, Danely (2003:98) points out that public libraries support education through basic literacy, cultural awareness, formal learning support, IL and life-long learning.

### **2.3. Programmes involving public libraries and students**

The process of educating a child involves developing the child's literacy that is crucial for that child's future. In this process the public library, as an IL hub is expected to ensure that the educational, cultural and recreational needs of the members of the local community are successfully met. It is in this context that Quagraine (2015) asserts that one of the current trends in public library service provision is the introduction of learning centres in addition to the traditional services provided. In his study in Ghana, he established that considerable benefits exist in the implementation of library learning centres within the public libraries. However, most of the public libraries, with the exception of the Accra Central Library, are not adequately resourced in terms of infrastructure,

technology, human and financial resources, parameters that are necessary for the creation of learning centres. In the same vein, Balapanidou (2015) notes that there is a growing consensus for public libraries to revise their traditional role by extending their educational, instructional and consultation services.

Howard's (2013) study found that public libraries provide a physical learning space for all ages for developing literacy skills. In addition, public libraries provide a welcoming literate environment with a collection of diverse literacy materials that can stimulate individual or group learning. Public libraries are also ideal places for literacy activities (UNESCO Bangkok 2011). From the foregone discussion one can safely say that the educational role of the public library has gained widespread recognition both in the developed and developing countries and has attracted a lot of research inspite of the fact that is not a recognised concept within the public library.

### **2.3.1 The educational role of public libraries**

Several scholars have studied the role of public libraries in the educational sector in different parts of the world. Examples include, Terrie and Summers (1987), in Florida and Pungitore–USA, Fitzgibbons (1999) cited in (Fitzgibbons 2012:13) in Indiana. The Florida study revealed that students visited the library for an educational purpose. The Indiana study captured the following ratings of the four major roles of the public libraries: information (92%), educational (88%), recreational (84%), and cultural (49%). Programs for school-aged children included summer reading and other literacy programs such as book talks, puppet shows and performances. Public libraries offered high school students many informational and instructional programs and class visits to the library and the librarian visits to the schools.

Fitzgibbon's (2012) study reports of a branch library that established an after-school study centre in Colorado. The study targeted to reach a large section of the population on extensive community

needs assessment. The centre focussed on fifth-grade students from two elementary schools and included an extensive magazine collection, free photocopies of materials for homework, bilingual staff, trained volunteers, and basic school requirements.

Fitzgibbons (2012) demonstrates the work of public libraries in supporting schools. Fitzgibbons cites an example of the Douglas Public Library in Colorado that is serving as the main library for several charter schools, through provision of services such as library skills instruction, collection of basic texts, teacher loans and class visits to the library.

In another study, Goodman (2008) in Johannessen (2009) describes five Resource Centres for Libraries (RCLs) in Burkina Faso established by Friends of African Village Libraries (FAVL) in 2001. The five libraries had a collection of 1 000 to 3 000 books each in 2007. That year they had 37,000 visits and checked out 10,000 books in total. The author found indications that the library users got better grades in school, although the evidence was not measurable. The librarians helped users to locate materials, answer questions such as how to use a dictionary and help with mathematics exercise (Goodman, 2008).

According to Henkel (2015), IL is a key competency of the information society that requires librarians not only to act as providers of information but also as educators of the information society's citizens. Henkel (2015) further points out that librarians take the role of experienced and focused guides in supporting individuals at becoming more intelligent consumers in this supermarket of information. This is supported by Julien and Pecoskie (2009: 149) who point out that "librarians have a long tradition of offering bibliographic instruction but more recently they have expanded their instructional repertoire to include more generalisable ILS". Librarians need to address the changes laid out before them, reposition themselves as well as their institutions (Foo et al 2002) and change

from being “transmitters of knowledge to facilitators of learning” (Woodavel 2003:190). In short, these scholars agree to the fact that librarians need to expand their skills base and include that of teaching.

## **2.4 Public and school librarians’ role, attitudes and perceptions of IL education.**

The following section will discuss public and school librarians’ role, attitudes and perceptions of IL education. Their roles on IL education are based on the results of previous studies.

### **2.4.1 The role of librarians as instructors**

Despite the different views on the roles of librarians, there is agreement in the literature that public librarians have an important role in instructing, guiding, teaching, facilitating and providing all the assistance users need in the library. Thus public librarians as IL providers, teachers, guides, facilitators, and instructors need to update their IL skills constantly. However, it is noted that most librarians are uncomfortable with the increased levels of the instruction they are called to provide in their jobs (Julien & Genius 2009). Dean (2011) reveals that public librarians feel inadequately prepared for an instructional role and that there is confusion among librarians about the scope of IL. Bruce and Lampson (2002), cited in Dean (2011), found that public librarians had difficulty in articulating the difference between IL and information technology literacy. For Skov (2009) these difficulties emanate from a lack of common understanding of what exactly IL entails.

For Julien and Genuis (2009) the ever-increasing roles of library staff members cause them some emotional stress. Hart’s (2006) study indicates that public librarians in South Africa (Mpumalanga) were not prepared for a teaching role. In her study of 2004, Hart argued that the lack of school libraries placed a lot of pressure on the resources of the public libraries. From the study, it became clear that public libraries have to play the broader role of school, home, and provider of relevant information for research projects.

A study conducted by Julien and Breu (2005) revealed that students needed IL training whereas public librarians were not prepared for that role. However, Grafstein (2012:197) points out that the role of librarians as instructors is not new. For example, librarians offered library instruction in various forms before the civil war of 1860 in USA. However, several studies such as Peacock (2001); Clyde (2002); Bruce and Lampson (2002) and De Jager and Nassimbeni (2007) argue that the responsibility for IL implies that librarians have to change from being librarians to educators whilst librarians are not traditionally viewed as instructors. O'Brien (2006) and De Jager and Nassimbeni (2007) argue that public librarians must accept the enhancement role, as IL is an important component of information provision in a modern public library. Lai's study (2011) reveals that students' ILS need to be enhanced and careful attention needs to be paid to these skills in primary, secondary and even higher education sectors.

Relevant literature reveals that the instructional roles of librarians have come as an imposition. Scholars such as Harding (2008); Julien and Genius (2009) and Dean (2011) agree and argue that traditional librarians were not meant to take up instructional roles. Harding (2008) sees this role as an imposition on the public libraries. Harding (2008) notes that public librarians are not perceived as having a teaching role, even though there is a general perception within the community and among international organisations that public libraries are the learning institutions. Skov (2009) argues that public librarians are ill equipped to teach IL as a broad concept but rather highlights the supporting role of the public library. Skov goes further and argues that the government and educational bodies' failure to support public libraries in the development of IL programmes further cripples effective IL provision. From the above discussion, it is clear that scholars agree to the fact that librarians are expected to assume a teaching role.

#### **2.4.2 The skills and competences of librarians**

Lai's study (2011) found that public librarians require an increased awareness of the educational theory that they lack. Bruce and Lampson in their 2002 study discuss the need for additional training in needs assessment and evaluation. The study also reveals that librarians needed an explanation of the definition of the term IL. The results also indicated that librarians needed an explanation on the importance of imparting IL skills to their patrons. Julien and Genius' 2009 study found that para-professionals are also expected to provide instruction on IL skills. Hall (2010) suggests that it is the lack of published research pertaining to public libraries that leads to public librarians feeling that instruction in IL is not pertinent. According to De Jager and Nassimbeni (2007), there is a lack of research in this area with most of the research focused on ICTs. Nielsen and Borlund (2011) suggest that increased research linking public libraries to IL instruction is needed before public librarians will attach importance to this area of their job responsibilities.

Proficiency in IL instruction requires formal training, which Julien (2005) believes librarians have. Julien (2005) argues that librarians have access to training opportunities including workshops, seminars and employer provided training. For example, Van der Walt (2006, 2015) discusses a coaching workshop that had the aim of equipping public librarians with the skills and knowledge to guide children in using the public libraries' information sources effectively in a public library in Cape Town in South Africa. In another study conducted by De Jager and Nassimbeni in 2007, the authors noted that the campaign gave the librarians an opportunity to develop their ILS that they could apply in their libraries. The authors further say that the librarians were invited to attend workshops where they were given training in IL in their communities. The potential of IL to bring about positive change was emphasised and participants' were led through the process of needs assessment, projects planning and outcome evaluation.

However, Bruce and Lampson (2002) and Harding (2008) found that training opportunities were limited by a lack of funding and internal support by library administrators. Hall's study (2010) found IL to be of low priority within the public library context, although libraries appeared ideal as the sole providers of IL training. Harding (2008), however, notes that there is a lack of IL guidelines and few manuals in this sector. The author further points out that public libraries developed their own responses to the proclamations about IL. They are supposed to balance between the responsibilities for providing IL instruction with their limited resources and the demands of the community (Harding 2008:280). The examined literature reveals that although public libraries have a pivotal role to play in efforts towards universal IL, additional research and training will be required to prepare the librarians for this necessary responsibility.

Research indicates that public librarians need the technical competence, so that they could assert themselves in the educational criteria; (Nutefall 2001; O'Brien 2006; De Jager & Nassimbeni 2007). Bruce (2002) and Hart (2006), however, note that the idea of a teaching role seems to be a challenge to the public librarians who cannot assume the day-to-day contact with students as they are not trained to teach. Furthermore, public librarians see their role as the provision of resources for projects on demand and the prevailing IL education is a once-off orientation process to new users of the library.

#### **2.4.3 Users of public libraries: evidence from the literature**

Hart (2006) and Van der Walt et al (2007), indicate that schoolchildren use public libraries. Children use the library for educational purposes. Dent and Yannotta (2005:45), describe how students in Ghana use the library during the day to follow up on school assignments, to review material that they would have just learned in class, for classroom-based activities, and homework. They also check out books to read during their free time. The students work alone or in groups, and frequently consult the librarians for assistance. During the day, the library buzzes with activity and the reference materials

are heavily used, especially geography-related materials such as atlases and maps. In her study of the Kitengesa Community Library and another school library in Ghana called Sseke Library, Dent (2006b) cited in Johannessen (2009:78) found that students at both secondary schools used the library frequently to study and check out books. Additionally the Vermont Agency of Education (2016) indicates that public libraries, complement school libraries and assist students identify quality resources for school assignments and projects.

Van der Walt, in a 2015 study, reports on how reference librarians in a public library coach children to use both the printed and digital resources in the city of Cape Town in South Africa. The author discusses how the working team involved in the project developed an IL programme to address the problem for both librarians and students. The author further discusses how the working team piloted IL programme in five public libraries in the city of Cape Town in South Africa. Nielsen and Borlund (2013) and (2014) studied and explored librarians' perceptions of IL and user education to support lifelong learning in Denmark. The survey addressed the public library's instruction on IL of high school students. The study revealed that public librarians considered the public library as an important place for learning. The librarians did not have a common understanding of the concepts of IL and lifelong learning. The study revealed a diversity of user education.

Shrem in her 2012 study reported that public libraries in Norway complemented school libraries with the provision of digitalised books and other digital resources. Shrem (2012) further discusses the Latvia Public Library's Read and Get Followers Project that used technology to motivate teenagers to read. Lai (2011) reports on the public libraries in Netherlands that use a long life learning approach with a focus on reading skills. Lifelong learning emphasises learning at all stages of life and is expected to motivate individuals, equip them with the necessary and supplementary knowledge, skills and competences. This indicates that librarians realized that they should adopt new technologies and offer more value-added services. The services did not only offer access but also guidance to information retrieval through IL programs. Nielsen and Borlund's 2011 study of high

school students' use of a public library in Denmark demonstrates that public libraries are considered as playing an important role in learning where librarians are viewed as very competent at helping students develop information searching skills. The study reveals that students display good critical skills but do not understand the IL and lifelong learning. The Electronic Information for Libraries (EIFL) reports on another 2014 project where the Clac library in Yaoundé implemented the online platform "Kahn Academy". The library agreed with the Ministry of Education of Cameroon that a few hundred students would use it with tutors. Assessment showed an important impact on the students' results and capacities. In another study, Michael (2014) reports on Friends of African Village Libraries (FAVL) that created reading materials for rural children in Burkina Faso. The libraries produced photo books and established a small media centre in Houde where a production team used scanned pamphlet stylebooks in local languages. The study found that books are widely used by young people, developing and improving their reading skills. The aforementioned studies indicate that children use public libraries for educational purposes and public libraries have taken such opportunities to engage with IL enhancement as all activities encompass the attributes of IL.

## **2.5 The role of the school in IL enhancement**

This section will discuss the role of the school library in IL enhancement. The school library is perceived to have a great role in assisting students acquire ILS. This is so because it provides a wide variety of materials and resources that can assist students achieve their academic scores.

### **2.5.1 The school library and IL**

Some of the reviewed literature shows a link between students' IL and schools, as well as public libraries. Skov (2009) notes that teaching students to become information literate is not done solely by teaching information searching. It requires a concentrated effort to teach ILS. Skov continues to state that teaching students ILS is the responsibility of the school as teachers are the stakeholders in

the learning process. The school as a formal educational institution has to play its critical role of equipping students with ILS.

There is substantial literature on the role and importance of school libraries worldwide. The majority of schools now regard the school library as an integral learning centre especially in developed countries, for example, the USA (Manzo 2000; Rodney et al 2003); Singapore (Mokhtar & Majid 2005); New Zealand and the UK (Isaac & Jorosi 2008) and Australia (Ward 2010). Isaac and Jorosi (2008) point out that very few studies on IL and the school library deal with developing countries.

Lonsdale (2003), cited in Day (2005:8), notes that very little research is documented regarding secondary school libraries whereas school libraries contribute to students' IL enhancement. IL learning is important because there has been a shift from a teacher-centred learning to student-centred learning as articulated by Hart (2006) and Isaac and Jorosi (2008). This implies that students are therefore supposed to make effective use of the school library when doing their school assignments. For example, Paton-Ash and Wilmot (2015) describe how the library has changed from being a place where children have access to books for reading and information only, to a place where the learner is the focus. Additionally, Isaac and Jorosi (2008) highlight the salient features mentioned in extant literature that emphasise the view that the current school library focuses on:

- the link between ILS and academic achievement;
- the new roles of teachers and librarians;
- the application of theoretical frameworks that guide educators and practitioners and
- the extolling of virtues of the student /child centred approach to learning.

Bradley (2013:8-10) studied the role of school libraries in developed countries and recommended that IL must become a priority not only among academic librarians but also in school, public, and special libraries as well as among others outside the library sector. The author argues that elementary

and secondary schools, as mandatory levels of education, must ensure that students achieve sufficient literacy levels to allow them to meet their life goals. Bradley (2013) discusses the Centre for the Study of Learning and Performance, Integrated Student Information System (CSLP ISIS – 21) project that was a Grant funded pilot program from Concordia University in Quebec in Canada. The aim of the project was to develop inquiry and ILS among children and teenagers in Quebec, Canada. Her observations were that the support from the University was an indication of the recognition and importance of IL development at the elementary and secondary levels that was spreading beyond librarians to funders and other academics. Similarly, Wessels (2010) also discusses the University of South Africa's Literacy Project that helped to develop an information climate at two schools in Atteridgville (South Africa).

### **2.5.2 The school librarian in IL debates**

The school librarian has a major role to play towards teaching ILS. Literature reveals that the librarian is a resource for students and teachers, one who plans and collaborates with teachers and acts as a teacher. The school librarian is supposed to provide “intellectual and physical access to material in all formats”. School librarians “provide the laboratory for developing IL” which includes a collection of well-organised materials within the school, Internet resources, community resources in public libraries and contacts to subject experts (Kuhlthau, Maniotes & Caspari 2007:49).

Numerous studies reveal that the role of the school librarian is to impact on students' achievement (Lance et al. 2007; Achtrman 2008; Lance, Rodney & Schwarz 2010). Montiel-Overall (2005b) cited in Mertes (2014:93) notes that librarians need good teaching skills preferably a teaching certificate in addition to a master's degree in library science for effective implementation of IL programs. Kuhlthau et al (2007) see a librarian as a teacher for IL who selects the IL standards that need to be dealt with. The foregoing discussion shows that there is an expectation for librarians to have basic teaching skills if they are to optimise their services.

### **2.5.3 Teachers in IL enhancement**

Teachers have an important role to play towards collaborating with the librarians to assist students acquiring the ILS. Research indicates that teachers are facilitators of IL teaching, subject experts and IL instructors. Teachers are collaborators of IL teaching with the librarian. According to Williams, Grimble and Irwin (2004) teachers have an influence on the students' use of the school library. The teacher is the one who provides opportunities for integrating IL with subject content.

Martes (2016) conducted a survey at an independent secondary school in the USA and found that the majority of teachers taught IL through assignments of research tasks. It was also found that teachers made use of the library as a space or work place together with the librarian. Both teachers and librarians provided interventions to the whole class as well as individual assistance on IL. It was also found that librarians did not need to consider themselves as the only ones responsible for IL teaching. The results of this study confirmed that the two professional groups should have a common understanding on collaboration in order to assist learners as they grapple with IL.

In another study, Moreira (2010) describes a survey study that comprised teachers and librarians of two elementary schools in Amager, Copenhagen. The main goal of the survey was to assess the understanding teachers and librarians had on their roles as educators of IL in elementary schools. The results reveal that most teachers recognised the term IL but could not exactly define it. Teachers did not seem to know whether students were information literate, though they admitted that their students usually browse the web, read and have contact with many different sources of information. The conclusion of the survey was that IL was unknown among teachers who were supposed to play a major role in the students' lives. Teachers were found to relate the concept only to the Internet and information technology. Similarly, Foo et al. (2010) conducted a survey on ILS of secondary school students in Singapore and found that librarians had little contact with teachers and their classroom objectives except to locate books and other reference materials or baby sit students who use the

library. Moreira (2010) recommended collaboration between teachers and librarians since both were responsible for the development of the needed skills in students.

## **2.6 The resources and facilities for effective IL programs in public and school libraries**

This section discusses the resources and facilities that may assist both the public libraries and school libraries in carrying out effective IL programs for the benefit of the students.

### **2.6.1 IL and school libraries in developed countries.**

Despite the challenges mentioned in extant literature, there are commendable success stories documented in some school libraries in developed countries. For example, Bradley (2013) asserts that school librarians in Canada have made considerable efforts to develop IL abilities in students with varying degrees of success attributed to differences in policies and their unequal implementation. In this regard, Canada has implemented the Ontario Curriculum grades 1-12 which includes “media literacy” as one of the core strands in the curriculum. The curriculum specifies, “The school library program plays a key role in the development of IL and research skills” (Ontario Ministry of Education, The Ontario Curriculum Grades 1-Y 8: Language 30).

Paton-Ash and Wilmot (2015) discuss the Organisation for Economic Cooperation Development’s (OECD) 2003 study, done on 15 year olds in more than 40 countries and found that the most important prediction of academic achievement is the amount of time students spend reading. The study concluded that the key to success lay in teaching students how to read and having them read as much as possible. Moreover, these studies indicate that comprehensive collections of books meeting the students’ needs and interests, teacher training on reading activities, and partnerships as well as alignment with the National Reading Plan, ensure effectiveness of school libraries (Martins & Martins 2012; Coddington, Juke & Cooper 2015).

Research also shows that the school libraries' efforts regarding literacy development have a positive impact on students' literacy and learning outcomes (Frederick 2011). Haskins (2006) notes that a planned program of teaching ILS in partnership with classroom teachers and other educators is an essential part of the school literacy program. Haskins (2006) reports on studies conducted in the USA, which found that a good school library program improves student achievement. Hoskins (2006) reports on a study by the Colorado State Library and the University of Denver Library and Information Services Department in 1991 and 1993 that studied the impact of school libraries and school librarians on student achievement. Both scholars found that a school library with a full time librarian, support staff and a strong computer network leads to higher student achievement.

### **2.6.2 IL and school libraries in Africa**

Within the African context, documented evidence reveals that school libraries are dysfunctional or non-existent. Douglas and Wilkinson (2011) observe that there is a general decline in the support of school libraries in Africa. The authors note that students in smaller communities and smaller schools in Africa are much less likely to attend schools that have a teacher librarian, and some schools do not have a library at all. Wessels (2010) discussing school libraries as a literacy intervention tool in primary schools in Atteridgeville (South Africa) notes that schools are responsible for many students' only literacy exposure but few of the schools have functional libraries or teachers who understand the importance of IL.

Paton-Ash and Wilmot (2015) share the same sentiments when they describe the challenges facing school libraries in Gauteng (South Africa) and indicate that as of 2011, twenty-one percent (21%) of state schools had libraries of which seven percent (7%) had stocked libraries while seventy-nine percent (79%) of the schools had no libraries at all. Van der Walt's (2015) study indicates that only seven percent (7%) of South Africa's schools have libraries. He indicates that the South African government has gone to the extent of expanding public libraries so that they can accommodate the

school learners. This is an indication that school libraries are not playing an effective role in supporting and enabling quality education in South Africa. According to Zinn (2006:21), the Department of Education of South Africa does not budget for teacher librarian posts and teachers do not have the resources to teach learners IL even if they had the knowledge (South African Department of Education 2005b).

Research has also shown that students entering university do not have the reading and ILS that Wessels (2010) and Chanakira (2017) believe they inherited from their school education. A study conducted by Boekhorst and Britz (2004) which examined IL at school level in South Africa concluded that libraries can play an important role in IL at school level. Unfortunately, this role is currently undervalued (Boekhorst & Britz 2004).

Similarly, Maepa and Mhinga's (2003) study investigated the barriers that hinder effective use of the school library by teachers and learners in the Limpopo Province. Barriers included a lack of insight among principals and educators into the educational role of a library. Thus, educators themselves do not fully understand the role of the school library within the context of outcomes-based education (OBE). Paton-Ash and Wilmot (2015) and Chanakira (2017) note that the school principal is seen as having an important role to play in the development of a school library (Hartzell 2002; Hay, Le Roux & Hendrikz 2006) as they control the budget for the resources and staffing of a library.

Nengomasha, Utoni and Yule (2012) acknowledge that a number of investigations have been done in Africa which confirms the challenges that school libraries are facing, particularly pointing to negligence in the teaching of IL in most Southern African countries as highlighted by the case of Malawi, Anderson and Mathews (2010) cited in Nengomasha et al (2012). The study showed the existence of libraries in all the schools, more than 80% of these did not have adequate resources in terms of reading materials, equipment and staffing. The study also established that although students said that they liked reading there was no strong library programme to inculcate a reading culture.

In Botswana, investigations also revealed that a lack of qualified librarians was hindering non-compliance in the teaching of IL in schools Baffour-Awuah (2002) cited in Nengomasha et al. (2012). Moswela (2010:27) examined the state of senior secondary, school libraries in Botswana. The study revealed that poorly equipped libraries would negatively affect students' academic achievements, as they would graduate without having acquired IL. The conclusion was that the high rate of book losses was due to poor library security systems.

The IFLA/BLA Workshops in(2013, 2015, & 2016) were jointly organised under International Federations of Library Associations (IFLA) Section on school libraries and the Botswana Library Association (BLA) under the theme: “Advocating for school libraries’”. Its objective was to examine approaches towards enhancing advocacy for school libraries in Botswana. This advocacy by BLA is an indication that school libraries are not properly recognised. However, Isaac and Jorosi (2008) conducted a survey on the ILS of secondary school students in Gaborone, (Botswana) and found that the teaching of ILS in secondary schools in Botswana was gradually becoming a national priority, although not guided by research. ILS in Botswana is strongly supported by the Revised National Policy on Education (RNPE 1998) which advocates resource-based learning and school libraries as key agents in imparting these skills.

In a study on secondary school libraries in West Africa, the World Bank Report (2008) indicates that few secondary schools had a library or a resource centre in Togo. Secondary school libraries were virtually non-existent in Cameroon. The report further reveals that Rwanda, did not give high priority to secondary school libraries in rebuilding the education system after the 1996 genocide. Cote d'Ivoire in the 1990 economic crisis also converted about seventy percent (70%) of the secondary school libraries into classrooms, leaving only about ten percent (10%) of secondary schools in the country with school libraries. Although Mali, Burkina Faso, and Senegal had received donor

assistance, the World Bank Report concluded that all the countries had poorly developed secondary school libraries.

A substantial body of research findings has established a positive correlation between access to good school libraries and students' achievements (Loertscher 2007). According to Haycock (1995a, 1995b), cited in Lonsdale (2003), more reading occurs when there is a school library. Haycock further notes that students in schools with good libraries and services of a school librarian perform better on tests for basic research skills, reading comprehension and use of reference materials than in schools with minimal or no library services.

### **2.6.3 IL and public libraries in Africa**

The emerging need for IL demands the ability to identify, locate, evaluate and apply information on the part of the user (Mutula, 2006). Several studies have shown that a lack of IL is partly the cause of the underutilisation of ICTs and information resources in Africa. Lwehabura and Stilwell (2008), cited in Adeleke et al (2015), note that documented evidence in the literature on libraries reveal that user instruction in public libraries is minimal.

Ojedokun and Lumande (2006) point out that, other than a few initiatives reported by the South Africa public libraries, IL in Africa is still largely invisible. Ejedarifu (2015) surveyed the state of IL in public libraries in the Delta State in Nigeria. It was found that there was still a lack of relevant studies investigating IL training in public libraries in Delta State in Nigeria. Ejedarifu (2015) noted that this was because of poor funding, lack of adequate staff, poor physical facilities, lack of adequate space and inability to cope with technology trends. This author further pointed out that access to information in rural communities in the Delta state was affected by a number of barriers such as basic infrastructure, low levels of literacy, lack of adequate information services, technical competencies on the part of public library staff and absence of IL programmes in the state (Ejedarifu

2015). Another observation by the study is that many African countries only have a few public libraries.

With the above shortcomings facing public libraries in Africa, it is crucial to note that Botswana has not been spared from similar challenges that affect other countries in terms of IL. Baratedi (2000) conducted a study and established that public libraries in Botswana also faced chronic shortages of work force that resulted in shorter working hours, (35 hours per week). Eight years later, Baratedi (2008) noted that the growth and expansion of the library services encountered problems that ranged from staffing, inadequate space and information resources in public libraries and village reading rooms, inadequate hours of service and computerisation of services.

Recent studies carried out within the Botswana context have however established some change and new developments in public libraries. According to a Botswana Library Association (BLA) Report of 2016, public libraries in Botswana have recently seen a spike in growth in terms of refurbishments, remodelling of service and recognition. The BLA report states that libraries offer diverse and more appealing programmes aimed at transforming the lives of the communities they serve. Libraries are now among the first port of call in terms of information access and have increased the duration of their service from 35 to 46 hours per week. This report also highlights basic ICT training as the most popular programme. It explains how the programme trains the members of the public on one hand and offers regular ICT access for different purposes including email, database, research, office applications, Skype and games, on the other hand. Several researchers (Maswabi et al 2011; Radijeng 2013; Sesigo (BIDPA 2013); Mutshelwa 2015; Serema 2016; Monyatsi & Maimela 2016 and Jain & Jibril 2016) have also documented the ICT training in public libraries.

The literature cited above reveals that ICT training that is part of IL has received more attention in Botswana's public libraries.

There is also some substantial amount of work done on IL in schools and academic libraries in Botswana. Examples include the work of Isaac (2002); Lumande (2005); Isaac and Jorosi (2008); Rasaki (2009); Toteng et al. (2011); Kgosiemang (2013); Mologanyi (2014) and Onen (2015).

## **2.7 Relationships between public libraries and school libraries**

The examined literature reveals that school libraries and teacher librarians are not valued within the education sector. This leaves learners with no choice other than to turn to the public librarian for assistance. Raju (2010) also argues that the use of public libraries by learners places greater demands on these institutions. Hart (2004:111) also argues that the lack of school libraries places great strain on the resources of public libraries and what worsens this is the lack of communication between the school and the public library. Schools do not inform the public librarian about the school projects in good time and learners are not familiar with using the library effectively. In spite of such pressures, Hart (2004) however argues that public libraries must embrace their role in the educational process to the extent that there is a shift from how the curriculum influences libraries to how libraries affect the curriculum.

In a study conducted by Anunobi (2003) cited in Mabusa-Ndlovu (2016), it was revealed that librarians in public libraries have yet to play a significant role in assisting students. The study found that the presence of school librarians who teach students how to make good use of the library in the secondary schools has not produced any significant results that reflect the inability of students to use catalogues and indexes in order to have access to materials from the library.

In the same vein, Mabusa-Ndlovu (2016), reports on Hart's (2004) study conducted in the Western Cape (South Africa) where schoolchildren made great use of public libraries. The findings of the study reveal that children rely on public libraries to research and gather information for their school projects. Mabusa-Ndlovu (2016) further reports on another survey conducted by KPMG in 2007. From this survey, it is evident that public libraries cater mainly for children as 80 percent of the

activities of the library were geared towards children. Accordingly, the study concluded that public libraries in effect performed the role of school libraries as articulated in South Africa's Department of Arts and Culture document. The document states that the Department of Arts and Culture and Library Services in South Africa provides services and support to public libraries throughout the country (South Africa Department of Education 2005). In general, all types of libraries, school, and public, academic and special ones; need to collaborate with each other in order to produce lifelong learning citizens who are equipped with ILS.

## **2.8 Strategies and methods to support IL enhancement**

### **2.8.1 Collaboration between public and school libraries**

This section explores a range of successful collaborative relationships between public libraries and school libraries. Collaborative relationships between the two separate institutional settings are a strategy to achieve an educational reform that may lead to improved ILS and student learning. Most of the examined literature does not provide any guidelines on the strategies for enhancement that public librarians can adopt in their endeavour to assist students. There are however a few studies that have been conducted on the subject such as one by the American Libraries Association (ALA 2005); Fitzgibbons (2012); Nkhangweni (2013); Godbey (2013); Brown (2015) and Musemburi and Nhendo (2016). These provide some strategies that some libraries have implemented. The following paragraphs will deal with the strategies.

Godbey (2013) notes that collaboration is not a new concept in the world of libraries. Barthwick (2001), cited in Godbey (2013:5), defines educational partnership as "a process that brings together members and resources to produce outcomes directed to the enhancement of education". Grossland (2008:23), cited in Nkhangweni (2013), believes that library cooperation could include developing the library collection jointly, and recommends that relevant stakeholders should work towards the success of this joint venture. Library cooperation can be regarded as a relationship in which each

library contributes equally whatever it has in its stock, for example materials, personnel, and programmes, grant application and networking ideas, into a partnership. It is a joint effort, a joint use, collaboration, consortium and networking or partnership. Its purpose is to provide wider access of available materials to its users especially senior secondary school students in this instance.

### **2.8.2 Rationale for collaboration**

Brown (2015) in her study on school and public library collaboration in Florida, USA discusses the reasons for collaboration, the types of collaboration and the challenges of collaboration. The common goal of developing IL forms the basis for school and public library collaboration (Aman & Carnes 2012). Public libraries and school libraries both work with children. Reading and pre-reading skills are some of the first IL skills that must be developed, and public libraries have traditionally been a strong ally to schools as they both provide similar activities. School libraries take the role of providing resources to support the school curriculum. However, both public and school libraries work together to ensure that children have the tools necessary to become lifelong learners in the 21<sup>st</sup> century.

The examined literature revealed that collaboration has filled gaps that existed in funding and staffing of both public and school libraries. Brown (2015) indicates that economic factors are a major reason for school and public libraries to collaborate. According to Pelman (2013), public and school libraries operate with minimal budgets and these force the institutions to slash resources in order to save money. Brown (2015), in a study on collaboration between public and school libraries, discusses how public libraries have had to reduce the number of staff working with children's programmes as well as reduce budgetary allocations for collection development and databases. The author goes on to argue that school libraries have even faced more severe cuts and elaborates that teachers without a library qualification are operating some school libraries instead of having a fulltime librarian. Some school librarians have been eliminated. Wessels (2010) for example, in a

study on school libraries in Atteridgville in South Africa, discussed how school libraries closed down since 1995.

School and public libraries collaborate in order to share the expertise of the staff at both libraries (Brown 2015:26). Brown further points out that today's children must have a variety of skills that may include technology, critical and creative thinking and IL. The author argues that it is difficult to find one person who has the expertise in all of these areas. Covering all areas therefore, requires collaboration to share their knowledge and expertise on IL.

Allison's study (2010) in Colorado (USA) reveals that the majority of public and school librarians did not agree with the fact that they should have a joint collection policy. Allison concludes that the librarians did not know each other's collections and could not predict what the demands would be on each other's collections. This study indicates that librarians from both institutions were not knowledgeable on each other's collection development issues. The lack of knowledge thus hinders the implementation of an IL program that may be of benefit to the students who ought to be equipped with the ILS. Garland's (2012) study on collaboration explores the implications for collaborative acquisitions between school and public libraries and concludes that there was a need to make collaborative decisions on nonfiction titles to provide diversity of titles while still duplicating titles in high demand. She also recommended that public libraries should concentrate on fiction whilst school libraries should concentrate on nonfiction. Both types of libraries need to work collaboratively towards acquiring the titles in demand to satisfy the reading needs of the students. The balance on the titles would imply that students' needs would be satisfied in either institution.

Despite the shortcomings regarding the types of collaboration mentioned so far, there are successful forms of collaboration that exist in libraries that demonstrate how libraries working together can improve student academic success. For example, Brown (2015) notes that outreach programmes are a way in which school libraries and public libraries can work together. Martinez

(2008) shares the same sentiments and gives examples of outreach services of twenty-six (26) public libraries in Maryland, USA that used story time and reading programmes in their libraries. Martinez (2008) observed that visits to the schools and other community events were other ways public libraries reached out to schools. Martinez (2008) found that book talks, homework help, shared author visits and field trips where students visited the public library were also other forms of outreach.

### **2.8.3 Challenges of collaboration**

Studies have confirmed that collaboration often faces a number of challenges. Godbey (2013) discusses issues that both institutions need to consider if they anticipate positive results. Harris (2003:67) notes the differences on information transactions between schools and public libraries. The author notes that public libraries and school libraries operate differently. Harris (2003) further argues that a school librarian takes a more active role in guiding the student to an understanding of the assignment and the information needed. Harris (2003) and Godbey (2013) agree that exposing students to different kinds of libraries introduce them to different kinds of information transactions.

These authors argue that increased collaboration with public libraries might not actually improve student readiness for academic success. In the same vein, Gilton, (2008) cited in Godbey (2013:7), argues that gaining skills in the use of a public library does not necessarily translate to academic library skills. This author notes the different information systems used in each case. Gilton (2008) further points out that although public librarians have a long history of instructing patrons in information use, the instruction has been informal and indirect in contrast to the direct instruction that takes place in school libraries. Both institutions need to consider all these factors before the implementation of collaboration.

Brown (2015), in her case study in Florida, USA on collaboration between school and public libraries discovered that teachers and students found collaboration to be challenged by a variety of

factors hence its failure in meeting the diverse needs of the 21<sup>st</sup> century students. The findings of this study reveal that some of the barriers or challenges to collaboration include lack of communication, time and territoriality. The study further reveals that lack of communication was due to lack of time. The same results revealed that public librarians knew very little about the responsibilities of school librarians and vice versa and that; there was very little time in librarians' busy schedules to learn about each other's institution. The study brought to light that public librarians had very little contact with school librarians.

The study also confirmed another barrier to collaboration as "territoriality". Some teachers and librarians did not want to work together because they did not understand how collaboration could be beneficial to their patrons and students. Some felt threatened that they could not meet the needs of those they served and would refuse to collaborate for that reason. School library and public library collaboration must help develop well-rounded literate students for the 21<sup>st</sup> century. Although there are challenges to collaborative efforts, the benefits can outweigh these challenges. It is, however, important to note that the collaboration of libraries, as one of the strategy to enhance IL, has its advantages and disadvantages as highlighted above.

## **2.9 Summary**

This chapter proffered a comprehensive discussion of IL within the educational and library contexts. Substantial literature on the role of public libraries in enhancing the growth and development of IL due to the digital revolution has forced people to realise the importance of acquiring IL skills. In this chapter, the efforts made by public and school libraries in enhancing the IL skills of senior secondary school students were also discussed. The role of public libraries in enhancing the IL skills is evident as they are key players, and better resourced compared to school libraries. Although the acquisition of IL skills is established as the domain of public libraries, there is need for more research to link

public libraries to IL, as the teaching role of IL seems to be a challenge to the public librarian who cannot assume day-to-day contact with students.

Some of the gaps identified from relevant literature that will receive attention throughout this research include

- The role that public libraries could play in enhancing the ILS of senior secondary school students.
- Collaboration between public and school libraries for the benefit of senior secondary school students.

The next chapter will discuss the methodology of this study.

## **CHAPTER THREE**

### **RESEARCH METHODOLOGY**

#### **3.1 Introduction**

The methodology chapter provides a systematic framework to describe, understand, explain and predict the research phenomena. It is a way the researcher uses to systematically solve the research problems scientifically (Kothari 2004:8). The commonly used approaches in research are: qualitative, quantitative and mixed methods. The quantitative approach will be discussed in more detail later in this chapter. The purpose of the study was to investigate the role of public libraries in enhancing the ILS of senior secondary school students in the Central District in Botswana. The study sought to address the research questions as outlined in section 1.2.3 in chapter 1. The rest of the chapter is organised around the following themes: research approach, research design, population, selection of sample size, sampling techniques, data collection procedures, instruments validity and reliability, data analysis and ethical considerations.

#### **3.2 The research approach**

There are three commonly used research approaches namely; quantitative, qualitative and mixed methods. Ngulube (2005) and Macrina (2005) point out that the choice of which approach to use in research depends on the research topic and the appropriateness of the questions asked. The researcher mainly used the quantitative approach for this project though qualitative was also used to a limited extent during the verification of some findings from the responses. Quantitative research, as defined by Mugenda and Mugenda (2003:37), refers to an approach that produces quantifiable and numerical data. Neuman (2006) observes that quantitative analysis measures phenomena using numbers in combination with statistics to process data and summarise result.

The use of quantitative methods is prevalent in IL research studies. Hart (2004); Goulding and Spacey (2004); Allen (2007); Koltay (2011); Nielsen and Borlund (2011, 2013, 2014) and Onen (2015) all used a quantitative approach in their studies of IL when they did research on high school students in different parts of the world. This study triangulated both quantitative and qualitative approaches. The quantitative approach enabled the researcher to accurately describe the research participants' views on the role of public libraries in enhancing the ILS of senior secondary school students in the Central District in Botswana. The aim of using qualitative research in this study was therefore to gain an in-depth understanding of facilities and find out how they are used to enhance the IL of students. IL literature draws heavily on quantitative and qualitative research approaches. School library researchers (Bruce, 2002; Lance & Loertscher, 2002; Lance et al., 2000) have conducted and published many quantitative and qualitative studies because the use of a single methodology often fails to explore all the components of a single approach. Ngulube (2005:131) on his part claims that using both qualitative and quantitative approaches offer insights that neither type of analysis could provide alone. The qualitative approach allowed for the observation of libraries and resources to gain a deeper understanding of how they operate. On the other hand, the quantitative approach was used to describe, predict and explain quantitative degrees and relationships. By combining both quantitative and qualitative approaches it was possible to obtain comprehensive data and generate confidence in the researcher's findings and conclusions.

### **3.3 Research design**

Within qualitative and quantitative modes of enquiry there are several orientations such as case study, survey, ethnography, phenomenology and more.

Most IL research relies on surveys and case studies, and the current study applied a survey. Powell and Connaway (2004) refer to a survey as the research strategy where one collects data from all or part of a population to assess the relative incidence, distribution and interrelations of naturally

occurring variables. Surveys involve setting objectives for information collection, designing research, preparing a reliable and valid data collection instrument, administering and scoring the instrument, analysing data and reporting results with the aim of studying relationship between specific variables. A survey, as defined by Mouton (2001:78), is a study that is usually quantitative in nature and aims to provide a broad overview of a representative sample of a large population. Burns and Grove (2009) note that it can be classified as descriptive as its purpose is to explore and describe phenomena in real-life situations. It can generate new knowledge about topics that are limited or where no research exists. Mouton (2001:93) points out that the survey research design is characterised by its potential to generalise on large populations, but this is only possible when people implement appropriate sampling designs. This research design enhances the validity of research findings by controlling potential sources of bias that may distort findings. It entails quantities, sampling, generalisation, numeric data and the use of structured questionnaires.

The survey was suited for this study because as Burkell (2003) points out Library and Information Science (LIS) researchers often study needs, challenges and problems of information professionals and information users using surveys. Creswell (2003) asserts that a survey design provides both qualitative and quantitative descriptions of trends, attitudes, or opinions of the population. Surveys can be ideal in instances where the subjects are geographically spaced. Surveys also offer a convenient data gathering technique as they can be administered to participants in a variety of ways. Surveys present little or no observer subjectivity because they provide all the participants with a standardized stimulus. Surveys produce precise results as questions undergo careful scrutiny and standardization such that they provide uniform questions to the subjects who answer the questionnaire. This leads to a greater precision in terms of measuring the data gathered. Furthermore, the survey was used to shed some light on the topic since very little is known about the ILS of children in the rural areas. Finally survey design was used because it is suited for generating results

that have wider applicability derived from high representativeness. The study of IL demands the replicability of the outcomes and also deep understanding of unique situations.

### **3.4 Research population**

The population refers to the people who have the answers to the research questions. Brink, Van der Walt and Van Rensburg (2012:131) define a population as the entire group of persons or objects that is of interest to the researcher. The current study investigated three categories of groups that were of interest to the researcher namely, public librarians, teacher librarians and students who are all based in the Central District of Botswana.

The Central District is a large area consisting of a third of Botswana's population. The Central District of Botswana has twelve (12) senior secondary schools and fifteen (15) public libraries. Thus, the twelve (12) senior secondary schools and fifteen (15) public libraries constituted the total population of the study. Within the 12 schools in the district, there were 18000 students with an average enrolment per school of 1500. In each public library, there were about 10 employees and this indicates that the total number of public library employees is 150. In each school, there is a teacher responsible for the day-to-day functioning of the library, giving 12 teachers working in school libraries in the whole district. The population of the study is therefore 18 162 comprising senior secondary pupils, teacher librarians and public librarians in the Central District of Botswana. Given this huge population researcher made use of a sample that represented the research population.

#### **3.4.1 Sampling procedure**

Cohen, Manion and Morrison (2000) state that the quality of a piece of research not only stands or falls by the appropriateness of methodology and instrumentation but also by the suitability of the sampling strategy that would have been adopted. In view of this understanding, Mills (2007) emphasises that a sample must represent the population as a whole. In the same vein, Powell (2005:68) argues that samples are often more accurate than interviewing every member of a selected

population. A sample is a selection of units from the total population one has to study. It is less costly and saves time to use a sample than the whole population. The other factor considered was that when the whole population is used, it leads to a heavy response burden on people. This emanates from the fact that modern day society has such a demand for information and people often take part in surveys. People often feel that this is intrusion of their time, privacy and loose interest in surveys. The advantage of using a sample is that it provides information about the sampled elements of the population from which one can make an inference to the population of the study. The selected units would equally represent large numbers of the concerned numbers one has to study. The sample should be identical to the entire population and large enough to permit generalisation according to the measurable limits of accuracy to the population from which the researcher selects. Sampling procedures and techniques should be determined when designing a sample (Powell 2005:72).

There are two types of sampling methods namely probability and non-probability sampling. Non-probability sampling refers to sampling approaches where subjective judgment plays a role in the selection of the sample (Cohen, Manion & Morrison 2011). Examples of non-probability sampling include convenience sampling, purposive sampling, snowballing, quota, judgmental and dimensional sampling. In contrast, in probability sampling each member of a population has an equal chance of being selected as a member of the sample (Cohen, Manion & Morrison 2011:153). Examples of probability sampling include random and systematic sampling. This study used purposive and random sampling methods to select respondents. Random sampling allowed all students to have an equal opportunity to participate in the study. Sampling of the three groups is as described below.

### **3.4.2 Sampling frame**

The Ministry of Local Government and Rural Development divided the Central District Council into seven Sub-districts. These are Serowe, Palapye, Mahalapye, Tutume, Bobirwa and Boteti. Nine

additional Sub Districts exist at Boteti (Rakops), Tutume (Nata and Sebina), Mahalapye (Shoshong, Sefhare and South Central), Bobirwa (Mmadinare), Serowe (Paje) and Palapye (Lerala).

The geographical area of this study focussed on the provision of library services in the Central District. The researcher chose the Central District, because it is the largest district with the largest number of libraries and senior secondary schools, hence it would be representative. The Department of Education subdivided the Central District into areas for ease of management as shown in Table 1 below.

**Table: 3. 1: Sub Districts in the Central District**

<b>Sub Districts in the Central District</b>						
Serowe	Palapye	Mahalapye	Bobirwa	Boteti	Tutume	Tonota

*Source: Central District Council*

**Table: 3. 2: Inspectorate regions in the Central District**

<b>Inspectorate Regions in the Central District</b>						
Serowe	Palapye	Mahalapye	Boteti	Tutume	Selibo	Tonota

*Source: Ministry of Education, Central Region*

As shown in Table 2 above, the inspectorate regions in the Central District are Serowe, Palapye, Mahalapye, Boteti, Tutume, Selibo and Tonota. The coverage is slightly different from the Sub-District boundaries as Selibo incorporates Selebi-Phikwe Town Council and Bobonong Sub District that are two different administrative areas.

The researcher obtained a list of senior secondary schools and public libraries from the Principal Education Secretary based at the Regional Headquarters in Serowe and the Regional Librarian based in Serowe. There are twelve (12) senior secondary schools and fifteen (15) public libraries in the

Central District. There was no list of schools with functional libraries at regional level and the researcher obtained such information from the school heads. Table 3 below shows a list of senior secondary schools and public libraries in the Central District of Botswana.

**Table 3.3: List of senior secondary schools and public libraries in the Central District of Botswana**

No	Name of Senior Secondary School	Location	Location of nearest Public Library
1	Swaneng Hill Senior Secondary School	Serowe Village	Serowe Public Library
2	Lotsane Senior Secondary School	Palapye Village	Palapye Public Library
3	Madiba Senior Secondary School	Mahalapye Village	Mahalapye Public Library
4	Letlhakane Senior Secondary School	Letlhakane Village	Letlhakane Public Library
5	Matshekge Senior Secondary School	Bobonong Village	Bobonong Public Library
6	Mmadinare Senior Secondary School	Mmadinare Village	No Public Library
7	Moeng Senior Secondary School	Lerala Village	No Public Library
8	SelebiPhikwe Senior Secondary School	SelebiPhikwe Town	SelebiPhikwe Public Library
9	Nata Senior Secondary School	Nata Village	No Public Library
10	McConnell Senior Secondary School	Tutume Village	Public Library is located within the school
11	Shoshong Senior Secondary School	Shoshong Village	Shoshong Public Library
12	Shashe Senior Secondary School	Tonota Village	Tonota Public Library

13	.....	Moreomaoto Village	Moreomaoto Public Library
14	.....	Molalatau Village	Molalatau Public Library
15	.....	Ramokgonami Village	Ramokgonami Public Library
16	.....	Matlhaku Village	Matlhaku Public Library

Source: Survey Data 2016

For each list, for example, the senior secondary list and the public library list, six (6) schools and six (6) public libraries were selected randomly through a table of randomly generated numbers, making use of a sampling interval of six (6). As a result, schools and public libraries that were numbered 2, 4, 6, 8, and 12 were drawn from the list and those were included in the sample. Thus, a sample of six (6) senior secondary schools drawn from a population of twelve (12) senior secondary schools and six (6) public libraries drawn from a population of thirteen (13) public libraries.

Form five (5) students from senior secondary schools were selected for the survey sample. The researcher chose the form five students because they had reached an educational level that requires independent research for lifelong learning. Only secondary school students who had attended the same school from form four (4) qualified for the study. Thereafter the random sampling fishbowl draw technique determined those students who qualified to respond to the questionnaire. The researcher wrote even numbers 2 to 40 on 20 pieces of paper and the other 10 pieces bore the odd numbers. The researcher placed the papers in a container and shuffled them. Twenty students were randomly selected and each of them had to pick one paper with a number. Those students who picked even numbers responded to the questionnaire and those who picked odd numbers did not take part in the study.

Teacher librarians who are responsible for the libraries in various schools qualified for participation in the survey. Since there was no list that indicated schools with operational libraries, six (6) schools were sampled. Since there was only one teacher responsible for a school library, it followed those six (6) teachers responsible for school libraries in the selected schools responded to the questionnaires.

### **3.4.3 Purposive sampling**

Purposive sampling is an acceptable method of sampling for special situations. It uses the judgement of an expert in selecting cases (Neuman 1997:205). Teachers and librarians were identified because of their specific role in IL development in public libraries and school libraries. Kothari (2004:59) asserts that purposive sampling procedure does not require any condition for estimating the probability of each item in the population being included in the sample. Moreover, purposive sampling technique allows the researcher to decide what needs to be known and find people with valuable knowledge and life experiences on the subject under study (Patton, 2002; Gorman & Clayton 2005:158). Purposive sampling was appropriate for this study as it allowed the researcher to select key informants believed to have the expertise on libraries and schools in the Central District of Botswana. Key informants in this case were the staff from public libraries that comprised of the Regional, Chief and Senior librarians. These had the experience, expertise and knowledge of libraries and schools. Purposive sampling therefore aided the researcher to obtain in-depth information on public libraries.

Purposive sampling helped the researcher to select the public library staff members. The regional librarian was a key informant since the district has only one regional librarian. He is the head as well as the overseer for all public libraries in the district.

The Chief and Senior librarians who qualified to respond to the questionnaires were those who had worked in the same library for a period of at least two (2) years, as he/she had enough experience

concerning students as well as developments in library issues. As already mentioned, 12 librarians and 1 regional librarian were selected from the sampled libraries to participate in the study.

### **3.5 Data collection methods**

In quantitative research, data collection involves obtaining numerical data to address the research objectives, questions. During data collection, questionnaires measure the study variables (Burns & Groves 2009: 167). Madjumdar (2008) observes that data collection requires the selection of a mode of collecting data. The choice of any particular method of data collection depends on its appropriateness in answering the areas of investigation in a study. This study made use of questionnaires and observation.

#### **3.5.1 Questionnaires**

Structured self-administered questionnaires assisted with the collection of data from the respondents. A questionnaire is a written list of questions, to which respondents record the answers (Kumar 2012:124). A questionnaire is a structured instrument that is prepared by the researcher to gather information intended to answer the research questions. The administration of a questionnaire involves the respondents completing it. Respondents read the questions, interpret what is expected and then write down the answer in the spaces provided.

#### **3.5.2 Development of questionnaires**

Neuman (2012:175) outlines the issues to consider when constructing questionnaires, - keep it clear, simple and keep the respondents' perspective in mind. The way in which a questionnaire is developed has an impact on the data that it will gather. It is therefore important to take serious measures when constructing them. Neuman (2012) further lists 12 things to avoid when constructing a questionnaire:

1. Avoid jargon, slang and abbreviations

2. Avoid ambiguity, confusion and vagueness
3. Avoid emotional language
4. Avoid prestige bias
5. Avoid double-barrelled questions
6. Do not confuse beliefs and reality
7. Avoid leading questions
8. Avoid asking questions that are beyond the respondents' capabilities
9. Avoid false premises
10. Avoid asking about intentions in the distant future
11. Avoid double negatives
12. Avoid overlapping or unbalanced response categories

The researcher designed three sets of structured questionnaires for senior secondary school students, teacher-librarians and public librarians', (*see* Appendix G, H and I). During the designing process, the researcher had to ensure that questions were clear and easy to understand. The researcher ensured that the layout and sequence of questions was also easy to follow. The questionnaires were more structured limiting the responses of the participants to stated alternatives. Having fixed responses helps to ensure that the answers are given in a frame of reference that is relevant to the purpose of enquiry. Questionnaires were pre-tested before they used in the survey.

### **3.6 Pilot study**

Powell (1997:105) stressed that questionnaires need to be pre-tested or evaluated to improve the standard of questioning, before they are used in a survey. Pretesting is important because it can solve

problems that the researcher did not solve in the design of the instrument (Fowler 2002:114). Brink, van der Walt and van Rensburg (2012:157) also pointed out that the questionnaire should be tested on a small sample and revised if necessary. A pre-test gives the researcher an opportunity to identify questionnaire items that tend to be understood by the participants, or do not obtain the information that is needed (De Vos et al 2011:484).

Prior to the actual survey a pilot survey and a pre-test of the survey instruments were done using a purposive sampling of twenty-three (23) respondents comprising of three staff members from the Serowe public library, eighteen (18) students and two teachers from Swaneng Hill senior secondary school in the Serowe Village. The pretesting questionnaire was delivered personally to the individuals after arranging with public a library and a school. The questionnaires were filled on the same day and feedback obtained from the respondents. This pre-test exercise was done with a specific intention to test the capability of the instrument to be easily understood by the respondents, seeking all the required data and identifying the existing institutions and the key informants in the study area. This was also done in order to confirm the validity of the study, since, according to Best (2003), validity is the extent to which an instrument is able to measure what it is supposed to measure. This afforded the researcher the opportunity to identify questions that could be understood by the respondents. Following the pilot study, relevant adjustments and corrections to the questions were undertaken. Ambiguous questions that did not obtain desired information, poor instructions to questions, unnecessary questions, and missing questions to establish general reactions to the questions as pointed out by Babbie and Mouton (2002:224) were removed or reworked. Some items in the questionnaires were revised based on (Brink, van der Walt & van Rensburg 2012). Minor typographic errors in the questionnaires were also corrected before the administration of questionnaires to the intended target population

The public librarians, teacher librarians and students survey questionnaires, (*see* Appendix G, H and I) were delivered to each of the sampled public libraries and schools by the researcher and two

research assistants. In each school, the teacher librarian who was purposively selected to partake in the study was tasked to distribute the questionnaires to the students who were randomly selected to participate in the study. The selection of the teacher-librarians was based on the fact that they were involved in teaching IL in the schools. In each public library, the senior librarian was appointed to distribute the questionnaire to other library members. The public libraries and schools in the study were sent further information and contacted via telephone by the researcher to organise mutually convenient times for data collection.

The researcher and two research assistants used the questionnaires to collect data relating to the following:

- The availability of the physical facilities' Information about usage of the school library or public library,
- The respondents' perception of the role of the school library or public library,
- Attitudes towards the school or public library service,
- Information concerning the library stock of the school and the public library,
- The relationship between the school and the public library
- IL programs in place in school or public library
- User education provided to learners
- Problems inhibiting IL programs in public libraries
- Suggestions concerning the school or public library.

During the data collection period, the researcher made observations without asking respondents questions. Observing things helps in gathering quick information. Kothari (2004) points out that

observation can be used to gather information on what is going on in a specific situation. Krishnaswami and Ranganathan (2010:169) indicate that observation is a systematic viewing of a specific phenomenon in its proper setting for specific purpose of gathering data for a particular study. Kothari (2004) argues that observation eliminates subjective bias, and information observed by the researcher relates to the current situation in the environment. In this study direct observation was used to supplement the findings obtained through questionnaires. Observation was done in line with what Cohen, Manion and Morrison (2011:457) refer to as unstructured or non-intrusive descriptive observation that allows the researcher to observe and explain physical settings and resources in a specific facility under study. Cohen, Manion and Morrison (2011) opined that observation could be of facts, for example the number of books in a school library. The researcher observed among other things public libraries and school libraries lay out, size, collections and resources, availability of ICT such as computers and type of library catalogue. In undertaking the observation, the researcher was cautious as Mills (2007) cautions, as one embarks on observation; one should not be overwhelmed with the task as it is not humanly possible to take everything that the researcher sees during the observation.

### **3.7 Data analysis**

Processing and analysing data involve a number of closely related operations that are performed with the sole purpose of summarising the collected data and organising this information in a manner that the data addresses the research questions (Powell 2005:130). Data processing operations include editing, classification and tabulating. Editing is a process of examining the collected raw data in order to detect errors, omissions and to correct these where possible (Kumar 2012:140). Classification is a process of arranging data in groups based on common characteristics. On the other hand, tabulation is the process of summarising raw data and displaying the same in a compact form for further analysis (Burns & Groves 2009:97).

Data collected through observation were transcribed by the researcher immediately after. Data were further organised systematically in a standard format that allowed the researcher to draw conclusions about the characteristics and meaning of recorded data (Babbie & Mouton 2001:383). Quantitative data were analysed as described below.

After receiving the responses from the respondents, the researcher edited the raw data in order to ensure that it was free from inconsistencies and was not incomplete. The researcher also scrutinised the completed research instruments in order to identify and minimise errors in the data collection process. The researcher further examined all the answers to all questions and the responses given by the respondents.

The researcher then post-coded the responses, and used an exercise book to record all the responses to each question on the questionnaire for content analysis and to determine how the data was to be analysed. Coding facilitates the organisation, retrieval, and interpretation of data and leads to conclusions based on that interpretation. It enables the researcher to make sense of and analyze data (Sharon 2012:12). This was done to determine the number of respondents who chose a particular option to a closed question.

The other advantages associated with coding are that it also allows the study to be repeated and validated and it makes the method transparent by recording analytical thinking used to devise codes. It also allows comparison with other studies (Shenton 2010:45). From every question provided with options, the responses were grouped together according to the particular option indicated by the respondent. The researcher then drew up a table indicating the question and listed the number of responses.

When all the coding and tabulation was completed, the researcher used the (Statistical Programs for the Social Sciences) SPSS programme to analyse the data. The type of statistical analysis that can be used depends on the type of data collected, how it is collected, and how it is coded (Sharon 2012:18).

Statistical Package for Social Scientists (SPSS) was used to analyse the data collected as part of this research. Raw data was converted into a usable data for analysis, by simply transforming information from the questionnaire to a computer database. Data from the research field were coded, meaningful codes were assigned, usually a number, to each possible response to each question. The analysis of the data and results depended on the information that was being sought. Data were imported from excel spreadsheet into the SPSS template.

The SPSS program for statistical analysis has been described as one of the most influential “tools” for allowing ordinary researchers to do their own statistical analysis (Wellman 1998:71) The programme allowed the researcher to make smarter decisions regarding solving the research problem. Frequencies were run and tables and pie charts indicating the percentages and other variables were produced. There could have been some errors in handling instruments, raw data, data entry, assigning codes, values and value labels. However, in an effort to improve on the quality of data, it was cleaned to improve the quality of the results.

### **3.8 Reliability and validity**

Kumar (2012:147) states that there are three types of validity in quantitative research, namely: face and content validity, concurrent and predictive validity, and construct validity. This study adopted the face and content validity. Face validity is the judgement that an instrument is measuring what it is supposed to measure primarily based upon the link between the questions and the objectives of the study. Each question or item of the research instrument must have a logical link with an objective. Establishment of this link is called face validity. Assessment of the items of the instrument in this respect is called content validity (Kumar 2012:147). Vockell (2003:22) suggests that reliability addresses questions of whether a measuring instrument is consistent or not. Denscombe (2008:22) is of the view that the criterion of reliability refers to whether the research instruments are neutral in their effect and can measure the same result if used on other occasions. Vockell (2003:47) believes

that validity addresses the question of whether a measuring instrument is really measuring what it should measure. On the other hand, McNeill (2005:5) refers to validity as the problem of whether data collected is a true reflection of what is being researched.

To enhance the reliability and validity the researcher adapted questionnaires that have been used previously in similar studies. In addition other survey questionnaires were adapted from related studies such as; Cahoy, (2002), A survey using questionnaire developed from AASL/AECT, (1998), Connecting K-12 and College Standards for IL; Dotan and Aharony, (2008), A survey of IL roles of library media specialists in high schools in Israel; Onen, (2011), A survey of Maru-a-Pula program in Botswana, Onen, (2015), A survey in integration of IL in secondary school curriculum in Botswana ; Henri, Hay and Oberg ,(2002), A study of the school library-principal relationship; Guidelines for research and practice, Rojtas-Milliner, (2006), A survey of school library change process and the socio-political realities of implementing a curricular integrated high school IL programme.

The questionnaires were meant to measure the extent to which public libraries have played their role of enhancing the ILS of senior secondary school students in the Central District in Botswana. From the data analysed it was clear that the required information on the role of public libraries and IL corresponded with what has been documented, hence the data collected was reliable. The data was first-hand information obtained from the selected respondents, comprising public librarians, students and teacher librarians from libraries in various schools. This category of respondents knew the real situation taking place in the public libraries and schools in the Central District in Botswana. The collected data was in line with the findings of existing documented literature. The use of the questionnaire and observation enhanced validity of the study as advised by Creswell (2003) and Merriam (2002).

### 3.9 Ethical considerations

The study involved the use of schoolchildren whose ages ranged between 17-18 years. As a point of entry, the researcher requested for an introductory letter from the University of South Africa. The letter explained the purpose of the research. The researcher then personally visited the Ministry of Education, presented the letter, and further briefed the education officer responsible for senior secondary schools in the Central District, on the purpose of the study. The education officer then informed the heads of the schools which had been selected for the sample about the planned exercise that was to take place. The researcher had to follow the stipulated steps in carrying out the exercise since the Botswana Education system maintains that, once an individual obtains permission from the Ministry of Education and the District Education Officer, one can proceed to use schools for research.

According to Vaus (2002) any survey will be shaped by three broad sets of considerations comprising the technical, practical and ethical considerations. The technical (sample design, questionnaire administration, and analysis) aspects for this study have been discussed already above. This section therefore presents the ethical issues considered in undertaking this study.

According to Seaman (1995), ethics is concerned with the attempt to formulate codes and principles of moral behaviour that ensures that the ethical codes or considerations for research takes on a universal form, which must be followed, regardless of the place and circumstances in which the researcher finds himself/herself. In view of this analysis, the study developed around five (5) basic ethical responsibilities as suggested by Berg (1989); Seaman, (1995) and Vaus (2002). These responsibilities are voluntary participation, informed consent, confidentiality and anonymity, no harm, and privacy. Below is a summary of each of these responsibilities;

- a. **Voluntary participation:** Since the collection of data involved the use of the respondents' time, seeking their personal information as well as their views on the teaching role of public

librarians as a means to enhance the ILS of senior secondary school students in the Central District, it was important to clarify the objectives of the study. These objectives formed the cover page of the questionnaire. They were also informed that the study was for academic purposes although the results could be used in improving library service delivery in Botswana. It was made clear to the respondents that they had been selected through a purposive and a random sampling technique, where every respondent had an opportunity to be included in the sample and that other respondents were included due to their expertise in the field of public and school libraries. They were also told that their participation was very important as it could lead to the achievement of the set objectives pertaining to this particular study.

- b. Informed consent:** This is related to the above aspect in the sense that it is the informed consent of individuals to participate in the study that showed the exercise of their freedom of choice. This means that the respondents selected for this study were free from any element of fraud, deceit, duress or similar unfair, inducement or manipulation (May 2001). As the research took off, respondents were reminded of the basic purpose of the study and the fact that their responses would be used strictly for academic purposes. Concerning government institutions, permission was sought from the Botswana National Library Services as well as the Ministry of Education. Prior arrangements or appointments were made for questionnaires to be delivered and administered. In most cases, the head or director of the department/division was consulted, who then referred the researcher to the appropriate officer in charge. With the given consent of the head, the public librarians, teacher librarians responsible for libraries in various schools and learners, provided the raw data that forms part of this study.
- c. Confidentiality and anonymity:** Confidentiality means that the researcher can match the names with responses but ensure that no one else will have access to them (Vaus 2002). The respondents were assured of the confidentiality of the responses that they gave. The names of

the respondents remained anonymous and confidential. The information provided by respondents was treated with confidentiality and used solely for the purpose of this research. Anonymity means that the researcher would not and cannot identify the respondent (Vaus 2002; Babbie 2010). Anonymity was ensured particularly by using codes so that the responses given could not be associated with any respondent. For example, the students' questionnaires were coded as child 1, child 2, child 3 etc.

- d. **No harm:** The research did not jeopardise or harm any of the respondents in any way physically or psychologically. This was evident in their zeal to participate in the research, especially the students.
- e. **Privacy:** Vaus (2002) notes that while the principles of voluntary participation and confidentiality are partly based on the principle of a person's right to privacy, it extends beyond these matters. He further explains that privacy can also mean that people can expect to be free from intrusion. Though the researcher had been granted permission to carry out the research, participants had to sign consent forms as stipulated in the University of South Africa's ethical research code. All subjects completed and signed the consent form. The signing of the consent form was an indication that they participated willingly and without duress.

### **3.10 Summary**

This chapter has presented the research methodology. The research methodology covered aspects such as the research approach, the research design, and the survey. It also highlights how the participants were randomly and purposively sampled for the study. It also outlines how the schools and libraries were sampled. Attention was also paid to the data collection instruments that were used to collect raw data. Data analysis, reliability and validity were also dealt with. Other aspects included

the pilot study and ethical considerations. The next chapter will deal with the presentation of the research findings.

## **CHAPTER 4**

### **PRESENTATION OF RESULTS**

#### **4.1 Introduction**

The previous chapter dealt with the research methodology applied in this study. The purpose of this chapter is to focus on the presentation and analysis of data gathered from the questionnaires and observation. Johnson (2012:n.p) defines data analysis as, “a process used to transform, remodel and revise certain information with a view to reach a certain conclusion for a given situation or problem”. DeVos, Strydom, Fouch and Delpont (2011) further add that it involves reducing the volume of raw data, sifting significant from trivia, identifying significant patterns and constructing a framework for communicating the essence of what the data reveals.

The investigation took the form of a survey of some sampled senior secondary schools and public libraries in the district. The research used a mixed method approach and the study thus involves both quantitative and qualitative data analysis. The data were analysed and presented in appropriate themes. In line with research ethics, data presented in this chapter is not attributed directly to any respondent(s) or a specific ministry. Data is presented in the form of tables and figures. Responses were generalised with the aim of establishing and making recommendations on the role that public libraries may play in ILs of senior secondary school students in the Central District in Botswana.

#### **4.2 Response rate**

The researcher aimed at administering 120 questionnaires to secondary school students, 12 public librarians and 12 librarians or teacher librarians at the school libraries. One hundred and eight (108) of the 120 secondary school students completed the questionnaire giving a 90% response rate. Nine (9) of the 12 librarians or teacher librarians completed the questionnaire giving a 75% response rate and eleven (11) of the 12 members of the library staff completed the questionnaire giving a 92%

response rate. The data presentation of results in this chapter is in three categories namely: senior secondary school students, librarians or teacher librarians and public librarians. However, where similar questions have been asked to the same category of respondents these are discussed together under one category.

### 4.3 Students' responses.

In this section, an analysis of the information obtained from students' responses to the questionnaire is provided. The students' responses are briefly tabulated in the various tables and figures below. The meaning or explanations of the responses are given below each table. In question 1, the senior secondary school students were requested to indicate if there is a library at their school.

#### 4.3.1 Is there a library at the school?

**Table 4.1 Availability of a library at school**

Availability of a library	N	%
Yes	108	100
No	0	0
<b>Total</b>	<b>108</b>	<b>100</b>

Source: Survey Data 2016

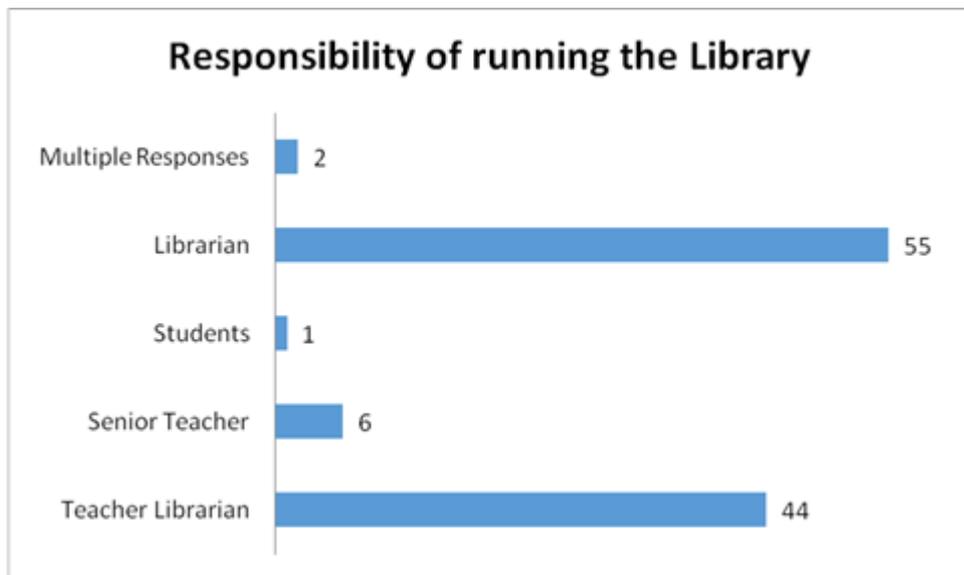
The results in Table 4.1 above show that all the senior secondary school students (100%) who responded to the question indicated that there was a school library at their schools. The availability of libraries in all the senior secondary schools was attributed to the adoption of the recommendations of the Kedikilwe Commission of 1993 that proposed that additional facilities such as science laboratories and libraries should be constructed in all the senior secondary schools in Botswana. As a

result, and as indicated by all the respondents, senior secondary schools have already benefited from the recommendations of this commission.

#### 4.3.2 Who is responsible for running the library and teaching IL?

In Question 2 the students were asked, “Who is responsible for running the library at your school”? The students had to indicate the person responsible for running the school library. The responses were grouped into the following categories; teacher librarian, head teacher, senior teacher, students and librarian. The results are shown in Figure 4.1 below.

**Figure 4.1: Responsibility for running the school library and teaching IL**



Source: Survey Data 2016

The results in Figure 4.1 above show that the majority of school libraries were managed by librarians as indicated by 55 of the total number of respondents (n=55). On the other hand, forty-four (44) (n=44) respondents indicated that teacher librarians managed the school libraries while six (6) respondents indicated that senior teachers managed the school libraries. From the responses, it is clear that school libraries were managed by librarians, teacher librarians and senior teachers. Lastly,

a single (1), (n=1) respondent indicated that the senior secondary school students managed libraries in their schools.

### 4.3.3 Computers with access to the Internet

**Table 4.2: Computers with access to the Internet**

<b>Computers in the library are connected to Internet</b>	<b>N</b>	<b>%</b>
Yes	84	77.8
No	24	22.2
<b>Total</b>	<b>108</b>	<b>100</b>

Source: Survey Data 2016

The question aimed at establishing connectivity to the Internet at the school libraries. The majority of the respondents, 78%, indicated that they had computers in the school libraries and that the computers were connected to the Internet, whilst 22% of them indicated that they had computers in the libraries but there was no Internet connection.

### 4.3.4 Is there a public library within the village?

**Table 4.3: Existence of a public library within the village**

<b>Existence of a public library</b>	<b>N</b>	<b>%</b>
Yes	52	48
No	56	52

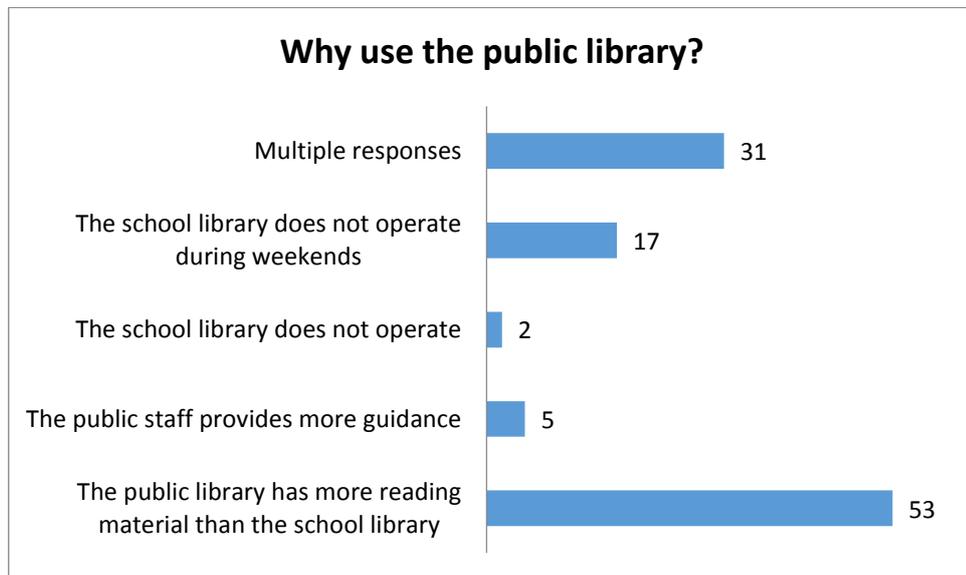
<b>Total</b>	<b>108</b>	<b>100</b>
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Source: Survey Data 2016

Efforts at meeting the information needs of the community in Botswana have been undertaken by the government through establishing public libraries in all the major villages in line with one of the pillars of Vision 2016 that aimed at creating an educated and informed nation. The question “Is there a public library within the village” sought to establish the existence of public libraries within the major villages. A small majority of the respondents (52%) indicated that there was no public library within their village while (48%) indicated that there was a public library in their village.

#### 4.3.5 Why do you prefer to use the public library?

**Figure 4.2: Preference for using the public library**



Source: Survey Data 2016

School libraries exist in all the sampled senior secondary schools and public libraries exist in the major villages or next to the villages where the sampled schools exist. Due to high patronage to public libraries by the senior secondary school students, it was in the interest of the researcher to

establish why students preferred to use public libraries over school libraries though they were using both the school and public library. The majority of the respondents, 53 (n=53) indicated that they preferred to use the public library rather than the school library because the public libraries had more reading materials. The second highest category of responses namely 31 of the total respondents (n=31) provided different views indicating preferences such as the fact that there were more reading materials in public libraries as compared to the school libraries, public library staff provided more guidance and the school library does not operate during weekends. Seventeen (17) of the total respondents (n=17) indicated that they preferred the public library as it was open during weekends, while 5 (n=5) respondents indicated that the public library staff provided more guidance. Only two (2) of the total respondents (n=2) indicated that the school library did not operate effectively. Students prefer to use the public library over the school library because of the availability of more resources.

#### 4.3.6 Are you guided or assisted on how to use the public library?

**Table 4.4: Assistance from public library staff on library usage**

<b>Assistance from public library staff</b>	<b>N</b>	<b>%</b>
Yes	94	87
No	14	13
<b>Total</b>	<b>108</b>	<b>100</b>

Source: Survey Data 2016

This question “Are you guided or assisted on how to use the public library” sought to establish if the students got some assistance from the public library staff members on how to use the library. Most of

the respondents, namely 87%, indicated that from the very first time that they used the public library they were assisted by public library staff members while 13% indicated that they did not seek for any assistance from public library staff. Those who responded indicated that they were assisted through the information desk and some went guided tours of the library. A total of 83% of the respondents indicated that the attitude of public library staff was friendly and that they were more than willing to help at all times, while 17% indicated that public library staff were unfriendly. Students get the desired assistance from the friendly library staff members.

#### **4.3.7 Have you acquired certain skills from the guidance and assistance offered by the public library staff members?**

**Table 4.5: Acquisition of certain skills**

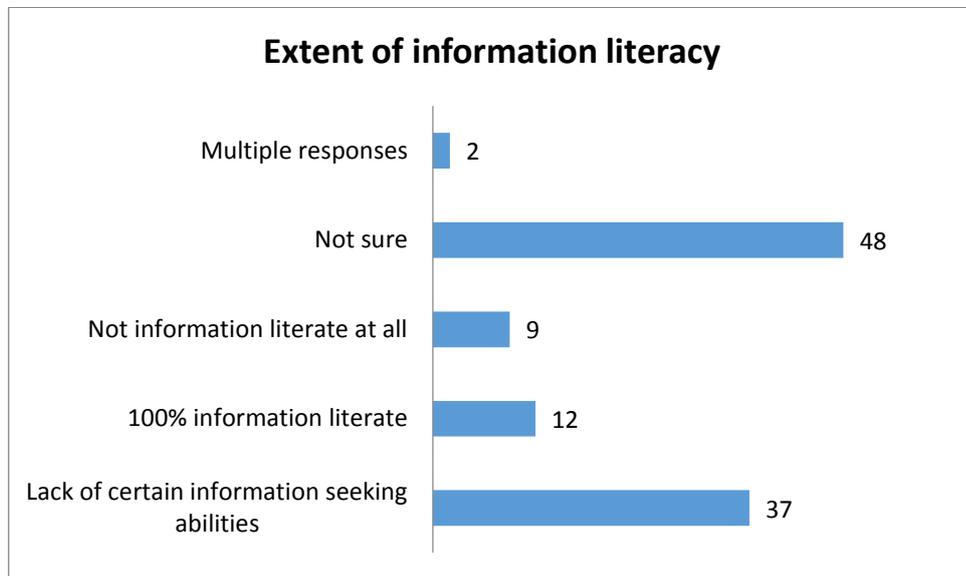
<b>Acquisition of certain skills</b>	<b>N</b>	<b>%</b>
Yes	95	88
No	13	12
<b>Total</b>	<b>108</b>	<b>100</b>

Source: Survey Data 2016

IL constitutes an important component of the researcher's study focus; hence, it was important to establish the extent to which the students had acquired certain skills due to some guidance and assistance that was offered to them by the public library staff members. The majority of the respondents (88%) indicated that they had acquired certain skills resulting from the guidance and assistance that they received from the public library staff members, while 12% indicated that they had not acquired any skills.

#### 4.3.8 To what extent do you think you are information literate?

Figure 4.3: Degree of IL

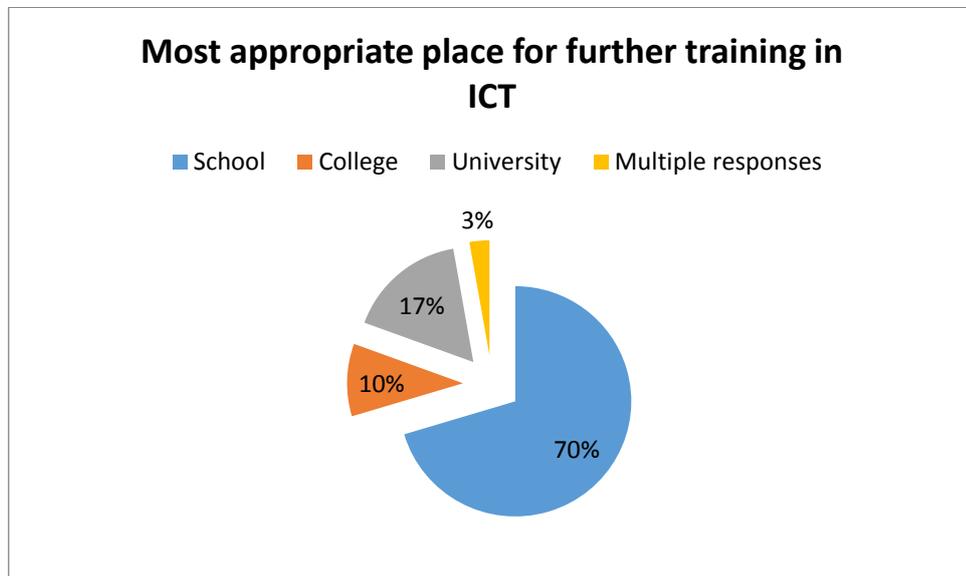


Source: Survey Data 2016

The researcher wanted to establish the extent to which the senior secondary school students were information literate. The majority of the respondents, 48 (n=48) indicated that they were not sure of the degree to which they were information literate. There could have been some aspects of IL that they might know but they were not aware that it was part of being information literate. The second highest category namely 37 (n=37) indicated that they were not information literate as they lacked certain information seeking abilities. On the other hand, 12 (n=12) respondents indicated that they were 100% information literate. In addition, 9 (n=9) respondents indicated that they were not information literate at all, while 2 (n=2) respondents gave many responses to the question. Students could not ascertain the degree of their ILS.

#### 4.3.9 What do you think is the most appropriate place for further training in ICT?

Figure 4.4: Most appropriate place for further training in ICT



Source: Survey Data 2016

The question, “What do you think is the most appropriate place for further training in ICT” was aimed at establishing the most appropriate place for further training in ICT. The majority of the respondents, 70%, indicated that the most appropriate place for ICT training was in a school environment while the second highest category, namely 17% indicated the university as the most appropriate place. On the other hand, 10% of the respondents indicated the college as the most appropriate place, while 3% indicated a school, college and university being the most appropriate places for further training in ICT.

Students were further asked about the most appropriate form of training. The majority of the respondents, (35%) indicated that a workshop would be the most appropriate form of training, while (31%) preferred classroom demonstrations. Thirty-three (33%) of the respondents indicated one-on-one interaction as the most appropriate form of training while one (1%) respondent indicated one-

on- one, demonstrations, class demonstrations and workshops. Students’ felt that workshops and one-on-one demonstrations would be the best forms of training.

#### **4.4 The role of teacher-librarians in enhancing the IL of senior secondary school students.**

In this section, a presentation of the responses obtained from nine (9) teachers comprising librarians from the six (6) schools, to the questionnaire, is provided. The responses of the librarians or teacher librarians are briefly tabulated in the tables and figures below. In question 1, the teachers were requested to indicate the types of information sources available in the school libraries.

##### **4.4.1 What types of information sources are available in the school library?**

**Table 4.6: Type of information sources available in the school library**

<b>Type of information sources available in the library</b>	<b>N</b>	<b>%</b>
Books	8	88
Electronic sources (Data and web pages)	1	12
<b>Total</b>	<b>9</b>	<b>100</b>

Source: Survey Data 2016

The question, “What type of information sources is available in the school library” sought to establish the dominant type of material sources available in the school libraries. The majority of the librarians and teacher librarians 8, (88%) who responded to the question indicated the dominant type of information sources as being books, mostly academic books, encyclopaedias and dictionaries. Only one (1) respondent (12%) indicated electronic sources as being the type of information source

available in their school library. The most predominant information sources in school libraries are books. The variety of information sources in the school libraries should meet the various user needs of the senior secondary school students.

#### 4.4.2 Does the school library meet the information needs of students and teachers?

**Table 4.7: Is the library meeting the information needs of teachers and students**

<b>Library meeting information needs</b>	<b>N</b>	<b>%</b>
Yes	2	22
No	7	78
<b>Total</b>	<b>9</b>	<b>100</b>

Source: Survey Data 2016

A school library is expected to meet the information needs of teachers and students. During the survey, the researcher sought to establish the extent to which the school library was meeting the information needs of senior secondary school students and teachers. Seven (7), constituting 78% of the nine (9) respondents indicated that the library did not meet the information needs of teachers and students while two (2) constituting 22% indicated that the library met the information needs of teachers and secondary school students. The respondents who indicated that the library did not meet the information needs of students and teachers attributed it to lack of Internet connectivity, outdated books and the library not being open at all times as the teacher librarians had other classes to teach.

#### 4.4.3 Do teachers use the library for lesson preparation?

**Table 4.8: Use of the library for preparation of lessons**

<b>Use of the library for preparation by teachers</b>	<b>N</b>	<b>%</b>
Yes	5	56
No	4	44
<b>Total</b>	<b>9</b>	<b>100</b>

Source: Survey Data 2016

This question was aimed at establishing the level at which the teaching staff members of the schools under study used their school libraries to prepare their lessons. Table 11 above clearly indicates that the majority, namely five (5) of the respondents constituting 56% indicated that they used the library for the preparation of their lessons whilst four (4), constituting 44%, indicated that they did not use the library for preparing their lessons. Some teachers use the library and others do not.

#### 4.4.4 Do all classes have a library period on the school timetable?

**Table 4.9: Existence of a library period on the school timetable**

<b>Library period</b>	<b>N</b>	<b>%</b>
Yes	4	44
No	5	56
<b>Total</b>	<b>9</b>	<b>100</b>

Source: Survey Data 2016

A library period constitutes an important class period for students who need to access the Internet or for those who would like to do research and find information as well as work in a silent environment. Forty-four percent (44%) of the students indicated that they had a library period while fifty-six percent (56%) indicated that they did not have a library period. Out of the responses from nine (9) teachers who responded on the library period, four (4) respondents, constituting 44% indicated that they had a library period while five (5) constituting 56% indicated that they did not have a library period. Despite the non-existence of a library period, students accessed the library during their free period where there was a librarian or when the teacher librarian was also free.

Students were further asked about the frequency of a library period on the school timetable. The majority of the respondents namely, 54% indicated that there was a library period once a week while 46% indicated that there was a library period every day. The frequency of the library period varied from school to school.

#### 4.4.5 Do you teach IL as a subject to the students?

**Table 4.10: Do you teach IL**

<b>Do you teach IL</b>	<b>N</b>	<b>%</b>
Yes	7	78
No	2	22
<b>Total</b>	<b>9</b>	<b>100</b>

Source: Survey Data 2016

The teaching of IL constitutes an important development in this ICT era, hence the question was aimed at finding out if the librarians and teacher librarians taught IL. Seven (7) of the nine (9) respondents constituting 78% indicated that they taught IL to the senior secondary school students

while the other two (2) respondents constituting 22% indicated that they did not teach IL. Some teachers offered IL to the students and others did not.

#### 4.4.6 What methods do you use in teaching IL?

**Table 4.11: Methods used in teaching IL**

<b>Methods of teaching IL</b>	<b>N</b>	<b>%</b>
Library Instruction	6	67
Teach students how to find appropriate study material	2	22
Borrow books	1	11
<b>Total</b>	<b>9</b>	<b>100</b>

Source: Survey Data 2016

The question, “What methods do you use in teaching IL” was aimed at establishing the various methods that are used by librarians and teacher librarians to teach IL. The majority of the respondents namely six (6) out of nine (9) constituting 67% indicated that they offered IL through various methods that included instructions on how the library works. Two (2), constituting 22% of the respondents indicated that they taught IL by teaching students how to identify, locate, retrieve and use information independently. One (1) respondent, constituting 11% indicated that students visited the library to borrow books. Different methods were used to teach IL to the students.

#### 4.4.7 What elements of IL skills programmes are taught to students?

**Table 4.12: Elements of IL taught to students**

<b>Elements of IL which are taught</b>	<b>N</b>	<b>%</b>
Orientation, training and guidance	6	67
User education	3	33
<b>Total</b>	<b>9</b>	<b>100</b>

Source: Survey Data 2016

The researcher wanted to establish the elements of IL that were taught to students. Six (6) respondents constituting 67% of the nine librarians or teacher librarians indicated that the elements of IL which were taught to students were, library orientation, which included aspects such as the library layout and types of materials found in the library. In addition, the respondents indicated that they offered training, guidance or instruction on how to make effective use of library material as part of the IL skills programme offered to students. Three (3) of the respondents constituting 33% indicated that the element of IL skills programme that they offered to students was user education. The outcome of the survey results indicated that there were some elements of IL that were taught by the librarians and teacher librarians which were important for the senior secondary school students.

#### 4.4.8 Challenges inhibiting the teaching of basic IL to students

**Table 4.13: Challenges inhibiting the teaching of basic IL to students**

<b>Challenges inhibiting the</b>	<b>N</b>	<b>%</b>

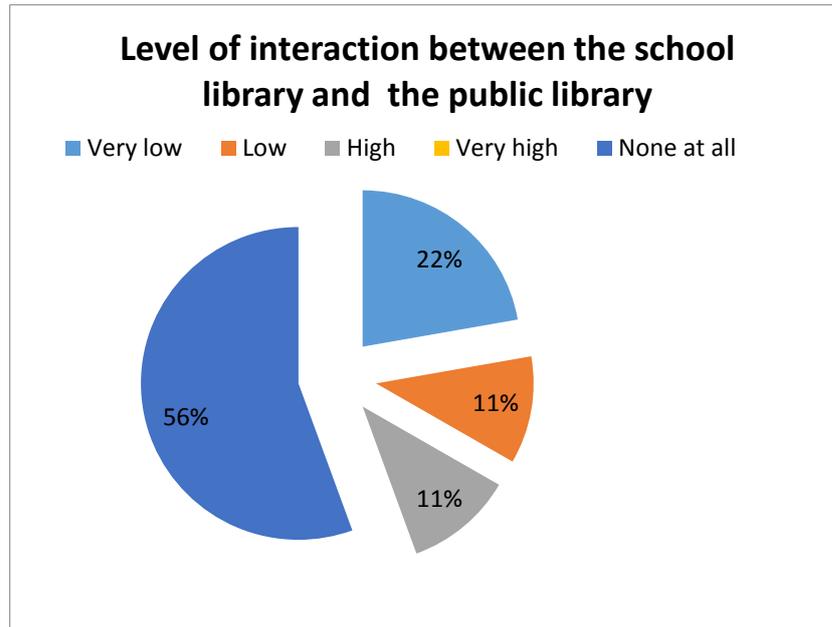
<b>teaching of IL</b>		
Multiple responses	7	68
Other – not part of the school curriculum	2	22
<b>Total</b>	<b>9</b>	<b>100</b>

Source: Survey Data 2016

The question, “What challenges are inhibiting the teaching of basic IL to secondary school students” sought to establish the challenges that were being experienced in teaching IL by librarians or teacher librarians within secondary schools. The results of the survey clearly indicate that the teaching of IL to senior secondary school students was not being undertaken and the researcher sought to establish the reasons for that. Seven of the 9 librarians or teacher librarians, constituting 68% indicated several reasons such as lack of qualified personnel, lack of monitoring the operation of school libraries and inadequate funding, as challenges that prevent them from teaching basic IL to senior secondary school students. Two (2) constituting 22% of the respondents indicated that IL was not part of the school curriculum hence they did not teach it effectively. IL was not given the same weight as other subjects because it is not part of the curriculum.

#### 4.4.9 What level of interaction exists between the school library and the public library?

Figure 4.5: What is the level of interaction between the school library and public library



Source: Survey Data 2016

The above question on “The level of interaction between the school library and the public library” was asked to establish the relationship between the school and public library. Public libraries and school libraries exist within the same community and there is need for high levels of interactions between these institutions. The majority of the students utilised public libraries hence their needs should be catered for since not all schools have qualified librarians and the school libraries are not well stocked as compared to public libraries. As a result, guidance should be sought from public libraries since they have qualified members of staff and better materials. The majority of the respondents, namely 56% indicated that there was no interaction at all between the school libraries and the public libraries. 22% of the respondents indicated that the levels of interaction with public libraries was very low, 11% indicated that the level of interaction was low whilst the same percentage, 11% indicated that the level of interaction was high. Public libraries and schools do not have any interactions and relationships.

#### 4.4.10 Do public library staff visit school libraries

**Table 4.14: Any visits by public library staff to school libraries**

<b>Visits by public library staff</b>	<b>N</b>	<b>%</b>
Yes	3	33
No	6	67
<b>Total</b>	<b>9</b>	<b>100</b>

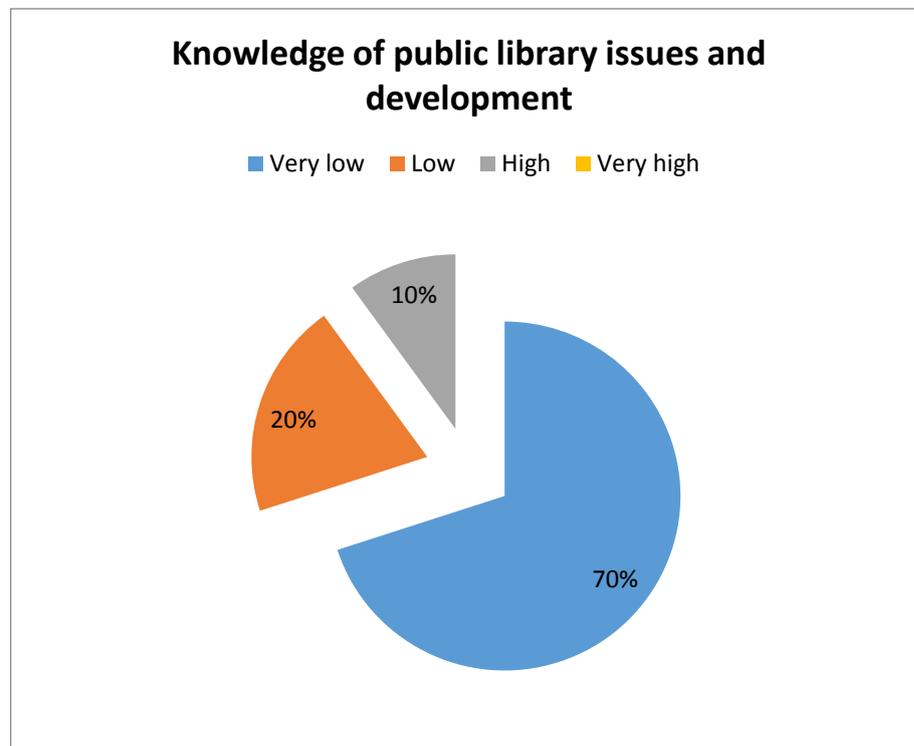
Source: Survey Data 2016

The question on whether there were some visits to the school library by the public library staff was meant to establish the relationship between the school and public library staff, in order to discuss how best they could meet or improve on the user needs of their major users-senior secondary school students. Six (6) of the nine respondents, (67%) indicated that there were no visits by public library staff to school libraries while three (33%) indicated that there were some visits by public library staff to their school libraries.

During the survey, the researcher also sought to establish the relationship between the school libraries' and the public libraries' staff members, by asking if there were any specific visits by the school library staff to the public library. Eight (8) respondents, (89%) indicated that there were no visits by school library staff to the public libraries. Three (3) of the respondents, constituting 11% indicated that school library staff often visited the public library for collaboration on IL issues as they all served senior secondary school students. Responses by the majority indicated that the relationship between the school libraries and the public libraries did not exist or was very low.

#### 4.4.11 Do you have any knowledge of public library or school library administration and development?

Figure 4.6: Knowledge of library administration and development



Source: Survey Data 2016

The researcher sought to establish the relationship between school libraries and public libraries by establishing the level of knowledge of public library issues and development among the school librarians or teacher librarians. Seven (7) of the nine (9) respondents, constituting 70% indicated that their level of knowledge about public library issues and development was very low. Only two (2) of the respondents, 20%, indicated that their knowledge of public library issues and development was low while one, 10%, indicated that their level of public library issues and development was high. Librarians from both institutions do not have knowledge about library issues.

#### 4.5 The role of public librarians in enhancing the IL of senior secondary school students.

In this section, an analysis of the responses obtained from eleven (11) public library staff from the six (6) libraries, to the questionnaire, is provided.

The responses of the public library staff are briefly outlined in the tables and figures below.

In question 1, the public librarians were requested to indicate if there are visits to the public library by secondary school students.

##### 4.5.1 Do senior secondary school students visit the public libraries?

**Table 4.15: Visits by senior secondary school students to public libraries**

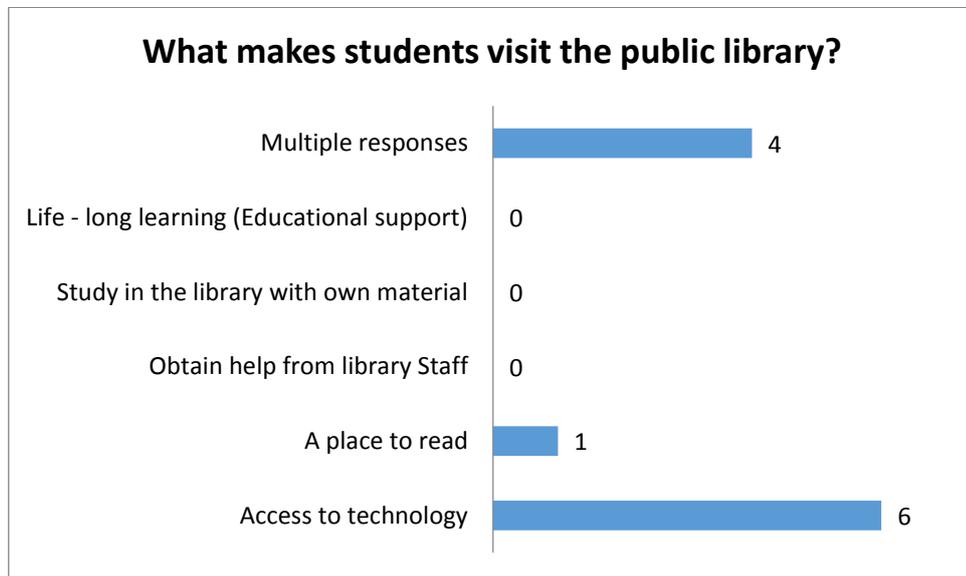
<b>Visits by students to libraries</b>	<b>N</b>	<b>%</b>
Yes	11	100
No	0	0
<b>Total</b>	<b>11</b>	<b>100</b>

Source: Survey Data 2016

The question, “Are there visits by secondary school students to public libraries” sought to establish the level at which senior secondary school students used the public libraries. All the eleven respondents, constituting 100% indicated that there were visits to the public libraries by the senior secondary school students. Students make use of the public library.

#### 4.5.2 What makes students visit the public library?

Figure 4.7: Why secondary school students visit the public library



Source: Survey Data 2016

The researcher wanted to establish reasons why the secondary school students preferred to use the public libraries as opposed to the school libraries. Six (6) of the eleven (11) respondents indicated that the senior secondary school students preferred to use the public library so that they could access the Internet. The second highest number of respondents four (4) out of eleven (11) used the public library to access technology, variety of books, magazines and newspapers, a place to read, to get assistance from the library staff and the provision of lifelong learning by the public library (educational support). Only one (1) respondent indicated that the secondary school students preferred the public library as it offered a peaceful and quiet environment for reading. Students preferred the library because it offered a variety of facilities and resources.

#### 4.5.3 Does the public library offer any form of support to senior secondary school students?

**Table 4.16: Support to senior secondary school students**

<b>Support to secondary school students</b>	<b>N</b>	<b>%</b>
Yes	10	91
No	1	9
<b>Total</b>	<b>11</b>	<b>100</b>

Source: Survey Data 2016

The question, “Does the public library offer any form of support to senior secondary school students” sought to establish the relationship between the public library and the secondary school students. Ten (10) out of eleven (11) respondents, constituting 91% indicated that they offered support to senior secondary school students, while one (1), 9% indicated that they did not offer any support to senior secondary school students. Public librarians offered support and guidance to the students.

#### 4.5.4 Do you think teaching IL is the role of the public library?

**Table 4.17: Is teaching IL the role of the public library**

<b>Is teaching IL the role of the public library</b>	<b>N</b>	<b>%</b>
Yes	8	63
No	3	27
<b>Total</b>	<b>11</b>	<b>100</b>

Source: Survey Data 2016

While it is generally acknowledged that the teaching of IL is important, the researcher sought to establish some views on the responsibility for teaching IL. This became relevant since the senior secondary school students seemed to prefer to use the public library to the school library. Eight (8) respondents, constituting 63% indicated that teaching IL was the responsibility of the public library. However, three (3) respondents, constituting 27% indicated that teaching IL was not the role of the public library but that of the school librarian or teacher librarian. It is the responsibility of the librarians to teach IL to all community members.

#### 4.5.5 Do you offer IL training to senior secondary school students?

**Table 4.18: Offering IL to senior secondary school students**

<b>Offering IL to secondary school students</b>	<b>N</b>	<b>%</b>
Yes	4	36
No	7	64
<b>Total</b>	<b>11</b>	<b>100</b>

Source: Survey Data 2016

The question, “Do you offer IL training to secondary school students” was aimed at establishing if the public libraries were offering IL training to assist the researcher to answer the research questions. There was a consensus that IL should be taught to secondary school students but the question was ‘who should undertake it? Only four (4) of the respondents, constituting 36% indicated that they offer IL to secondary school students since the students are part of the members of the community and the senior secondary school students were their major patrons. On the other hand, seven (7)

respondents, constituting 64% indicated that they did not offer IL to secondary school students since it was not their mandate. Public librarians offer IL to the students unknowingly. All the services they provide constitute IL.

#### 4.5.6 How do you offer IL in the public library?

**Figure 4.8: Offering IL in the public Library**



Source: Survey Data 2016

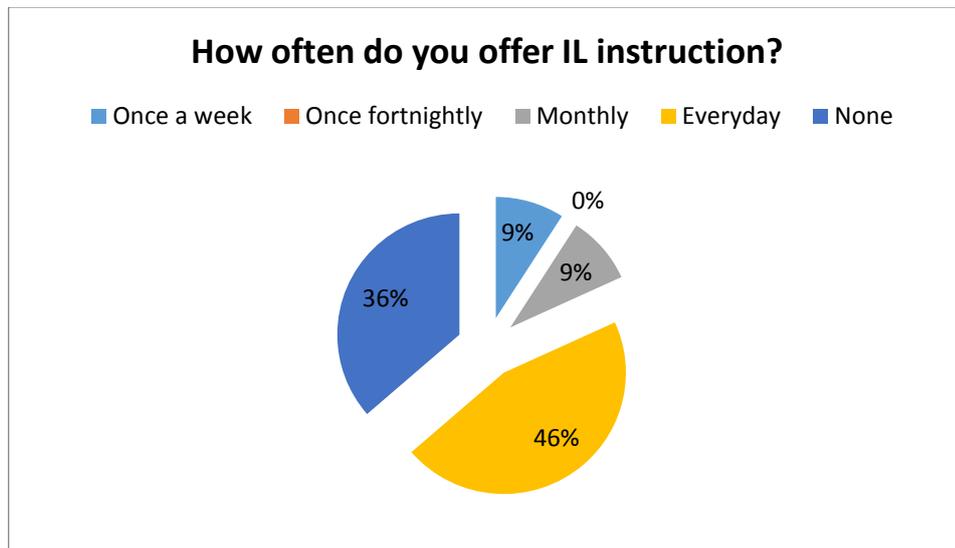
Public libraries offered IL in various forms. Six (6) of the eleven respondents, (n=6) indicated that public libraries offered IL in the form of ICT training, reference interviews and partnerships with schools. Three (3) respondents, (n=3) indicated that public libraries offered IL in the form of ICT access and training, while two (2) respondents, (n=2) indicated that the public library offered IL in the form of reference interviews. However, the current scenario is that public libraries offered IL in the form of ICT training. Follow up sessions on an individual basis are often undertaken during the monitoring process when people encounter problems.

The researcher also wanted to establish who offered IL training to members of the community and the students. The majority of the respondents, namely 37%, indicated that non-professionals (non-

librarians i.e. -Information and Technology administrators) offered IL in the public libraries. Twenty-seven, (27%) of the respondents indicated that the administrative staff undertook IL training, whilst 18% indicated that professional librarians also undertook it. A further 18% of the respondents indicated that para professional staffs (library and information science) undertook it. In terms of qualifications for the various library staff members offering IL, four (4) staff members constituting, 37% of the library staff who undertook in IL training possessed a Master’s degree that was related to libraries, three (3) or 27% had degrees in other fields, two (2) or 18% had undergraduate degrees that were related to the libraries and one (1), constituting 18% had a form five (5) certificate.IL training was offered by librarians and IT officers.

#### 4.5.7 How often do you offer IL instruction?

**Figure 4.9: Frequency of IL instruction**



Source: Survey Data 2016

The question, “How often do you offer IL instruction” sought to establish the frequency at which the public library offered such training. Five (5) respondents, (46%) indicated that they offered IL instruction every day, while four (4), (36%) indicated that they did not offer IL at all. One (1)

respondent, (9%) indicated that they offered IL once a week and the other one, (9%) indicated that they offered IL once a month.

Librarians were also asked about the duration of a training session to ensure that a trainee was competent in IL. Eight (8) of the respondents, (n=8) indicated that it took a month to complete a training session in IL, while three (3) respondents, (n=3) indicated that it took a week to complete a training session. Another question was asked on the adequacy of time allocated for training. Eight (8) respondents, (n=8) who indicated that IL instruction was undertaken in one month indicated that the time allocated for IL training was enough whilst the other three (3) respondents, (n=3) who indicated that it took one week indicated that the time allocated was not enough for IL training. The frequency, duration and the adequacy of time allocated for training varied from library to library.

#### 4.5.8 At what Level should IL instruction be taught?

**Table 4.19: Level at which IL should be taught**

<b>Level of instruction</b>	<b>N</b>	<b>%</b>
Pre-primary	0	0
Primary education	9	82
Secondary education	2	18
<b>Total</b>	<b>11</b>	<b>100</b>

Source: Survey Data 2016

One of the major challenges cited by public librarians was the lack of IL skills amongst senior secondary school children. In an effort to address this issue, the researcher wanted to establish the appropriate level of education at which IL should be taught. Nine (9) respondents (82%) indicated that IL should be taught at primary school level while two (2), 18% indicated that it should be

taught at secondary school level. No respondent indicated that IL should be taught at pre-primary school level. IL should be taught at primary and secondary schools.

#### 4.5.9. Challenges being experienced in offering IL at the public library

**Table 4.20: Challenges in offering IL**

Challenges in offering IL	N	%
Yes	10	91
No	1	9
<b>Total</b>	<b>11</b>	<b>100</b>

Source: Survey Data 2016

The question “What challenges are experienced in offering IL at the public library” was asked to public librarians. While public librarians were aware that they should offer IL, they noted that there were some challenges, being experienced which made them fail to provide IL as expected. Ten (10) respondents, (n=10) indicated that libraries experienced problems in ensuring effective IL delivery while one (1) indicated that there were no problems experienced by libraries in ensuring effective IL delivery. Public librarians provide IL to the community with the available resources and facilities.

#### 4.6. Summary

The role of public libraries in enhancing the IL skills of senior secondary students was not being effectively implemented and that was attributed to the poor relationship between public libraries and school libraries. School libraries did not seem to teach the basics of IL and public libraries were not eager to take up this role, as they believed that it was the role of the school librarian or teacher librarian. Students did not know how to search for information and there was no one taking full

responsibility for IL or any other skills required as part of IL. Librarians, teacher-librarians and public librarians seemed to be equally indifferent as to who should take the responsibility.

The following chapter deals with data analysis and interpretation.

## **CHAPTER FIVE**

### **DATA INTERPRETATION**

#### **5.1 Introduction**

The purpose of this chapter is to discuss the research findings presented in chapter four. The research questions and objectives on which the interpretation of the results is based are found in section 1.2.2 and 1.2.3 of chapter 1. The process of data interpretation is important in presenting the key issues that were under the spotlight in the research project. Data interpretation in this chapter followed the order in which the results were presented and analysed in chapter four.

#### **5.2 Interpretation of students' responses**

##### **5.2.1 Is there a library at the school?**

The study revealed that all the six (6) sampled senior secondary schools in the Central District of Botswana had libraries. The existence of libraries in all the senior secondary schools was attributed to the implementation of the Kedikilwe Commission of 1993 that recommended that facilities such as libraries should be provided in all the senior secondary schools. The Revised National Education Policy (RNEP) of 1998 also recommended resource based learning in schools that could be achieved through school libraries. The results are in agreement with previous studies that have emphasised the importance of the school library towards students' academic achievement and ILS enhancement. Douglas and Wilkinson (2014) assert that a school library has a powerful role in raising students' literacy levels and improving their knowledge. Neumann (2011:78) notes, "Libraries are vital for children's achievement and developing informational needs. Children need libraries in their classrooms, schools, communities. However, not all children will use the materials fully without supportive adults and librarians". This is an indication that the success of a school library is heavily

dependent on the existence of a librarian. Librarians play an important role in a senior secondary school environment.

The IFLA/UNESCO School Library Manifesto (2006) stipulates that the mission of a school library should be to provide information and ideas that are fundamental to the successful functioning of people in today's information and knowledge-based society. The school library equips students with lifelong learning skills and develops their imagination, enabling them to live as responsible citizens. According to Haycock (1995a, 1995b) in Lonsdale (2003), more reading occurs when there is a school library. Haycock further notes that students in schools with good libraries and services of a school librarian perform better on tests for basic research skills, reading comprehension, and use of reference materials than in schools with minimal or no library services. Wheelock (1999:14,) quoted in Lonsdale (2003), states that "instead of being limited to classroom lectures and textbook assignments, by using library resources-books, CD-ROMs and the Internet, students are able to explore topics in more depth." They also learn through reading about structuring of texts for example sequencing of facts or story events. According to Krashen, Lee and McQuillah (2012) it has been established that access to books as provided by school libraries results in more reading. Given the positive relationship between reading behaviour and proficiency in reading and language, school libraries seem to have the potential to improve the school performance of students. Learners who spend more time in the library improve their reading achievement significantly. Research indicates that school libraries contribute to quality education and student achievement as attributed in the works of Clark (2010); Softlink (2012) and Kleijnen, Huysmans and Elbers (2015). The school library is a powerhouse that provides reading skills that are part of the ingredients of IL.

### **5.2.2 Who is responsible for running the library and teaching IL?**

The findings in Figure 4.1 (page 87) indicate that 55% librarians run school libraries followed by teacher librarians at 44%, senior teacher at 5.6%, and students at 1.9% and 0.9% respectively. Qualified librarians managed the majority of school libraries. However, there are not yet enough qualified librarians for deployment to all school libraries in Botswana. Teacher librarians, senior teachers and students assist in managing school libraries. The results are in line with what is documented in extant literature.

Jorosi, and Isaac (2008) and Onen (2011, 2015), IL programmes in selected schools in Botswana and referred to the Revised National Educational Policy of 1998 on how school libraries should be managed. According to the RNEP, a teacher-librarian should manage each school library, that is, a qualified subject teacher who also possesses a certificate in school library studies (CLS) or, lately, a Bachelor in Library Studies (BILS). The authors point out that there is a shortage of trained teacher-librarians that has resulted in most of the school libraries being run by subject teachers who do not have any library qualification. The people who are in charge of school libraries mainly constitute of trained teachers in possession of a Diploma in Secondary Education (DSE) or a Bachelor of Arts plus a Postgraduate Diploma in Education (BA+PGDE) who are given extra responsibilities to oversee the school library. What is evident from the survey data is that library management is a partnership between librarians, teacher-librarians, senior teachers and students. Students are selected because of good conduct and interest in library issues to assist teacher-librarians with the day-to-day library chores.

The findings are in line with the recommendation of Ogunniyi et al (2011) that professional librarians must operate a school library. Jorosi and Isaac (2008) indicated that although Botswana has an advanced schooling system in which all secondary schools have a library, librarian, books and technology. However, not all people operating these libraries are professionally trained in that field. Librarians (referred to as teacher-librarians in public schools) in Botswana have to work within

overloaded timetables in their core subjects. The overloaded schedule limits the effective orientation of students in library skills and information searching (Molebatsi 2002:8). Limited budgets also make school libraries operate under poor conditions (Allan 2003).

The approach used in the deployment of teacher-librarians, more especially teachers assigned with the library management duties was definitely not going to nurture ILS among the students. Merchant and Hepworth, (2002) and Limberg and Sundin, (2006) argue that even though teachers and librarians constantly highlight the significance of IL, it has proven difficult to treat it as an object of learning. Furthermore, Lundh and Sundin (2006) argue that teacher education does not always equip the future teachers with a method for teaching IL. A study by Limberg (Limberg & Sundin 2006) shows that practices in school environments often included recommending specific sources, demonstrating tools, or discussing the information seeking process. IL education was primarily treated as being about generic competencies (Limberg & Sundin 2006; Lupton & Bruce 2010). The critical evaluation of the credibility of sources was seldom addressed in teaching because it was considered too difficult for the students, but teachers and librarians mentioned that it was important. Furthermore, when the students' IL practices were assessed, the teachers often looked at how information was used rather than how it was sought and found (Limberg & Sundin 2006). Research has revealed that the non-availability of full time teacher-librarians also affect the number of hours school libraries are open each week. Libraries in schools with full time teacher-librarians are more likely to have longer hours, which ensures that students have access to the library before, during and after school (Ontario School Curriculum 2011). Previous studies have also confirmed that school libraries have failed to produce information literate students because subject teachers who are not qualified in librarianship manage these libraries.

### **5.2.3 Computers with access to the Internet**

The majority of the respondents, namely 78%, indicated that they had computers in their school libraries and that the computers had Internet connection. Twenty-two percent (22%) of the

respondents indicated that they had computers in their school libraries but they were not connected to the Internet. Where libraries had computers but no Internet connection, it was lack of service provision by Botswana Telecommunication Corporation (BTC). In addition to the above question, students were asked about their access to computers. Fifty-three percent (53%) of the respondents indicated that they had access to computers whilst 47% indicated that they did not have access to computers. The students who indicated that they did not have access to computers were constituted of those whose libraries did not have Internet connection, a major pull factor of students to libraries. For those school libraries that did not have Internet connection, students went there mainly to read and write assignments. Understandably, such a situation resulted in a low patronage as compared to a library where there was Internet connection.

According to Monyatsi and Maimela (2016), the Government of Botswana has joined the global bandwagon by accepting the advent of Information and Communication Technology (ICT) into every sector of the economy. The government has taken a further step by developing a National ICT policy called Maitlano. The aim of the policy was to give guidance to the citizens in the area of technological advancement. One of the aims that relates to education was a recommendation that a 1:7 computer to student ratio, be introduced into all schools by 31 December 2012. Monyatsi and Maimela (2016) further state that most schools have computers installed for use by staff and students. The Botswana 2016 Information for All Programme (IFAP) reports and the Universal Access and Service Fund (UASF) of Botswana 2015 reveal that Internet speed in schools is slow or non-existent. The report further reveals that some schools use obsolete computers and that the ratio of student to computer is high. Computer laboratories are un-serviced. The report further indicates that different media is used to deliver ICT in schools. The media includes the use of radio, television, telephones, and computers.

According to the Botswana ICT Statistics Report of 2013, of all the schools in Botswana, sixty percent (60%) used radios as the medium of furthering education curriculum while sixty-one percent (61%) used television sets. Still in the same period, eighty-eight percent (88%) of the schools had telephones. Student-computer ratio in 2013 stood at eight percent, (8%) indicating that for every 100 students there were only eight computers available to them (8:100). The report further found that forty-seven percent (47%) of students had access to the Internet at school and five percent (5%) of teachers both at primary and at secondary schools had a qualification in ICT. The non-availability of the Internet in some schools hinders students from accessing information.

Literature has revealed that the Internet is a driving force for much development and innovation in both developed and developing countries. Yusuf (2005) refers to the schools in Iran and points out that Internet provide opportunities for teachers and students to communicate with one another more effectively during formal and informal teaching and learning.

Previous studies by Head (2007), Nielsen and Borlund (2011) point out that it seems that worldwide Internet is the main source of information for high school students, although there is some evidence that there is still a preference for print materials or for useful library resources. The work by Hepworth (2002), Lanning and Turner (2010) indicate that there is a decline in the use of print reference sources in favour of electronic ones, and that students feel more comfortable finding and using electronic information. Zhing and Kudva (2014) argue that both print books and e-books have unique attributes and serve irreplaceable functions to meet people's reading needs. E-books complement print books. Electronic books do not replace the print books but rather changed the content in which people interact with different books. The idea of media displacement is based on one basic assumption: the notion of equivalence (Zhing & Kudva 2014:1696). This implies that e-books are likely to replace print books if the two are similar in function. E-books would and could

replace print books because it could fulfil all the functions of print books. E-books sales and readership has risen in recent years but they are not yet positioned to replace print books. E-books have firmly established a place in people's lives due to the fact that they allow people to access their favourite content anywhere, anytime. E-books and print books complement each other by providing the same content in two different media. At the same time, some studies have found that students lack the skills and experience necessary to construct efficient and sophisticated search strategies, as well as evaluate the retrieved resources (Burton & Chadwick 2000; Lorenzen 2001; Merchant & Hepworth 2002; Jackson & Hansen 2006; Julien & Barker 2009; Rehman & Alfaresi 2009). As a result, several scholars have recognised the need for programmes that would help students identify the information they need, select the appropriate information and use it effectively to solve problems or meet their information needs. Previous studies have indicated a need for IL education that would assist students to become independent information searchers and evaluators.

#### **5.2.4 Is there a public library within your village?**

The majority of the respondents, 52% indicated that there was no public library within their village while other respondents, (48%) indicated that there was a public library within their village. All the respondents who indicated that there was a public library in their village indicated that they used it.

Public libraries have an important educational role in the communities they serve and this has been noted in previous studies. For example, Omar's 2013 study of high school students' use of a public library in Zanzibar (Tanzania) reveals that a good number of students who use the public library go after the library services provided there compared to school libraries such as the Internet, newspapers, journals, adequate reading materials and a conducive environment for studying. This is because public libraries are better positioned to accommodate all members of the community regardless of age and educational background (Opara 2008). Public libraries therefore provide both formal and informal educational opportunities. They also provide for the information needs of the

public. In so doing, they help enrich the public's knowledge base. Reviewed literature has confirmed that students use the public library for an educational purpose. Extant literature has also indicated that students have been given special attention compared to other public library users due to their use of the library that is linked to IL.

### **5.2.5 Why do you prefer to use the public library?**

The findings, as presented in figure 4.2, (page 89) chapter 4 show that the majority of the respondents, (n=53) prefer to use public libraries to school libraries. Reasons advanced for preference of public libraries over school libraries were that public libraries have more reading materials and that the school libraries do not operate during weekends. Some of the respondents indicated that the public library staff members provide more guidance while others indicated that the school library do not operate to their satisfaction. In addition, school libraries are only open when the teacher-librarian is free. Students at those schools where the school libraries do not have Internet connection preferred to use the public libraries so that they could use Internet services. Vakkari (2012) points out that Internet provides a huge amount of information and effective tools for searching information. The author further mentions that the Internet may replace the uses of the public library by providing swift and easy access to various information resources. Vakkari (2012) is also of the idea that those who use the Internet, tend to use the public library and the frequency and time of Internet usage does not change the reasons why people use the library. Vakkari (2012) investigated Internet use in a public library in Finland and observed that Internet use and book reading increased most the odds of using the library. The results of the investigation revealed that the use of the library and the use of the Internet are complementary. Overall, preference was given to the public libraries over school libraries due to the better services they offered. The results of the study concur with documented evidence in the extant literature.

The public library is primarily concerned with providing the needs of the student as an individual and as a member of the community, and gives the student experience in using a facility that will be a lifelong resource (Fitzgibbons 2012:13). Previous studies have found students to be active users of public libraries. The average student visits a public library about five times per year, and half of these visits have an educational purpose. The studies also revealed that public libraries have four educational roles, namely informational, educational, cultural and recreational. Public libraries also serve as school libraries. Relevant literature revealed that public libraries complement school libraries in terms of collections and human resources.

#### **5.2.6 Are you guided and assisted on how to use the public library?**

Table 4.4 (page 90) indicates that students were guided and assisted by staff from the public library when they visited the public library. The research findings reveal that eighty-seven percent (87%) indicated that from the very first time that they used the public library they were taught how to use the public library by way of the information desk and guided tours. Thirteen percent (13%) of the respondents indicated that they had not received any training on how the library catalogue works. The teaching that they had received on how to use the public library had contributed to some increased visits and confidence in the use of the public library by the senior secondary school students. This was so since they now know how to look for books or any important materials in the library. Generally, students received some form of guidance from the public library staff on a continuous basis.

The findings of the study also concur with results from previous studies on how students received assistance in public libraries. A study by Dent and Yannotta (2005b) revealed that students worked in the public library in groups and frequently consulted the librarian for assistance. Goodman (2008) and Johannessen (2009) also asserted that librarians assisted students to locate materials, answer questions such as how to use a dictionary and help with mathematics homework. Hart (2006) and De

Jager and Nassimbeni (2007) documented evidence of public libraries assisting students with resources for projects.

The public librarians see themselves as mediators as opposed to being teachers. They are the link between information resources and search tools and the users' informal learning. Information technology plays an important role in supporting and guiding the users to the right information, since there is an awareness of a digital divide in society and the public library has a responsibility to help those who have problems with technology. Previous studies have revealed the guiding role of librarians to students, as users of public libraries.

#### **5.2.7 Have you acquired certain skills from the guidance and assistance offered by the public library staff members?**

This study revealed that eighty-eight percent, (88%) of students had acquired certain ILS while twelve percent, (12%) indicated that they had not acquired any ILS. The students who indicated having acquired certain skills indicated that they were able to locate access and search for information on the Internet. They further indicated that the skills acquired had benefits in terms of using the library. The students did not indicate how they acquired certain skills. Those students who had not acquired any skills indicated that it was a challenge to access information in the library.

These results concur with the previous studies on how students acquire ILS. The acquired skills have however received a lot of scrutiny from scholars such as Williams and Roland (2007) and the University of California Library (UCL) (2008). William and Roland's (2007) study revealed that the young generation was at the same level in relation to digital searching as generations born before the digital age. Similarly, the UCL 2008 report stresses that the Google generation (born after 1993), was speedy in their approach to the media in a society characterised by abundant information, but did not pay attention to the quality of information. The report further emphasises that young people might

have acquired ILS but were not aware of the existence of academic information sources such as databases and electronic journals.

William and Roland's (2007) report concluded that young people have an ILS-gap that is unevenly distributed. These scholars further note that a quarter of young people who have gained high marks, in examinations have received training and education in the use of IT for the search of information. Additionally, Mawe's (2006) evaluation exercise indicates that an entire generation of upper secondary school students possessed inadequate competencies in relation to assessing information searches. In another survey conducted by Goldstein (2000) at the University of Regensburg, in Germany, 90% of the students responded and suggested that they searched for answers to a search issue on Google. The authors of the evaluation exercise agreed with Mawe's (2006) and Williams and Roland's (2007) reports, and the UCL study of 2008, that students are IT literate but do not possess all the skills that qualify them to be information literate. Nielsen and Borlund's studies (2011, 2013 and 2014) of high school students' use of a public library in Denmark revealed that students were over confident in using computers yet they did not seem to understand how to critically evaluate sources. Relevant literature revealed that students claim to have acquired certain ILS yet they fail to execute an information search strategy.

### **5.2.8 To what extent do you think you are information literate?**

Forty-eight percent, (48%) of the respondents indicated that they were not sure of the extent to which they were information literate. Fifty-two percent, (52%) of the respondents indicated that they had not received any form of IL training. The findings confirm with the findings of previous studies that found that students were lacking in ILS.

A study conducted by Moreira in 2010 in Australia indicated that teachers admitted that their students usually browsed the Web, read and had contact with many different sources of information,

like television, music, their community and family. The study further revealed that the teachers thought that this was not enough to make them information literate. Teachers agreed that their students were not prepared to deal with the huge amount of information that they had access.

These results are consistent with the findings of earlier studies which found that students lacked the skills and experience to construct efficient and sophisticated search strategies, as well as to evaluate the retrieved resources (Burton & Chadwick 2000; Lorenzen 2001; Merchant & Hepworth 2002; Mittermeier 2005; Jackson & Hansen 2006; Julien & Barker 2009; Rehman & Alfaresi 2009). A possible explanation for the relatively low level of search competence observed in the students surveyed might be that they acquired searching skills on their own, without any formal training; as a result, they used the simplest and most common techniques for retrieving information. Previous studies indicated that there was a necessity for students to be trained in IL as this training might assist in enhancing their IL skills that would nurture them to become lifelong learners of the 21<sup>st</sup> century.

#### **5.2.9 Form of IL training and the most appropriate place for further training in ICT.**

The majority of the respondents, thirty-five (35) (n=35), indicated that a workshop would be the most appropriate form of training, while thirty-one (31), (n=31) preferred classroom demonstrations. Thirty-three, (33), (n=33) respondents indicated one-on-one interaction as the most appropriate form of training while one (1), (n=1) respondent indicated one-on-one demonstration, class demonstrations and workshops. The majority of the respondents, 70%, indicated that the most appropriate place for ICT training would be in a school environment while the second highest category namely 17% indicated a university as the most appropriate place. On the other hand, 10% of the respondents indicated a college as the most appropriate place, while 3% indicated a school, college and university being the most appropriate places for further training in ICT. From these responses, it becomes clear that the school would be the most appropriate place for further training since ICT may be introduced at an early stage. As the students proceed to tertiary educational institutions, they would have

acquired all the basics in ICT. The findings of this study concur with the findings of earlier studies in this regard.

Research by Bransford (2000:123) indicates that students go to university with "a range of prior knowledge, skills, beliefs and concepts that significantly influence what they notice about the environment and how they organise and interpret it". This scholar notes that the basic knowledge encompassing IL that students had gathered at the secondary school attended had a significant influence on such a student. This scholar is of the opinion that such knowledge would be consolidated at the university level. This therefore implies that secondary schools were expected to include IL in their school curriculum irrespective of the level of development in the country. The integration of IL into the curriculum would require teachers to take an active role of coaching and guiding their students.

Studies by Humes (2003), advised that in order to produce students who were information literate, schools needed to integrate ILS across the curriculum in all subject areas, starting from the earliest grades. The Association of College and Research Libraries (2000) advocated that the educational reform and restructuring make ILS a necessity as students sought to construct their own knowledge and create their own understandings. The 21<sup>st</sup> century education system requires collaborative learning methods where the students themselves felt empowered. Studies by ACRL (2000) stated that gaining skills in IL multiplied the opportunities for students' self-directed learning, as they became engaged in using a wide variety of information sources to expand their knowledge, ask informed questions, and sharpen their critical thinking for further self-directed learning. Previous studies have confirmed the school as a central place for laying the foundation for students' IL. The school is confirmed to be an IL hub where teachers and librarians work together to mould information literate

students. Previous studies have also revealed that integration of IL into the curriculum may assist in the production of information literate students.

### **5.3 Interpretation of teacher-librarians' responses**

This section interprets responses from the nine (9) teacher-librarians.

#### **5.3.1 What type of information sources is available at the school library?**

The findings as presented in Table 4.6 (page 94) indicate that 88% of the respondents confirmed that books were the major sources of information at school libraries. The other 12% of respondents indicated multiple sources of information as being in existence in the school libraries namely books, electronic databases and web pages. However, books constituted the majority of the sources of information because they were provided to all the schools. Studies by Jorosi and Isaac (2008) and Onen (2011, 2015) confirmed that the dominant materials in school libraries were books. The availability of library resources particularly books was a positive contribution in the school libraries as it might positively influence students who come from different social backgrounds. This is especially valid in disadvantaged communities and developing countries where a reading culture has to be nurtured, homes have few books, families do not have the disposable income to buy books, bookshops are scarce, public libraries are not always easily available and houses are small, noisy and often without electricity (Machet & Wessels 2006). Krashen (2004) underscores the importance of a print-rich environment. However, Pihl (2012) and Ngwuchukwu (2013) note that a school library should consist of a variety of resources such as text books, picture books, information books, periodicals, reference materials, audio-visual material and electronic resources. These offer different kind of services which include reference and information services, lending services, recreational services, information skills instruction, reading guidance and promotion. A well-equipped school library provides room for interaction with library resources which will make way for the development of ILS.

Functional school libraries in Botswana could provide many students with such an enriched environment. Many students come to school without any significant pre-literacy skills and poor vocabulary and the materials in the school library could provide the much-needed opportunities to practise and improve their literacy skills. The school library is a quiet and safe venue where students are exposed to a print and text-rich environment where they could be immersed in reading activities. These activities help students to improve their vocabulary and comprehension of texts.

The responses from this study indicate the need for additional material resources in the school libraries so that they could be in a position to meet the users' needs. Arua and Chinaka (2011) stated that school library information resources were seen as all inputs that were utilised in the library in order to provide a good learning environment for students and teachers so that they are able to achieve their educational goals. This variety of library information resources is essential in order to facilitate the school library to fulfil its functions some of which are to:

- thoroughly provide information resources necessary for the school's educational programmes and;
- help in improving and raising the reading skills and learning habits of students.

Fakomogbon et al (2012) argue that the school library helps to support the school curriculum by providing up-to-date information to keep teachers and students abreast of new developments. The library also promotes the development of reading skills and encourages long-term planning habits through reading, listening to and viewing a range of learning materials. In addition, research carried by Clark (2010) and Soft link (2012) confirmed that school libraries contribute to school attainment as well as reading for enjoyment. This is further supported by Kleijnen et al (2015) who also shed light on the attributes of school libraries that are positively linked to student achievements. They

further argue that the presence of a qualified librarian who acts as an instructor and collaborates with teachers instils a reading culture among students. Effective school libraries provide additional reading opportunities for students, which in turn improve reading skills, knowledge, writing and clarity of expression, which in turn supports student performance in all other curriculum subjects (World Bank 2008). However, Arua and Chinaka (2011) revealed that the inadequacy of relevant information resources in school libraries contributed to low levels of student performance. Previous studies revealed that a school library stocked with different information sources contributed to students' better academic performance. Non-availability of relevant information sources is one of the key factors to the high rate of failure in schools.

### **5.3.2 Does the school library meet the information needs of teachers and students?**

The results of the survey shown in Table 4.7 (page 95) shows that most of the respondents, namely seventy-eight percent, (78%) indicated that the school library was not meeting the information needs of teachers and students. The other 22% indicated that the school library was meeting the information needs of teachers and students. The reasons that were advanced by the respondents as to why the library was not meeting such information needs included a lack of appropriate facilities and time, and a lack of training in librarianship. The lack of training in librarianship often meant that the teacher did not provide guidance; but just opened the library for students to read books or do their homework from the library. These findings correlate with what has been documented in the extant literature.

Arua (2011) asserted that school libraries failed to meet the needs of students and teachers due to lack of current materials, lack of a professional teacher or librarian to process materials, poor library orientation, and restricted library hours. Papazoglou (2002) supports this idea and states that in most cases, school libraries are underfunded. The author further argue that schoolteachers instead of trained librarians manage the libraries and they have a small collection, usually consisting of encyclopaedias, dictionaries and literature books, not always accessible by all students. The study

notes that students cannot acquire knowledge only through textbooks or classrooms, but they need to refer to other school library information resources as well. Previous studies revealed that students and teachers' information needs might be satisfied where there is a collection of books, periodicals, magazines, and newspapers, films, computers, filmstrip, videotapes, and recordings of all types. Literature also revealed that the availability of the Internet could assist students, teachers to access more relevant, and current information resources (Bernard & Dulle 2013).

### **5.3.3 Do teachers use the school library for lesson preparation?**

Table 4.8 (page 95-96) indicates that 56% of the teachers used the library to prepare their lessons. The other forty-four percent, (44%) did not use the school library to prepare their lessons. The few teachers that used the library to prepare their lessons could be explained by the importance that they still put on printed resources as opposed to the Internet resources. Those teachers that did not use the library indicated the non-availability of the Internet facilities at their libraries to facilitate research, as their main reason for not using the library. In addition, teachers had prescribed books that are in print form and they used those to prepare for lessons from their homes or from the staffroom at their schools. The little or non-use of the school library by teachers could be caused by the fact that the level of development of school libraries in the country was poor and not up to standard.

Omar (2013) studied the impact of school libraries in Zanzibar, (Tanzania) and established that many secondary schools were confronted with critical challenges including lack of understanding by both teachers and students on the role of a school library. The author further states that in many schools the concept of a school library no longer exists because for many teachers and students, a library is seen as simply the place where school textbooks are stored. Students fail to make effective use of these important library resources because they lack the foundation in the use of libraries. Thus, if the students are not groomed well in the use of libraries at secondary and high school or even lower levels, they will fail to use the library in the expected manner at higher levels.

Omar (2013) further investigated libraries in selected schools in Zanzibar (Tanzania) and found that most secondary schools in Zanzibar were faced with inadequate library stock, and where library stock existed it was outdated and often irrelevant to the curricular and teacher/student interest. The school libraries are not properly utilised in most public schools because of inadequate provision of library resources and non-exposure of some teachers to use library materials in preparing for their lessons as noted above.

Such a situation does not improve or arouse their interest to use library sources. This is affirmed by Chanakira (2017:38) who states the reasons for non-usage of school libraries as “the absence of library knowledge among teachers regarding good school library programmes, lack of time by teachers to read due to multifarious activities in their personal lives and non-exposure of teachers to good library services as well as the lack of a reading culture”. Teachers themselves are not knowledgeable on library issues and do not see any value in using libraries, as the reading culture is not nurtured. Previous studies reveal that school libraries consist of few out-dated collections and teachers did not have an interest in using the library as they lack the exposure.

#### **5.3.4 Do all classes have a library period on the school timetable?**

Table 4.9 (page 96) shows that 56% of the respondents indicated that the schools did not have a library period on their school timetable, while forty-four percent (44%) indicated that they had a library period. This study reveals that the non-availability of a library period was a common feature at all the senior secondary schools. Relevant literature from the Botswana context shows that in all the schools, English language is a compulsory subject taken by all students and that it is a requirement that one of the slots allocated to the English language class should be used as a library period. Students pay a weekly visit to the library. This finding is in agreement with what is documented in previous studies. This is also confirmed by the work of Jorosi (2002, 2008) and Onen

(2011, 2015). This type of arrangement contributes towards instilling reading skills and a reading culture, skills that are essential ingredients of ILS.

A follow up question that was aimed at establishing the frequency of a library period had 54% of respondents indicating that they have *ad hoc* library visits, while 46% indicated that they had a library period every day. Unscheduled use of the library by a class was a common feature when a subject teacher was unable to deliver normal teaching in class due to unforeseen circumstances. In such cases, students would be sent to the library for the duration of 40-80 minutes to do anything productive, including the reading of novels and magazines, and finding information in the library. These activities do not have much to do with IL; nonetheless, they help towards developing information literate students. In situations where schoolteachers are required to teach IL skills integrated into their subject syllabus, it could be a challenging task for some of them without adequate acquaintance with IL concepts. It is, therefore, desirable that teachers should be exposed to information-related concepts through well-designed professional development programs (Ballard 2014).

Major findings of previous studies revealed, among other things, that irregular use of school libraries by the students was one of the factors that contributed to poor scores in their test and examinations (Arua 2011; Arua & Chinaka 2011 & Bernard & Dulle 2013). These studies found that many students do not study outside the school and therefore their academic performance is poor.

### **5.3.5 Do you teach IL as a subject to the students?**

Seventy-eight percent, (78%) of the respondents indicated that they taught IL to the senior secondary school students. The respondents that indicated that they taught IL through assisting students to locate appropriate information, teaching students on how to retrieve information and teaching students how to apply information, create and communicate knowledge. Twenty-two percent, (22%)

indicated that they did not teach IL to the students. The results relate to documented evidence in the literature. For example, Schmidt (2005) points out that a teacher may have certain knowledge about where to retrieve information in a traditionally delimited archive and file system, despite not being a qualified librarian.

Limberg and Folkesson's (2006) study describes how they followed Swedish upper secondary school teachers and librarians' teaching on IL in 2001 and 2003. They found a discrepancy between what they taught, on the one hand, and the assessment of the quality of the students' information searches, on the other hand. The search methods in the described teaching were not developed in close interaction with the students' abilities to assess, process and apply information in their assignments. In other words, information searches were detached from and too limited in relation to the qualifications that were necessary in order to deliver a qualitative assignment. In spite of the lack of understanding, the teacher-librarians have a pivotal role to play in imparting ILS within the secondary school sector. Previous studies have revealed that teachers are not qualified to teach IL. Well-rounded information literate students might be produced through a collaborative effort between teachers and librarians.

### **5.3.6. What methods do you use in teaching IL?**

Table 4.11 (page 98) indicates that 67% of the teachers taught making use of various methods that encompassed instruction on how the library works, while others researched for assignments during the library period. Some of the respondents (22%) indicated that during the library period they taught students how to identify, locate, retrieve and use information independently. The least number of responses (11%) indicated that students visited the library to borrow books during the library period. The students' library period was utilised for different activities.

Extant literature on ILS did not reveal a dominant method of teaching in education, so teachers and librarians might think of any method that might yield results they anticipate. This might result in the under-utilisation of school libraries. Previous studies have also raised the problem of under-utilisation of school libraries (Rodney et al 2003; Williams & Coles 2007; Foo et al 2010).

There could be several possible reasons for infrequent visits to libraries and limited usage of their resources, including; inadequate and irrelevant collections; lack of professionally qualified library staff; limited appreciation of the role of libraries in education and learning; and the perception that the needed information could be found elsewhere. The literature reveals that the non-availability of librarians in school libraries led to the under-utilisation of libraries as teachers who are assigned to manage libraries operate under tight schedules.

### **5.3.7 What elements of ILS programmes are provided to the students?**

Most of the respondents (67%) indicated that they offered training, guidance or instruction on how to make effective use of library material to the students. The orientation of the library involved the introduction to aspects such as the layout of the library and the types of materials that were in a library. The other 33% indicated that user education was the most important activity. Students whose libraries were run by librarians indicated that they had received user education while students whose libraries were run by teacher-librarians and senior teachers indicated that they had never received user education. On the other hand, survey respondents did not seem to rely much on libraries, a finding that confirms previous studies. It has been observed that many students enter colleges and universities without having used a library before (Pavey 2006). It is also argued that young students are unfamiliar with the traditional library environment that requires learning the system from librarians.

The finding of the present study regarding low library usage concurs to relevant extant literature that reveals that school libraries have not thrived due to the following reasons:

- they have not been treated as an integral part of the educational system;
- they have not been connected to the teaching process;
- they have been regarded as redundant in a centralised, teacher-centred system, where teaching is limited to a single textbook (Arvaniti, Kyridis & Dinas 2007).

The extant relevant literature also reveals that school libraries are not considered as an important aspect in the learning of students and have failed to produce information literate students. Students leave high school without having acquired ILS that might prepare them for the workplace and lifelong learning.

#### **5.3.8 What are the challenges inhibiting teaching of basic ILS to students?**

Sixty-eight percent, (68%) of the responses indicated many reasons as to why IL was not taught to senior secondary school students. These ranged from inadequate budgetary allocations from the Ministry of Education and Skills Development that ultimately affected school library operations, the fact that the government does not monitor the performance of school libraries, and the shortage of qualified personnel and lack of teacher training in school library courses. The other responses (22%) were that there was too much focus on those subjects that were examinable and IL was not a promotional subject. As a result, the teaching of IL was not a priority at the secondary school level due to lack of resources, especially finances and work force. The findings relate to what has been documented in relevant literature. For example, Agbo (2015) studied the school libraries in Nigeria and found the following trends:

- Most teacher-librarians were not professionally trained in library management and consequently did not have knowledge or library skills. They could neither process nor

organise the library materials nor impart the basic library skills to the students. Some secondary schools in Nigeria did not even have teacher-librarians at all.

- Many children lack access to effectively organised schools and public libraries where they could use and borrow reading materials. Undoubtedly, the lack of physical access to library materials hinders effective teaching of the skills and their use.
- Students' lukewarm attitude and disinclination towards the use of the library might appear to be the greatest problem hindering effective teaching of library skills.
- The government and schools were yet to see the need to introduce and entrench the teaching of library skills in secondary schools (Agbo 2015).

Nevertheless, some previous studies also reveal that school libraries have not succeeded due to the lack of resources. In the literature there is documented evidence that the success of the school library was measured by the availability of various types of collections, the availability of the Internet and the employment of qualified fulltime school librarians (Arua & Chinaka 2011).

### **5.3.9 What is the level of interaction with the public library?**

Fifty-six percent, (56%) of the respondents indicated that there was no interaction with the public library at all. Other responses were that the levels of interaction were very low (22%), (11%), low interaction and the other 11% indicating that the levels of interaction were high. The respondents who indicated that there existed some level of interaction with public libraries attributed that to some assistance or guidance that they often received from officials from the Botswana National Library Services when they visited school libraries. Levels of interaction between the secondary school and public libraries were very low to non-existent. The responses clearly indicated the need for improved interaction between school and public libraries for the benefit of the senior secondary school students.

The findings relate to the literature review as discussed in chapter 2. Previous studies indicated that school and public libraries needed to work collaboratively as both were affected by understaffing and budget cuts. Research indicates that there are few studies that have dealt with cooperation between school and public libraries. Pihl (2012) established that in educational research, relatively few studies have addressed the school and public library collaboration despite that collaboration between public and school libraries enhances reading engagement and high educational achievement. In addition Kuhlthau (2010) advocates that in the information age, access to good school libraries and good public libraries with multimedia resources and the expertise of librarians is equally essential to teaching and learning. There are a few cooperation activities between school and public libraries that have been documented in the literature. Peter (2014) describes examples of successful cooperation between public and school libraries in the Eastern Province of South Africa. Peter (2014) elaborates on a study of collaboration efforts of a new public library with schools and pre-schools in a community in a Cape Town township. The results of the study revealed that success was uneven with more success coming through marketing to pre-primary schools than with primary schools and a high school. The study further revealed that 80% of the users are learners though there are no formal relationships with schools. Peter (2014) further gives an example of a successful joint use library of Maphotla, which was piloted in Mpumalanga Province in South Africa. In another study, Hart (2011) describes an interpretive case study of a group of six school community libraries in the Limpopo Province of South Africa. The case study conducted in 2009, investigates whether dual or joint libraries might help fill gaps and if so, under what conditions. The study concluded that, although many of international criteria for dual use libraries are not met, the six libraries do provide the crucial service for their schools and other schools in the surrounding areas. They provide a framework of the possibilities of dual use for rural information services. In another case study, Johannessen (2009) looks at another aspect that involves collaboration between the public library and schools. The author discusses an evaluation project of a public library's outreach programme in South Africa that

involved 26 schools. Each school received a box with 200-250 books and a teacher at each school was in charge of the box. The author reports that at the end of the evaluation, it was found that more than half of the schools and headmasters and teachers noticed a change in learners' behaviour. There was appreciation of an interest in books and more creative compositions. Teachers agreed that learners improved different aspects of their performance through reading. The improvements were attributed to the collaborative efforts of both the public library and school staff members. The public library provided the schools with the books. After receiving the books from the public library, teachers encouraged and motivated learners to read. Teachers themselves read and also integrated books with reading with the classes. These previous studies show that collaboration between public and school libraries have a positive impact towards students' academic achievement.

The justification for increased cooperation and collaboration between school and public libraries was presented in chapter 2 of this study. Studies by Hart (2011); Bradley (2013); Nassimbeni (2013); Peter (2014); Brown (2015) and Martes (2016) clearly indicated that the educational focus was a shared role and goal of school and public libraries and was one of the most critical factors in rationalising the need for cooperation and collaboration between these two institutions. When the school day ends, the public library is available to serve students' educational needs. Literature has revealed that collaboration between the public and the school library might be used as a strategy to enhance the ILS of students.

#### **5.3.10 Do the public library staff make visits to school libraries.**

The findings presented in Table 4.14 (page 102) show that 67% of the respondents indicated that there were no visits by librarians either from the public or school libraries. Thirty-three percent, (33%) indicated that they had visits. The staff members who visited schools were those from the Botswana National Library services, who visited with a specific intention to see how school libraries were operating so that they would provide the necessary advice or guidance.

These responses are consistent with some of the previous findings that sought to establish the level of interaction with public libraries and clearly indicated that there was low or no interaction between these two institutions. Previous studies also documented few visits of public libraries to schools yet such visits have a positive impact on students' academic performance.

For example, Tamakloe (2014) describes how the Volta Regional Library in Ghana brought new educational opportunities to school children from rural and poor communities through the mobile library. The Volta Regional Library mobile library van travelled to five schools, visiting each school once a week. The library paid 115 visits. The service conducted 105 computer lessons, building ICT competencies of 215 students. The students learnt to use the educational content and games on the computers with ease. The library also taught 119 of the students how to conduct research and to use the eGranary. They also learnt how to create e-mail and accounts. Fifty-three, (53) students learnt search techniques and can now access information on good agricultural practices.

Kinyanjui (2014) discusses the experience and impact of the Kenya National Library Service /Kibera Library's E-Learning /tablet computers project for slum schoolchildren in Kenya. The author describes the challenges the library faced from principals and teachers and how the librarians overcame the challenges and implemented the project. The impact of the project is that, it has inspired a love of reading, increased the numbers of young library users and contributed to improved school results. The EIFL-PLIP (2013) explains how Busia Public Library in Kenya also used ICT to help students improve school results. In this case study, the Busia Public Library's Watoto Kwa Watoto (Children for Children) project used six tablet computers to help children overcome challenges in passing examinations. They worked with teachers, librarians to conduct ICT classes with students. The results of the study reveal that after just a few months (2012/13), the children's results in science, mathematics, social and religious studies, Kiswahili and English improved. These studies demonstrate the role of the public libraries in contributing to national educational and

development goals. Through such few visits, the public libraries are supporting children's learning of school subjects, including ICT to help bridge the digital divide by providing access to computers and the Internet to rural communities.

These studies indicate the valuable contribution that can be achieved when public library staff members and teachers work together for the benefit of the students. Research has found that visits that may take any form by public libraries to the schools may improve students overall performance.

### **5.3.11 Do you have any knowledge of public library or school library administration and development?**

Seventy percent (70%) of the school and public librarians' who responded indicated that they had very limited knowledge on public library issues and development. Only one respondent (10%) indicated high levels of knowledge on public library issues and development. The other (20%) indicated that they had limited knowledge. The school librarians who indicated high levels of knowledge on public library issues and development could be those who had interacted with library staff from the Botswana National Library Services and not public libraries. The findings on the levels of knowledge of public library issues and development clearly indicated the low levels of interaction or minimal relationships between public and school libraries. This aspect leads to another barrier to collaboration, which is a lack of understanding of the roles that others play (De Groot & Branch 2009).

Most public librarians do not know what the job of a school librarian entails. They are not clear about the responsibilities of a school librarian, and therefore do not know how they can be partners in their work. This can also be said for school librarians' perceptions of public librarians. This lack of communication inhibits cooperation. By studying successful library collaboration as it is described in journal articles and blogs, librarians will gain any understanding of the ways in which program

awareness can benefit both partners' missions and goals (Amann & Carnesi 2012). Peter (2014) studied library cooperation of a dual use library in the Western Cape in South Africa where a fully functional school library managed by a qualified school librarian, is meeting the library needs of a community. The success is not only a cooperative agreement between the province, the local municipality, and the School Governing Body, but the presence of a qualified teacher-librarian as attributed by (Hart & Nassimbeni 2013:19). The librarian is accepted as the Library Manager and attends municipal library meetings, and is also very much a part of the school's programme but spends much of his/ her time in the library. Fraser (2013) elaborates this idea and points out that the Western Cape has successful examples of dual-use school/community libraries managed by qualified teacher-librarians. These libraries include Pelican Park, Klapmuts, Nieuwe Drift Wheelie Wagon, Rudolf Balie Memorial, and Masiphumelele public libraries. This previous study indicates the valuable role that librarians who are knowledgeable in school and public library issues may bring to the community. The librarians can manage both the school and public libraries at different times of the day to ensure that users have access to the information. Such types of librarians have the capacity to satisfy the needs of the school and the community. It is however important to emphasise that this type of dual use libraries may be challenged by issues such as students' security and different collections to meet the different categories of users being served by the same library. This may require a lot of planning before implementation.

## **5.4 Interpretation of public librarians' responses**

### **5.4.1 Do secondary school students visit the public libraries?**

Table 4.15 (page 103) indicates that all the respondents (100%) confirmed that there were visits by secondary senior school students to public libraries. Library usage by the senior secondary school students was noted throughout the year, with a notable increase towards the examinations period and during weekends as the school libraries do not open during weekends.

The findings of this study are in agreement with extant literature and findings of previous studies. Various studies by Harris Interactive (2007) and Sin (2012) revealed that students use public libraries mainly for educational purposes as opposed to leisure. Harris Interactive (2007) investigated secondary school students' use of public libraries in the USA and found that the major reason given by students for visiting the public libraries was to borrow books for personal use (78%), school assignments (67%), to read on the premises or to use the library website to research some information, recreation (34%), or to 'hang out' with friends (18%) (Harris Interactive, 2007). Omar (2013) in his study of high school students' use of a public library in Zanzibar (Tanzania) established that secondary school students prefer to use public libraries to access resources such as the Internet, newspapers, journals, other reading materials and a conducive environment for studying. Akinola, Apotiade and Ogunmodede (2013) examined the services of three public libraries in meeting the information needs of secondary school students in public libraries in Nigeria. The study revealed students used the public libraries to support their academic activities, for examination purposes. The study further revealed that the public libraries had access to materials like newspapers, access to reference resources and provided a conducive reading environment. The public libraries also had free access to free online / electronic resources and access to loan facilities (book borrowing). The results of the study revealed that the public library services had in one way or the other influenced the information needs of the students. The results of this study are in agreement with other recent studies. Musinguzi (2014) investigated public libraries in Uganda and found that public libraries offer the traditional service of lending books and offering a conducive environment for studying, where school pupils or even university students can complete homework and other classroom related reading, such as revising notes. In another study, Mugwisi, Jiyane and Fombad (2016) investigated public libraries in KwaZulu Natal (South Africa) and found that public libraries provide diverse information services to learners, parents, general workers, students, young adults and children in their role of facilitating access to information.

These studies indicate that secondary school students use public libraries due to the diverse information resources and a conducive environment. Secondary school students use public libraries to support academic activities (examinations, recreation, entertainment, personal development). The results of the studies by Harris Interactive (2007); Omar (2013); Akinola et al (2013); Musinguzi (2014) and Mugwisi et al (2016) indicate that students use public libraries for educational purposes which are linked to reading. These are consistent with the evidence from extant relevant literature.

#### **5.4.2 What makes students visit the public library?**

Six of the respondents indicated that secondary school students preferred to use the public library so that they may access the Internet while two indicated Internet and a variety of sources and one indicated that public libraries had large book collections. This is attributed to the fact that all the public libraries have Internet connection because of the upgrades that were undertaken with assistance from the Bill and Melinda Gates Foundation under the Sesigo project of 2009 -2013. The other respondents indicated reasons for using the public library as access to technology, a peaceful environment to read, where they could obtain help from the library staff; and that a public library provides lifelong learning (educational support). The above responses are consistent with those of the senior secondary school students' preference of public libraries over school libraries. Previous studies have also confirmed that students are enticed to use the public library by collections of various media.

Bamidele (2015) used a case study to investigate the library use habits of senior secondary school students in Ogun State in Nigeria and found that there was low usage of school libraries among students. The reasons attributed to low usage were that students were not encouraged and introduced to the school library by professionals (teachers, principals or librarians) and the total absence of

professional IL librarians to teach students on how to use various information sources. The study also revealed that the school libraries are in absurd state that does not entice students to use school libraries. The same trend is also echoed by Nabuyanda (2011) in Zambia; Matungi (2012) in Kenya and Fraser (2013) in South Africa. The woeful lack of school libraries, which are needed to support the school curriculum by providing the necessary resources for teachers and students, leave students with no other choice but to rely on the public library. This is confirmed in the work of Dent (2016) who investigated Ugandan secondary school students' use of Kitengesa Public library. The study found that the library is not an official school library, but it fulfills the role in the village and surrounding areas. In the village of Kitengesa, the rural library serves as part of the learning environment for students. This is further documented by Akinola et al (2013) in Nigeria; Johannessen (2014) in Uganda and Mugwisi et al (2016) in South Africa who investigated the impact of public libraries in various parts within Africa and found that public libraries in rural areas also serve as school libraries because there are no other such local resources that could provide reading and information materials for students.

From the above discussions, it is clear that students are attracted to the public libraries because the public libraries are the only alternative means of providing information resources in a rural context.

#### **5.4.3 Does the public library offer any form of support to secondary school students?**

The findings of this study, as presented in Table 4.16 (page 105) show that (91%) of the respondents indicated that public libraries offered support to senior secondary school students. Nine percent, (9%) of the librarians indicated that they did not offer any support to these students. The support offered to the senior secondary school students was in the form of one-on-one guidance at the information desk and user education. The responses testified the high levels of support offered to schoolchildren. Literature on the topic also revealed that the public library staff members improve access by assisting individuals in locating desired information. Several studies by scholars such as Hart (2006a; 2006b);

De Jager and Nassimbeni (2007); Skov (2009); Lai (2011) and Leininger (2012) established that public librarians support IL for adults and students by providing programs such as computer training and teaching ILS every day at their information desks.

Earlier studies further established that assistance and guidance also involved showing a library user how to access articles in databases, evaluate web sites, use the Dewey Decimal system, or even to use the index at the back of a book. All these activities provide opportunities for public libraries to teach ILS. The public librarians see themselves as mediators more than as teachers. They are the link between information resources and search tools and the users' informal learning. Information technology plays an important role in supporting and guiding users. This is because there is an awareness of a digital divide in society and the public library has a responsibility to help those who have problems with technology. Guidance is also needed because of the vast numbers of different sources of information available.

#### **5.4.4 Do you think teaching IL is the role of the public library?**

Sixty-three percent, (63%) of the public librarians were of the view that it was the role of the public library to teach IL as they were well equipped in terms of facilities and resources as compared to school libraries and also had qualified and dedicated staff to undertake that task. There were no qualified librarians in some schools and the school libraries concentrated more on examinable subjects not IL. The public libraries were also in a better position to teach IL to secondary school students as they were already doing that to other members of the community. For instance; one simply needed to register and a date would be availed for the training. The other respondents, (27%) who noted that teaching IL was the responsibility of the school librarian indicated that the school librarian or teacher librarian was solely employed to serve the secondary school students while the public librarian served the whole community. As public librarians, they indicated their preparedness

to assist when students encountered challenges but the basics of IL were expected to be taught at the secondary schools.

Earlier studies in this area found public libraries to be the most appropriate places to teach IL to students. Several studies (Maepa & Mhinga 2003; Day 2005; Hart 2006a, 2006b; De Jager & Nassimbeni 2007; Nielsen & Borlund 2011,2013, 2014; Van der Walt 2006; 2015) found that public libraries were heavily involved with teaching students, IL where librarians felt it was their core responsibility. Spacey and Goulding (2004) emphasised the need for public librarians to know their own role in relation to learning. This role of facilitating learning could be difficult, since librarians are not formally trained educators.

#### **5.4.5 Do you offer IL training to secondary school students?**

Most of the public library respondents (64%) indicated that they did not offer IL training specifically to senior secondary school students as a special group since it was not their mandate. Only 36% of the respondents indicated that they trained senior secondary school students in IL. The reasons advanced by the respondents who offered IL training was that the secondary school students constituted their main patrons and that they were members of the community, hence when they trained members of the community, they included them also. In addition, the respondents who indicated that they offered IL noted that the students were aware that the public libraries offered IL training, and that they registered to train just like members of the community for IL training sessions.

On the other hand, fifty-five percent, (55%) of the respondents who indicated that they taught IL to secondary school students noted that they addressed IL as a process whilst 45% indicated that they addressed IL as part of ICT training. The findings of this study are inconsistent with previous studies. Some public libraries offer IL training to schoolchildren whilst others do not. Those that offer do so to assist members of the community to be information literate. Public librarians do not fully

understand what IL entails, some think it is all about ICT. Dean (2011) points out that there is confusion among librarians about the scope of IL. Bruce and Lampson (2002) cited in Dean (2011) found that public librarians had difficulty in articulating the difference between IL and information technology literacy. Skov (2009) argued that problems emanated from a lack of common understanding of what exactly IL entails. The available relevant literature reveals that some public librarians offer some services to the members of the community without even understanding that they are providing instruction for IL.

#### **5.4.6 How do you offer IL in your library?**

Figure 4.8 (page 107) shows that six of the respondents offered IL in the public library in the form of ICT training, reference interviews and partnerships with schools. The other five respondents indicated that they offered IL in the form of ICT access and training as well as in the form of reference interviews. Follow up sessions with the trainees are held on a one-to-one basis when they encounter challenges. The libraries also provide basic computer training on a first come first serve basis and users have to book for their turn. Users are allowed only one hour per day that translates into five hours per week. The programme is offered for three months and it takes the users through an introductory course of Microsoft Office Suit. Other than computer training, users get computer access slots for duration of 30 minutes. Librarians support users when they encounter problems or forget their login details. They help them print and explain how the Wi-Fi works, help users to structure and write their CVs. Previous studies in this area confirmed that many public libraries have turned to offering ICT, computer access and training that aims to equip clients with online searching skills.

Harding (2008), (Australia) and Lai (2011), (Canada) studied public libraries and IL training and noted that the financial constraints within the public library sector have made the librarians believe that the key element of IL is the ability to locate and access information. Additionally, Hall (2010) postulates that the 21<sup>st</sup> century is characterised by abundant information presented in the form of CD

ROMS, electronic databases and web pages. Public libraries have responded to the information explosion by investing substantial amounts of money in digital and electronic resources and technology so that they might access them. It has however been noticed that the digital technology would not add any value if the users fail to access them effectively and thus the need for libraries to provide training and support to enable their patrons to 'navigate, explore and evaluate the information sources' (Poustie 2009). Previous studies in this area revealed that it was in the area of ICT training that public libraries have recorded a positive impact. It is in this area where public libraries have made the greatest inroads. This has been possible due to the availability of free Wi-Fi. The provision of public Internet access in public libraries has become a worldwide phenomenon. Additionally, many public libraries have implemented successful programs of ICT training. Many of these are targeted to specific groups within the community, such as seniors, teens, mothers, genealogists and young people. Some of these programs are directed at imparting computer skills (Harding 2008).

The research findings showed that there were various categories of personnel involved in training ranging from non-professional (non-librarians), administrative staff, professional librarians and para professional staff. It is important to note that despite the various categories of staff undertaking training in IL at the public libraries they should be competent and experienced to undertake the task. Discussing the capability of library staff on IL education, Widdowson and Smart (2013) point out that the success of the library is based on its staff. These scholars' further state that it does not matter whether the staff member is professionally qualified or library experienced. What matters is that they support people's engagement with information. Staff members use local knowledge to facilitate access to, evaluate and interpret information sources. Although public libraries offer inductions and training courses, many of these IL enhancing activities happen on an informal basis. This appears to contravene the school of thought that IL requires formal training.

Lai (2011) is in agreement with Widdowson and Smart (2013) in arguing that IL training requires the services of all librarians. However, Lai (2011) is of the opinion that librarians need training so that they may deliver effective and successful programmes to the users. The library staff must be trained first because information technology has also changed. Lai (2011:85) quotes one of the instructors of IL training emphasising the importance of training library staff: “We expect our staff to provide certain types and levels of training to the public. We need to train the staff first. We offer staff courses in new technologies, training delivery skills, one-on-one coaching, and designing courses’”. What is evident from previous studies is that all library staff members need to improve their IL and teaching skills so that they could provide effective formal and informal training opportunities to the public.

#### **5.4.7 How often do you offer IL instruction?**

Forty-six percent, (46%) of the respondents indicated that they offered IL every day, whilst the second highest category (36%) of respondents indicated that they did not offer IL training at all. 9% of the respondents indicated that they offered IL once a week and once a month. The respondents who offered IL everyday trained members of the community who would have registered on a daily basis. However, overall IL training was being offered depending on the number of people who would have registered and the availability of staff members to train the intended beneficiaries. The results relate with what has been documented in related literature. For example, studies by Julien (2006); Harding (2008); Skov (2009); ALA (2012), Maina (2014) Henkel (2015) and Khatun (2015) reveal that public libraries provided programs such as computer training, Internet use, bibliographic instruction, and user education and taught ILS every day at the information desk. Public libraries’ programs are driven bottom up by users’ demands and service provision is driven by the information needs of the public.

#### **5.4.8 At what level should IL instruction be offered?**

Eight-two percent, (82%) of the respondents indicated that IL instruction should be offered at primary school level while 18% indicated that it should be offered at secondary school level. The reason advanced for offering IL instruction at primary school level was that at primary school level children could learn the basics at an early age and improve their skills as they get more exposure. By the time, they had attended secondary school they would be well acquainted with all the basics and that would not put the librarians under a lot of pressure to train secondary school students in IL. The findings of this study are in agreement with results from previous related studies. For example, studies by IFLA (2002); Williams et al (2004); Hoskins (2006); Isaac and Jorosi (2008); Skov (2009); Wessels (2010); Moreira (2010); Bradley (2013) Paton-Ash and Wilmot (2015); MabusaNdlovu (2016) and Martes (2016) indicated that primary schools were essential resources for the acquisition of basic literacy as well as IL. These studies have further revealed that teaching students' IL was the responsibility of the school since teachers are stakeholders in the learning process. Studies also indicated that teachers provide opportunities for integrating IL with subject content. Moreira (2010) and Martes (2016) conducted researches on high school teachers involved in teaching IL in the UK and found that teachers are involved in teaching IL to the students. Boekhorst and Britz (2004) concluded by indicating that school libraries play an important role in enhancing IL at school level.

#### **5.4.9 Challenges being experienced in offering IL at the public library**

Table 4.20 (page 110) shows that ninety-one percent, (91%) of the respondents indicated that there were some challenges experienced by public libraries in ensuring effective IL delivery while nine percent, (9%) indicated that there were no challenges. The challenges that were cited by the majority of the respondents were staff shortages that affected the provision of appropriate training and budget constraints. Staff shortages were experienced due to a lack of a full staff complement in the public libraries, since there were other programmes in the outlying villages that were undertaken such as

out-reach services to schools that took a lot of time for the few library staff members. Some of the respondents cited poor marketing or advertising of IL training programmes as the major challenges, while 9% indicated lack of resources especially staff to conduct IL training and a constrained budget as well as the low levels of IL skills amongst senior secondary school children.

Nevertheless, it is crucial to note that all the public librarians who took part in the study (100%) indicated that there was no budget allocation for IL instruction. The reasons advanced for the non-availability of funds earmarked specifically for IL was that libraries have always operated under a constrained budget, the allocation is far less than the need. The Ministry of Youth, Sport and Culture does not have funds specifically earmarked for IL training resulting in IL being undertaken by library staff as part of their daily work routine.

The findings of this study are in agreement with results from previous related studies. Bruce and Lampson (2002); Hall (2008); and Harding (2008) investigated challenges affecting public libraries' desire to implement IL training in developed countries and found that training opportunities tended to be limited by funding and a lack of internal support by library administrators. The same challenges also affect public libraries' endeavours to offer IL training within the African context as acknowledged in the work of Adeleke and Ajedarihu (2015) in Nigeria. Lai (2011) noted that public librarians do not possess the effective approaches and theories about how to run IL programs that might inhibit the patrons' learning outcomes. Lai (2011) further mentioned that some libraries do not have full time staff to do the training. The results of this study concur with that of Julien and Hoffman's (2008) study that found that library staff faced challenges of becoming better teachers.

## **5.5 Summary**

This chapter discussed the research findings on the role of public libraries in enhancing ILS of senior secondary schools in the Central District in Botswana. This was done by comparing the findings of

this study with available related literature and research projects done in other countries. The findings of this study reveal that the majority of school libraries were affected by many factors such as human resources, financial resources as well as collections. The non-availability of adequate resources limited the implementation of IL programs aimed at producing information literate students. The study further found that public libraries supplemented school libraries in terms of human resources, collections and technology. It was also found that students used public libraries for an educational purpose.

The findings also reveal that some public libraries offered IL training to students, as they were part of the communities they serve. Furthermore, it was also found that there was no collaborative work between the schools and public libraries. The study also found that public libraries were challenged by budgetary issues, space, and staff shortages, to implement effective IL programs to their patrons. In spite of the challenges and lack of collaboration between the schools and public libraries, public libraries were found to be offering IL to the senior secondary school students in the Central District in Botswana. The findings of the current study concur to the documented evidence found in related literature. The next and final chapter summarises the results of the current research project, draws conclusions, makes recommendations and suggest areas for further research

## **CHAPTER SIX**

### **SUMMARY, CONCLUSION AND RECOMMENDATIONS OF THE STUDY.**

#### **6.1 Introduction**

Chapter five presented a discussion and interpretation of data gathered from questionnaires and direct observation. This chapter presents the summary of findings, a conclusion and recommendations of the study. The findings are based on the objectives and research questions of the study as set out in chapter 1, sections 1.2.2 and 1.2.3. Recommendations are primarily based on the findings of the study as discussed in chapter 5. The study aimed at establishing the role of public libraries in enhancing the ILS of senior secondary school students in the Central District of Botswana. The study adopted a mixed method approach (quantitative and qualitative) where a questionnaire survey and observation were used as data collection instruments. As a reminder, the objectives of the study were to;

- I) investigate facilities and resources available in Botswana's public libraries and school libraries for effective IL training;
- II) ascertain the roles of school libraries and public libraries in promoting IL of senior secondary school students in the Central District of Botswana;
- III) establish the content of IL taught in public libraries and schools in Botswana;
- IV) determine the level of experience and training of public librarians and school librarians in the Central District of Botswana;
- V) determine the level of cooperation between public libraries and schools in the Central District of Botswana and;
- VI) identify the strategies that might promote IL as well as barriers and problems of IL implementation in public libraries and schools in Botswana.

## **6.2 Summary of findings**

As mentioned, chapter 5 has presented the detailed findings of this study, but in the section below, a presentation of the summary of the findings is made. The structure of the presentation is informed by the study objectives (see chapter 1 section 1.2.2).

### **6.2.1 Findings on the facilities and resources available in Botswana's public and school libraries for effective IL training in the Central District of Botswana.**

- All the senior secondary school students, one hundred and eight 108 (100%), and teacher-librarians, nine (9) (100%) indicated that all the senior secondary schools have school libraries.
- All the teacher-librarians reported that the school library materials consisted of books as the major source of information, with a few computers. The student-computer ratio was 8:100.
- Eighty-four (84) of the senior secondary school students (78%) reported the availability of computers with access to the Internet, although the speed of the Internet was said to be slow.
- Fifty-five (55) senior secondary school students (51%) reported that librarians managed school libraries and forty-four (44), (41%), indicated that teacher-librarians managed the libraries.
- Fifty-two (52) percent of the senior secondary school students indicated the availability of a public library within their village while 48% reported that there was no public library in their village.
- Fifty-three (53) of the senior secondary school students (49%) indicated that they use the public library because it had more reading materials than the school library while thirty-one (31) senior secondary school students (28%) gave different responses. About 16% of the secondary school students reported that the school library did not operate during weekends.

- Six (6) staff members of the public library (54%) reported that the senior secondary school students preferred to use the public library due to the availability of Internet.
- Ten (10) staff members of the public library (91%) indicated that they provide support to the senior secondary school students.
- Ninety-four (94) of the senior secondary school students (87%) indicated that the public library staff members provide some guidance on how to use the library while fourteen (14) (13%) indicated that they were not guided.

It is important to note that most of the people who are running the school libraries do not have librarianship qualifications. The book based information sources and few computers with slow Internet speed, do not meet the information needs of senior secondary school students and at the same time inhibit effective training of IL. The study also reveals that public libraries exist in all the areas where there is a senior secondary school. Public libraries have up to date and better collections, computers, free Internet access and qualified librarians. Senior secondary school students and public librarians mentioned that students preferred public libraries to school libraries due to better facilities and resources found in these libraries. Students used public libraries mainly for educational purposes. The responses from the senior secondary school students, teacher-librarians and public librarians indicate that the resources for IL implementation were available although they were not adequate within the schools. Effective IL programmes can be implemented in public libraries as they are better resourced in terms of physical infrastructure, technology and human resources.

### **6.2.2 Findings on the roles of schools and public libraries in promoting IL of senior secondary school students.**

- Seventy-eight percent (78%) of the teacher-librarians indicated that they taught IL to the senior secondary school students while 22% indicated that they did not teach it.
- Sixty-seven percent (67%) of the teacher-librarians reported that they taught IL in the form of library instruction, guidance and research for assignments and 33% reported that they were taught user education.
- Sixty-three percent (63%) of the public librarians reported that it was their role to teach students IL while 37% indicated that it was not their role.
- Sixty-four percent (64%) of the public librarians further revealed that they did not teach IL to senior secondary school students as a special group but rather teach it to all members of the community (students included). The senior secondary school students were supposed to register for ICT training sessions at the public library. Thirty-six percent (36%) reported that they teach it in the form of ICT training, reference interviews and partnerships with schools.

The teacher-librarians revealed that it was their role to teach IL to the secondary school students even if they were not qualified to do so. Public librarians also accepted that teaching IL to the students was their role as secondary school students constitute part of the community they serve. Public librarians also indicated that they were qualified to do so. The study findings are in agreement with other previous studies that established that both the school and public libraries are learning institutions.

### **6.2.3 Findings on the content of IL taught in senior secondary schools and public libraries.**

The study reveals that both the school and the public libraries taught some certain aspects of IL to the students.

- Six teacher-librarians (67%) indicated that IL was presented in the form of library orientation, training and guidance while 33% reported that it was in the form of user education though there was an indication of low library use or irregular use of the school libraries.

- Fifty-four percent (54%) of the teacher-librarians indicated that students visited the library once in a week, while 46% reported that students visited the library every day. It is important to note that students' use of the school library was dependent upon the availability of the personnel appointed to manage the library.
- Six public librarians (54%) revealed that public libraries taught IL in the form of ICT training, two (18%) indicated reference interviews and three (28%) indicated different answers.
- Thirty-six percent (36%) of the public librarians indicated that they did not teach IL at all. At the same time, 46% indicated that IL was taught every day, 9% reported to be teaching it once a week and 9% once a month.

Public libraries taught IL to all members of the community as and when they went to the library. The frequency of training varied from library to library; depending on the availability of human resources to do the training. Students, as members, of the community, also receive the same attention as all other members of the community. They were not treated as a special group. If they wished to be trained in ICT, they had to register and wait for their turn. The study revealed that public librarians did not seem to understand what IL entails. They did not seem to realise that all the activities they teach to the users from the reference desk, computer access, assisting users with retrieving information and explaining how the catalogue worked all form part the broad concept of IL. Their understanding of IL was tied to ICT training only.

#### **6.2.4 Findings on the level of experience of public libraries who offer IL to the students.**

The study reveals that there were various categories of personnel involved in IL training. It was found that aspects like guidance at the reference desk, user education, computer access, teaching users how the catalogue works and to retrieve information was done by librarians with a library qualification. Information Technology Officers (ITO) offered ICT training.

- Thirty-seven percent (37%) of the public librarians reported that IL was taught by Information and Communication Technology Administrators, 27% of the public librarians indicated that administrators taught IL, 18% of the public librarians indicated that professional librarians taught IL and 18% indicated that para-professionals also taught IL.

Forty percent (40%) of the trainers held a Master's degree in Library Science, 30% had degrees in other fields, 20% had undergraduate degrees in Library Science and 10% had a form five certificate.

#### **6.2.5 Findings on the level of cooperation between the school libraries and public libraries.**

- Fifty-six percent (56%) of the teacher-librarians indicated that there was no cooperation between schools and public libraries, while 22% indicated that cooperation was very low, 11% indicated it was low and the other 11% indicated that it was high.
- Sixty-seven (67%) of the teacher-librarians reported that there were no visits between staff members of the public and school libraries, 33% indicated that such visits took place.
- Seventy-percent (70%) of the teacher-librarians reported that they were not knowledgeable in the operations of the public library, while 10% indicated that they had some knowledge and 20% revealed that their knowledge on the operations of public library issues was minimal.

The study reveals that cooperation between the public and school libraries has never existed. The study further established that there had never been any visits by either group (teacher-librarians or public librarians) or the groups were not knowledgeable on issues of each other's institution. Yet, a literature review has shown that cooperation is essential and may assist in enhancing ILS of students if public librarians and teacher librarians come together to share expertise and resources.

### **6.2.6 Findings on the barriers and problems of IL implementation in schools and public libraries.**

- Sixty-eight (68%) percent of the teacher-librarians indicated that a lack of qualified personnel, lack of monitoring of the operation of school libraries and inadequate funding were among the challenges that hindered the implementation of IL. Twenty-two (22%) percent reported that IL was not part of the curriculum.
- Ninety-one percent (91%) of the public librarians reported shortage of staff to carry out appropriate training, poor marketing or advertising of IL programmes and constrained budgets, while 9% indicated that there were no challenges.

The study reveals that both teacher-librarians and public librarians experienced similar challenges in their endeavour to fully implement IL to the senior secondary school students in the Central District of Botswana. The findings indicate that schools are affected by inadequate budgetary allocations, the non-monitoring of school libraries, inadequate resources that did not meet the user needs of teachers and students, shortage of qualified personnel to manage school libraries, non-prioritisation of teaching of IL as it was not incorporated into the curriculum and the lack of knowledge on IT issues. Public librarians indicated that staff shortages, budget constraints, poor marketing of IL training programmes and low level of IL understanding among students were the major challenges they faced. The public librarians indicated that IL should be introduced at both primary and secondary school level where students could be introduced to its basics. This would ensure that by the time they attended secondary school, they would be well acquainted with the basics of IL; a situation that would not put public librarians under pressure to train senior secondary school students in IL.

### **6.3 Conclusion**

The foregoing section has presented a summary of the results of this study. The discussion was based on and structured around the study objectives. The section below provides a conclusion to the study. In doing so, the researcher has revisited the research questions in light of the study findings and

discussed the implications of the findings in the wider national context in Botswana. The policy implications of the findings are also discussed.

### **6.3.1 Facilities and resources available in Botswana's public and school libraries for effective IL training.**

This objective was addressed in chapter 2 - data presentation, interpretation and the literature review, chapter 4 and chapter 5. Data gathered from the respondents revealed that the facilities and resources for IL implementation were available in schools and public libraries in the Central District. The resources and facilities in schools in the Central District do not however support an effective IL implementation programme. Numerous studies have revealed that the school libraries with a full time librarian influence positively on students' achievements (Lance et al 2007; Achtrman 2008; Lance, Rodney & Schwarz 2010 & Lu 2011). Empirical research has found important positive implications for student learning when librarians act as teachers (Achtrman 2008; Lance & Schwarz 2012 & Todd 2012). The findings imply that school libraries in the Central District are not in a position to produce information literate students as they do not have full time librarians and they do not teach IL and must therefore rely on public libraries within the Central District.

Public libraries offer the facilities and resources that school libraries do not have. Public libraries have an important educational role in the communities they serve and this has been revealed in previous studies. In a study of public libraries in KwaZulu Natal in South Africa, Mugwisi et al (2016) found that public libraries provide diverse information services to all members of the community including learners and students. The libraries were doing this as their mandatory role of facilitating access to information. This is because public libraries are "well-positioned to provide information to development agents and agencies, to support formal and informal rural education through the provision of materials to both students and teachers, and to serve as centres for community education and cultural activities" (Akinola et al 2016:3). They also tend to have the most

heterogeneous clientele (Opara, 2008). Public libraries therefore provide both formal and informal educational opportunities. The availability of resources in the public libraries within the Central District implies that public libraries have to complement the school libraries to enhance the ILS of the senior secondary school students.

### **6.3.2 Revisiting the roles of schools and public libraries in promoting IL with senior secondary school students.**

A key question for the study was “what are the public librarian’s roles” regarding the enhancement of IL skills to senior secondary school students in the Central District of Botswana. The results reveal that most teachers recognised the term “IL” but could not exactly define it. Teachers did not seem to know whether students were information literate, though they admitted that students usually browse the web, read and had contact with many different sources of information. The policy implications are that teachers need to be trained in IL so that they might have a better and deeper understanding of it in order for them to teach it in schools. Foo et al (2010) conducted a survey on ILS of secondary school students in Singapore and found that librarians had little contact with teachers and their classroom objectives except to locate books and other reference materials or “baby sit” students who use the library. The implication of studies such as this is that teacher-librarians and public librarians need to collaborate so that they may be able to produce information literate students. However, Isaac and Jorosi (2008) conducted a survey on the ILS of secondary school students in Gaborone, (Botswana) and found that the teaching of ILS in secondary schools in Botswana was gradually becoming a national priority though not guided by research. All these studies emphasise the importance of collaboration between teachers and public librarians in students’ IL. IL must not only be taught in the schools in the Central District but to all schools in Botswana since it has become a national priority.

### **6.3.3 Reflecting on the content of IL taught in senior secondary schools and public libraries**

A key objective of the study was to establish the content of IL taught to the senior secondary school students. The study results indicate that senior secondary schools and public libraries in the Central District taught a variety of the content or aspects of IL to the students. The teaching of IL is benefiting senior secondary school students in the Central District but this should also expand to the other parts of the country. Very few studies have dealt with the IL content taught to the students. Jorosi (2008) specifically studied the teaching of IL in secondary schools and established that teacher-librarians taught library orientation, library instructions, information retrieval and user education. Teacher-librarians indicated that they offered training in the form of guidance or instruction and user education.

Studies by Hart (2004, 2006, 2006a); De Jager and Nassimbeni (2007); Skov (2009); Lai (2011); Leininger (2012) and Nielsen and Borlund (2011, 2013, 2014) found that public libraries teach IL using different curricula. These studies found that public libraries were involved in different aspects of IL such as reading Oren (2011); Shrem (2012); Michael (2014)); online searching skills (EIFL 2014) and Van der Walt 2015); homework assistance Hart (2004, 2006); De Jager and Nassimbeni (2007) and Lai (2012) and user education (Nielsen and Borlund 2011, 2013, 2014). These studies have revealed that public libraries offer IL in different elements, all aimed at equipping the students with ILS. The findings relate to previous studies and imply that teaching IL must become a priority in the Central District and Botswana as a whole.

### **6.3.4 Reflecting on the level of experience of public librarians who offer IL to the students.**

A key objective of the study was to determine the level of experience of public librarians who offer IL to the students. The results of the current study indicate that librarians, administrators, and para-professionals as well as information and technology officers all offered IL instruction in the public libraries in the Central District.

Two studies that looked at the experience of public librarians who offer IL to the students were identified. These studies by Lai (2011), Widdowson and Smart (2013) indicate that staff members' professional qualification and library experience are not important when it comes to training students in IL. The most important aspect is induction and training that the librarians received in the form of library workshops as attributed in the work of De Jager and Nassimbeni (2007) and Van der Walt (2015). In-service training and workshops are needed to assist the library staff members to improve their IL and teaching skills so that they may provide effective formal and informal training opportunities to the public. The results of the study and evidence from previous studies indicate that experience gained from workshops, induction and in-service training play a major role. Librarians in the Central District should use the experience gained from some of the workshops they attended to enhance the ILS of the secondary school students.

### **6.3.5 Reflecting on the level of cooperation between the school libraries and public libraries.**

The key objective was aimed at determining the level of cooperation between the school and public libraries in the enhancement program. The results of the study indicate that cooperation between teacher-librarians and public librarians has never existed in the Central District. A few studies were identified in the literature that indicated that in general, school and public libraries do not cooperate. Studies include the work of De Groot and Branch (2009) and Fitzgibbons (2012). These studies looked at the level of interaction between the school and public libraries and found that it was non-existent. Literature has, however, documented very few successful examples of cooperation between public and school libraries yielded positive results on students' academic performance. These include studies by Fraser (2013); Hart and Nassimbeni (2013) and Peter (2014). The results of the current study relate to that and imply that this lack of cooperation has not only affected schools and public libraries in the Central District but Botswana as a nation. Lack of cooperation has also contributed to the failure of schools to produce information literate students.

### **6.3.6 Reflecting on barriers and problems of IL implementation in schools and public libraries.**

The key objective was to identify the barriers inhibiting the implementation of effective IL in schools and public libraries. The results of the study reveal that schools and public libraries in the Central District were challenged by a variety of problems. Several studies have documented the barriers that hinder school libraries from conducting effective IL programs. Researchers such as Isaac (2002); Baffour-Awuah (2002); Maepa and Mhinga (2003); Boekhorst (2004); Karen and Lindsay (2005); Meyers et al (2007); Isaac and Jorosi (2008); Montiel-Overall (2008); Moreira (2010); Anderson and Mathews (2010); Moswela (2005, 2010); Nengomasha et al (2012); Varlejs and Stec (2013); Agbo (2015) and Chanakira (2016, 2017) studied IL in schools and found that schools have failed to produce information literate students due to a lack of human resources, collections and that IL was not part of the curriculum.

Other studies have also dealt specifically with barriers in public libraries. Examples of such studies include those by Bruce and Lampson (2002); Harding (2008); Julien and Hoffman (2008); Hall (2010); Lai (2011); Adeleke (2015); Frimpong (2015) as well as Ajedarifu (2015). These studies found that public libraries failed to implement effective IL programmes to their users due to a shortage of human and financial resources, lack of support from the government, librarians' lack of understanding of IL theories and approaches. The results of the study relate to the results from the literature that imply that public and school libraries in the Central District are also affected by the same challenges which may also affect Botswana as a nation. This implies that Botswana school libraries and public libraries may fail to implement effective IL programs if the challenges indicated above are not addressed.

### **6.4 Recommendations**

The following recommendations are made based on the findings of this study;

- For IL to be implemented effectively in the schools there should be a department within the Ministry of Education and Skills Development to oversee the management of school libraries.
- Full time qualified librarians knowledgeable about the operations of school libraries and their development should manage school libraries.
- School libraries should be equipped with a variety of collections and computers connected to the Internet, if they are to satisfy the information needs of teachers and students.
- IL should be incorporated into the school curriculum. This is crucial, as IL will be given the same weight as other examinable subjects. The study further recommends that teachers be trained in IT issues so that they may assist students with retrieval of information.
- Teachers and teacher-librarians should collaborate in terms of planning all the IL issues.
- Headmasters should ensure that libraries are fully functional and should support the development of students as critical thinkers for lifelong learning challenges through teaching them IL.
- Public librarians should be trained in IL so that they may have a deeper and better understanding of what IL entails.
- Schools and public libraries should cooperate to share expertise, resources and collections.
- Public librarians should design IL programmes specifically for the students so that they may be in a position to know exactly how to assist students in acquiring the needed IL skills.
- Public librarians should also be involved in the actual ITC training of the students.

### **6.5 Further Research**

- This study was based on a case study of the Central District of Botswana. More research that is extensive is required to capture the situation at the national level, using more broad based research methods. Such an approach will yield more in-depth and varied information on the role of public libraries in enhancing the ILS of senior secondary school students in Botswana.

- The study paid attention to the senior secondary school students (17-18 years). A further study of all senior secondary school students in the other districts is recommended to gather in-depth information on the role of public libraries in enhancing the IL skills of senior secondary school students.
- Further research can also examine the following themes:
  - Impact of IL teaching on the academic achievements of students
  - Gender considerations in IL teaching; and
  - Best practice examples on the collaboration between public and school libraries

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## **Appendix A**

Assent form

Name: Sibongakonke Dube (40973522)

Supervisor: Prof T.B. van de Walt

Description of subject population: 17-18 year olds

Date: 16 June 2016

Institution: University of South Africa

My name is Sibongakonke Dube (40973522). I am a researcher at the University of South Africa (Unisa) department of Information Science. I am trying to learn more about the role of public libraries in enhancing the information literacy skills of senior secondary school students. To do this, I am asking you and other students to take part in my research study. A research study is a way to learn more about something. You are asked to join this research study because you are a senior student in one of the senior secondary schools in the Central District in Botswana. This form explains the study. If you decide to be in my study, I will ask you to do the following:

You will be given a list of questions for you to fill in. This is a set of questions on a paper that you can fill.

This study will last for a month. You will not have to come to Unisa; the researcher will come to the school. Being in this study may not have a direct benefit for you. The study will assist in finding out the reasons why public libraries ought to enhance the information literacy skills of senior secondary school students.

Other people will not know if you are in my study. The information I write down about you and other students will be kept safely locked up. When I tell other people or write an article about my research, I will not use your name. This way, no one will know that you took part in this study.

It is okay if you decide you do not want to be in the study or if you change your mind and wish to stop at any time. No one will be angry with you.

My telephone number is 71511080. You can call me if you have questions about the study or if you decide you do not want to be in the study anymore. If you decide to be in this study, please sign your name below. I will give you a copy of this form to keep.

Agreement

I have decided to be in the study even though I know that I do not have to.

Sibongakonke Dube has answered all my questions.

X\_\_\_\_\_

Study participant (student)

Date.....2016

X\_\_\_\_\_

Researcher (Sibongakonke Dube)

Date.....2016

## **Appendix B**

Assent form

Name: Sibongakonke Dube (40973522)

Supervisor: Prof. T.B. van de Walt

Description of subject population: Adults

Date: 16 June 2016

Institution: University of South Africa

My name is Sibongakonke Dube (40973522). I am a researcher at the University of South Africa (Unisa) department of Information Science. I am trying to learn more about the role of public libraries in enhancing the information literacy skills of senior secondary school students. To do this, I am asking you and other teacher-librarians to take part in my research study. A research study is a way to learn more about something. You are being asked to join this research study because you are teacher managing the school library in one of the senior secondary schools in the Central District in Botswana .This form explains the study. If you decide to be in my study, I will ask you to do the following:

You will be given a list of questions for you to fill in. This is a set of questions on a paper that you can fill.

This study will last for a month. You will not have to come to Unisa; the researcher will come to the school. Being in this study may not have a direct benefit for you. The study will assist in finding out the reasons why public libraries ought to enhance the information literacy skills of senior secondary school students .

Other people will not know if you are in my study. The information I write down about you and other children will be kept safely locked up. When I tell other people or write an article about my research, I will not use your name. This way, no one will know that you took part in this study.

It is okay if you decide you do not want to be in the study or if you change your mind and wish to stop at any time. No one will be angry with you.

My telephone number is 71511080. You can call me if you have questions about the study or if you decide you do not want to be in the study anymore. If you decide to be in this study, please sign your name below. I will give you a copy of this form to keep.

Agreement

I have decided to be in the study even though I know that I do not have to.

Sibongakonke Dube has answered all my questions.

X\_\_\_\_\_

Study participant (teacher librarian)

Date.....2016

X\_\_\_\_\_

Researcher (Sibongakonke Dube)

Date.....2016

## **Appendix C**

Assent form

Name: Sibongakonke Dube (40973522)

Supervisor: Prof. T.B. van de Walt

Description of subject population: Adults

Date: 16 June 2016

Institution: University of South Africa

My name is Sibongakonke Dube (40973522). I am a researcher at the University of South Africa (Unisa) department of Information Science. I am trying to learn more about the role of public libraries in enhancing the information literacy skills of senior secondary school students. To do this, I am asking you and other public librarians to take part in my research study. A research study is a way to learn more about something. You are being asked to join this research study because you are a public librarian in the Central District in Botswana. This form explains the study. If you decide to be in my study, I will ask you to do the following:

You will be given a list of questions for you to fill in. This is a set of questions on a paper that you can fill.

This study will last for a month. You will not have to come to Unisa; the researcher will come to the school. Being in this study may not have a direct benefit for you. The study will assist in finding out the reasons why public libraries ought to enhance the information literacy skills of senior secondary school students.

Other people will not know if you are in my study. The information I write down about you and other children will be kept safely locked up. When I tell other people or write an article about my research, I will not use your name. This way, no one will know that you took part in this study.

It is okay if you decide you do not want to be in the study or if you change your mind and wish to stop at any time. No one will be angry with you.

My telephone number is 71511080. You can call me if you have questions about the study or if you decide you do not want to be in the study anymore. If you decide to be in this study, please sign your name below. I will give you a copy of this form to keep.

Agreement

I have decided to be in the study even though I know that I do not have to.

Sibongakonke Dube has answered all my questions.

X\_\_\_\_\_

Study participant (public librarian)

Date.....2016

X\_\_\_\_\_

Researcher (Sibongakonke Dube)

Date.....2016



## Appendix E

### SAVINGRAM

**FROM:** Director - Regional Operations  
Regional Education Office - Central

  
E. M. Mollhardt for DRO

**TEL:** 4631820  
**FAX:** 4632324

**TO:** School Heads  
Swaneng Hill Senior Secondary School  
Lotsane Senior Secondary School  
Madiba Senior Secondary School  
Letlhakane Senior Secondary School  
Matshekge Hill Senior Secondary School  
Tutume McConnell College

**REF:** CREOS/1/13/1 (84) CEO

02 February 2016

**PERMISSION TO CARRY OUT A SURVEY IN SCHOOLS**  
**- SIBONGAKANKE DUBE**

The above subject matter refers.

This serves to inform your office that permission is granted for the above named student at Serowe College of Education to carry out a research in your schools.

Thank you

**cc:** Chief Education Officer - Serowe Sub-Region  
Chief Education Officer - Palapye Sub-Region  
Chief Education Officer - Mmabiyane Sub-Region  
Chief Education Officer - Boteti Sub-Region  
Chief Education Officer - Selebo Sub-Region  
Chief Education Officer - Tutume Sub-Region  
Principal - UNISA University of South Africa

  
RESIST, REJECT AND REPORT CORRUPTION - TOLL FREE: 0800 600 990



## Appendix F

TEL: (+267) 5901186  
FAX: (+267) 5913473



REPUBLIC OF BOTSWANA

MINISTRY OF SPORT YOUTH AND CULTURE  
PRIVATE BAG 00514  
GABORONE  
BOTSWANA

PAGE 01

①

REF: MYSC 9/2/1 III (7)

14<sup>th</sup> March 2016

Mrs Sibongakonke Dube  
Private Bag 001  
Serowe, Botswana

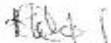
### RESEARCH PERMIT- MRS SIBONGAKONKE DUBE

This serves to acknowledge your application for a Research Permit on "THE ROLE OF PUBLIC LIBRARIES IN ENHANCING INFORMATION LITERACY SKILLS (ILS) OF SENIOR SECONDARY SCHOOL STUDENTS WITHIN CENTRAL DISTRICTS COUNCIL". The Permit is granted for a period of twelve (12) Months, commencing 14<sup>th</sup> March 2016 to the 14<sup>th</sup> of March 2017 and is granted under the following conditions:

1. Copies of the final product of the study are to be directly deposited with the Ministry of Youth Sport and Culture, National Library Services, National Archives and Records Services and Research and Development in the University of Botswana.
2. The Permit does not give you authority to enter premises, private establishment or protected areas. Permission for such areas should be negotiated with those concerned.
3. You conduct your study according to particulars furnished in the application you submitted taking into account the above conditions.
4. Failure to comply with any of the above conditions will result in the immediate cancellation of the Permit.

Thank you

Yours Faithfully

  
Kerly D Kelly

For/Permanent Secretary

Cc: Director, National Archives and Records Services  
National Librarian, National Library Services  
Director, Research and Development, University of Botswana



## Appendix G

My name is Sibongakonke Dube, a student studying for a Master's Degree in Information Science with the University of South Africa (UNISA). As part of my studies, I am undertaking a research project on: **The role of public libraries in enhancing information literacy skills of senior secondary school students in the Central District in Botswana.** I would really appreciate your assistance in filling in this questionnaire as part of the information gathering process for the project.

**Note:** All the responses shall be treated as confidential

### Questionnaire for secondary school students

#### 1. Do you have a library in your school?

1.1	Yes	
1.2	No	

#### 2. Who is responsible for running the library and teaching Information Literacy?

(Select as many options as are applicable)

- a) Teacher librarian
- b) Head teacher
- c) Senior teacher
- d) Students
- e) Librarian

**3. Do you have computers with access to the Internet in the library?**

<b>3.1</b>	<b>Yes</b>	
<b>3.2</b>	<b>No</b>	

**4. Is there a public library within the village?**

<b>4.1</b>	<b>Yes</b>	
<b>4.2</b>	<b>No</b>	

**5. Why do you use the public library? (Select as many options as are applicable)**

- a) The public library has more reading material than the school library
- b) The public library staff provides some guidance.
- c) The school library does not operate
- d) The school library does not open during weekends

**6. From the very first time you used the public library, were you taught how to use the library? (From the information desk, guided tours, how the library catalogue works etc)**

- a) Yes
- b) No

## **Information Literacy (IL) Section**

*Information Literacy (IL) can be defined as a set of abilities requiring individuals to recognize when information is needed and have the ability to locate, process, retrieve, store and use effectively the needed information. Information literacy forms the basis for life-long learning. An information literate student should be familiar with a range of the most commonly used information sources and has to acquire the necessary skills to access these sources.*

### **7. Have you ever received teaching, training, or guidance on information literacy?**

- a) Yes
- b) No

### **8. To what degree do you think you are in formation literate? (Select one that applies to you)**

- a) Lack of certain information seeking abilities
- 
- b) 100% information literate
- c) Not information literate at all
- d) Not Sure

### **9. Would you like to receive more training? If so in what form?**

- a) One-on-one interactions
- b) Class demonstrations
- 
- c) Workshops

d) Not Applicable

**10. Where do you think would be the most appropriate place for such training to be undertaken?**

At school

College

University

**Thank you**

**Appendix H:**

My name is Sibongakonke Dube, a student studying for a Master’s Degree in Information Science with the University of South Africa (UNISA). As part of my studies, I am undertaking a research project on: **The role of public libraries in enhancing information literacy skills of senior secondary school students in the Central District in Botswana.** I would really appreciate your assistance in filling in this questionnaire as part of the information gathering process for the project.

**Note:** All the responses will be treated as confidential

**Questionnaire for the teacher-librarians**

**1. What types of information sources are available at the school library? (Tick**

Applicable)

Encyclopedias

Dictionaries

Academic books

Fiction books

Fairytales

**2. Do you think the school library is meeting the information needs of students and teachers?**

Yes

No

**3. Do teachers use the library for teaching preparation?**

Yes

No

**4. Do all the classes have a library period?**

Yes

No

**5. Do you teach information literacy as a subject to students?**

Yes

No

**6. What methods do you use in teaching Information Literacy?**

Library Instruction

Teaching students how to find appropriate material

Show students how to borrow books

**7. What aspects of IL skills programmes are offered to students?**

Orientation, training, and guidance

User education

**8. What are some of the challenges that prevent you from teaching basic information literacy skills to the students?**

Inadequate funds for education and hence school libraries

Limited printed resources

Teacher librarian is not involved in the purchase of library materials

The government does not monitor performance on school libraries

Absence of qualified personnel

Lack of teacher training in school library courses

**9. What is the level of interaction with the public library?**

Very low

Low

High

Very high

None at all

**10. Do public library staff visit school libraries)**

Yes

No

**11. Do you have any knowledge of public library issues and development?**

Very low

Low

High

Very high

**Thank you.**

## **Appendix I**

My name is Sibongakonke Dube, a student studying for a Master's Degree in Information Science with the University of South Africa (UNISA). As part of my studies, I am undertaking a research project on: **The role of public libraries in enhancing information literacy skills of senior secondary school students in the Central District in Botswana.** I would really appreciate your assistance in filling in this questionnaire as part of the information gathering process for the project.

### **Questionnaire for public librarians**

#### **1. Do senior secondary school students visit your library?**

Yes

No

#### **2. What exactly makes these children visit your library (select the appropriate that apply to your library?)**

Access to technology

A place to read

Obtain help from library staff

Study in the library with own material

Life-long learning (educational support)

#### **3. Do you offer any kind of educational support to schoolchildren?**

Yes

No

**4. Do you think teaching IL is a role of the public library? (Tick Applicable)**

Yes

No

**5. Do you offer any IL training in your library to secondary school learners? (Tick applicable)**

Yes

No

**6. How do you offer IL in your library? (You may tick more than if that applies to you)**

ICT/Technology access and training

Reference interviews

Partnership (with schools)

Partnerships with community information providers

Partnerships with individuals

**7. How often do you offer IL instruction in your library? (Tick applicable)**

Once a week

Once fortnightly

Monthly

Everyday

Everyday

None

**8. At what educational level should IL instruction be offered to secondary school children? (Tick Applicable)**

Pre-primary

Primary school

Secondary school

**9. Are there any challenges about IL instruction/training in your library that hinder you from providing it?**

Yes

No

**Thank you**