

# Access to Educational Information by High School Learners: A Case of Jabavu High School, Fort Beaufort Educational District, South Africa

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## Abstract

**Purpose:** Underpinned by the importance of accessibility of learners to educational information, as a precursor quality education outcome the study purposed to investigate learners' information access, challenges confronting learners and how access to information can be improved.

**Design/Methodology/Approach:** Survey research design was adopted. Questionnaire was used to collect data from grade 12 learners and subject teachers while structured interview was used to collect data from the school librarian. A focus group discussion was employed as a complimentary data-gathering strategy. Data obtained were analysed using descriptive statistics.

**Findings:** The findings revealed that needed educational information resources were not accessible to high school learners. Learners have suffered neglect due to the general assumption that learners always have access to information. Indications of challenges of access identified were: "locked" school library; inadequate information provision; difficulty in identifying relevant information; incompatibility of operational hours with learners' free time and lack of information literacy education.

**Implication:** It is recommended that provision of functional hybrid library system should be prioritised in the school library system development and research.

**Originality/value:** The work is a benchmark study in the nexus of availability, accessibility and access to educational information by high school learners in an educationally disadvantaged and information poor educational district in South Africa. It is original in context and the phenomenon explored and could benchmark inquiry in other similarly disadvantaged areas. The methodological approach using triangulation further helps to give the inquiry depth as opposed to mono-linear method of exploring similar issues in users access dimensions.

**Keywords:** Educational information, access to information, information literacy, high school learners

**Paper type:** Empirical research

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## Introduction

Information access has been known not only to be fundamental to information literacy, but also critical in climbing the ladder of formal education. The revolution brought into existence by the rapid growth in universally obtainable information has made information to become an indispensable resource in every walk of life (Molawa, 2009). Information is cardinal to

societies. Quality education in the 21<sup>st</sup> century is highly dependent on information literacy skills and information-rich environment that is learner-centred. This underscores the concern for access to information by high school learners. Lo, Chen, Dukic, Youn, Hirakue, Nakahima and Yang (2014) asserted that information literacy

social and economic development (Ididio, 2005; Roling, 2007; Ranaweera, 2008; Buchholz, 2011; Ani, 2013), including security and policy development (Opara, 2003; Moahi, 2009). Furthermore, the level of information awareness, acquisition and appropriation determines the growth level of individuals, groups and

skills are gradually becoming a set of standards to be met by students. The vital roles of information in human development, coupled with the necessity of making it equitable, have been responsible for the concern on access to information. For instance, indigent students require information on scholarship to assist them

financially and to ameliorate the financial burden of their studies. Awareness and access to such information may enable a student to reach the peak of his/her career while a classmate who could not access such information may drop out along the line. Therefore, the information gap may be responsible for the difference between the successful students and the unsuccessful students. This study examined the availability and accessibility of educational information at a high school in the Eastern Cape Province of South Africa. In pursuit of this aim it is desirable to explore the educational information needs of high school learners in the subject high school, identify the educational information that are available and accessible to the high school learners; ascertain the information services and technologies available to the high school learners in accessing educational information and identify the challenges faced by the high school learners in accessing educational information.

### **Empirical review of Access to Educational Information**

Concern for information access is borne out of the need for information and the necessity of its provision and services for total welfare. In recognition of the place of information in the attainment of educational goals, studies have been conducted on information needs. Agosto and Hughes-Hassel (2006) examined the everyday life information needs of some urban teenagers between the ages fourteen to seventeen. The study reported that the essence of teens' everyday life information seeking is to facilitate their teenage-to-adulthood maturation process. Udofia (2012) surveyed the information needs of rural secondary school adolescents in Nigeria. According to findings from the survey, occupation was rated the highest among the listed information needs of the adolescents followed by the need for health information and thirdly information on social services among others. Conversely, the result of the investigation by Otoide (2015) on the information needs of secondary school students in selected schools in a rural Abraka community in Nigeria revealed academic related information as the greatest information needs of the young learners. This is followed closely by parental guidance information and information on future career choice. Other information needs of the students include information on: health, entertainment, friendship, religious, family care and societal values.

Quality education is highly dependent on knowledge-based environment and learner's ability to forage within a web of educational information. L. O, *et al.*(2014) believe that "the new knowledge-based learning environment has become increasingly focused on student-centred learning and other self-taught skills". Kuhlthau (2010) advocated a paradigm shift from the teacher-centred form of learning to learner-centred education. This, she believed, will encourage critical thinking, social transformation and practical orientation. Student or learner-centred learning requires information literacy as the driving force fueled by the availability of such information as may be needed by the learner. According to Pickard (2002) disparity of access to electronic information resources exists among schools, homes and public libraries thereby presenting uneven learning opportunities to learners. Access to and utilization of Information and Communication Tools (ICTs) such as computers, laptops, television, internet etc. is commonly believed to improve access to information, besides, Ribot and Peluso (2003) argued that technology can shape and influence access.

Meyers and Eisenberg (2008) assessed information seeking and use by Grade 9 students in six high schools from Seattle area revealed that students have high degree of internet access in various places. On the contrary, the study conducted on Maori students by Lilley (2008) reported the lack of access to information technology and internet among the students. This constituted a considerable barrier to the students' information access. Results from Aduwa-Ogiegbaen and Iyamu's (2011) survey of the availability and utilization of classroom computer across urban and rural schools in south western Nigeria revealed that all the schools were poorly equipped, though, urban schools were relatively better equipped than the rural schools. The researchers noted the inadequacy of ICT tools in the schools as a limitation on the students' education. It was therefore recommended that government at all levels should provide adequate fund for procurement of ICT facilities in schools and should strive to achieve a ratio of one computer to five (5) students in every school. Newby et al (2013) investigated ICT infrastructure and use in 11 secondary schools in Mukono, Uganda. Findings revealed that all the eleven (11) schools had minimum of one working computer, however, students' access to the computers was extremely

restricted. It was discovered that students had no access to computers at all in four (4) among the schools. In schools where computer laboratories exist, the computers were locked up and can only be accessed during computer classes.

Often it is assumed that the needed educational information is available. However, despite the enactment of information laws in various nations of the world, access has not been assured. The existence of structural and other human and personal factors often hinder access to information. Molawa (2009) reported infrastructural deficiencies facing a large proportion of South African “Third world” cities and villages, which impacted unfavourably on their ability to access information and by extension access to knowledge. The scholar further noted that other factors such as education, library and information services and commerce exert their influences both positively and negatively on access to knowledge. Hence, collective involvement and participation of all stakeholders in these sectors is paramount for information access.

Benard and Dulle (2014) examined access and use of school library information resources by secondary schools students in Morogoro Municipality, Tanzania and found that vital information resources such as atlases, maps, dictionaries and audio visuals required by the students to meet their information needs were not accessible to them. Additionally, the students are faced with several challenges which include inadequate facilities in the school library, outdated reading materials, restricted reading hours, and lack of qualified personnel. Lo, *et al* (2014), in a five-nation’s comparative study, have underscored the importance of both availability and accessibility of educational resources. They also emphasized that beyond availability of information, the influencers and shapers of access to information in this era are technological tools as well as information literacy skills.

Towards the turn of the century, South African education authorities and policy makers bought into the paradigm shift from teacher-centred form of learning to learner-centred education and came out with the outcome-based education policy, otherwise known as “CURRICULUM

2005” (Department of Education (DOE), 1997). Organisation for Economic Co-operation and Development (OECD) (2008) reported that “the new National Curriculum Statement (NCS) is grounded on a learner-centred, outcomes-based education approach”. Over ten years after the policy formulation on outcome based education in South Africa, certain schools are still grossly incapacitated in terms of access to print and electronic information resources (Wessels, 2010; Equal Education, 2011). This underscores the need for a study of this nature.

### Methodology

A survey research design approach was adopted for the study. The population comprised Grade 12 learners, teachers, the teacher-librarian from Jabavu High School and the librarian at Alice Public library, situated within the locality of Fort Beaufort Education District, Eastern Cape, South Africa. Jabavu High School consists of 119 Grade 12 learners. The simple random sampling technique was adopted for the study to give every member of the targeted population an equal chance of participating.

A triangulation method involving the use of questionnaires, structured interviews, focus group discussion (FGD) and observation checklist was employed in gathering qualitative and quantitative data. Questionnaires were administered to both students and teachers, while structured interviews were conducted for the teacher-librarian and the librarian in charge of the Alice public library. Thirty Grade 12 learners completed the questionnaire. FGD involve in students’ representatives from the Science and Arts class was utilized. Further, three subject teachers completed the *Non-learners* questionnaires, and interviews were conducted for the teacher-librarian and the librarian of Alice Public Library. Information resources in these libraries were also observed using the observation checklist for the study. The results obtained were analyzed using descriptive statistics. The variables of the study measured on a Likert-type scale were analyzed using the mean item score given as:

$$\text{Mean item score (MIS)} = \frac{\sum f_i w_i}{\sum f_i}$$

Where  $f_i$  is the frequency of the  $i$ th response  
 $w_i$  is  $i$ th value on the Likert-type scale ( $i$  varies from 1 to 5)

## 5.0 Results

**Table 1: Characteristics of the high school learners**

Gender	Number and percentage of Learners
Male	11(36.7%)
Female	19(63.3%)
Total	30 (100%)

**Table 2: Language status and language preference for educational information access**

	First language	Language of instruction at school	Preferred language of accessing educational information
Xhosa	30 (100.0%)	0 (0.0%)	24 (80.0%)
Zulu	0 (0.0%)	0 (0.0%)	0 (0.0%)
Africans	0 (0.0%)	0 (0.0%)	1 (3.3%)
English	0 (0.0%)	30 (100.0%)	5 (16.7%)
Others	0 (0.0%)	0 (0.0%)	0 (0.0%)
Mean (SE)	1.00 (0.000)	4.00 (0.000)	1.57 (0.213)

**Table 3: Learners' information needs**

Information needs on:	Learners	Teachers
	Mean item score	Mean item score
All the subjects taught at my school	2 (1.28)	1.33 (0.58)
Citizenship Education	2 (1.13)	1.67(0.58)
Security	2 (1.11)	2.00(0.00)
Diet e.g. balanced diet	2 (0.95)	2.33 (2.33)
Reading/library culture	2 (0.93)	2.00 (1.00)
First Aid such as rescue operations, emergencies, self-protection strategies, etc.	2(0.93)	1.67(0.58)
Soft skills e.g. leadership skills, communication skills, confidence skills etc.	2 (0.89)	1.33(0.58)
Family life	2 (0.84)	2.00 (0.00)
Skills and vocational education	2 (0.77)	1.33(0.58)
Ethics/Value Education: (12 Core values such as endurance, honesty, hardwork etc)	2 (0.76)	1.33(0.58)
Guidance/counselling e.g. career guidance	2(0.72)	1.27(0.58)
Information literacy is part of my needs	2 (0.66)	1.67(0.58)
Requirements for admission into Universities to further my education	1 (0.53)	N/A
Classroom assignments and homework	2 (0.51)	1.67 (0.58)
Information and Communication Technologies (ICTs) Education	2 (0.49)	1.67 (1.57)

*Spearman Rank Correlation (r) = 0.54, Standard deviation in parenthesis*

Table 1 shows the distribution of the respondents according to their gender. The male respondents constituted about 36.7%, while the female respondents were 63.3%.

### First language and language preference for educational information access

Access is a way of being able to derive benefit from something; therefore the language of educational information delivery could impact on the access. The study requested for respondents' first language, language of instruction at school and their preferred language for information access. The result is presented in Table 2.

Table 2 revealed that Xhosa is the first language of all the respondents in this study, the language of instruction at school is English language. However, 80% of the respondents prefer to access educational information in Xhosa language, 3.3% prefer Afrikaans, while 16.7% prefer English. This has an implication on their access to information. The study sought information on learners information needs. The result is presented in Table 3 below.

### Information needs of respondents

Table 3 revealed that the learners need all the types of information listed, but emphasized the need for information to further their educational pursuit. This is not unexpected, because it is the next phase of their academic pursuit. The rank

correlation showing the relationship between the learners’ perception of their information needs and the teachers’ perception of the needs revealed a weak, but positive relationship.

The Teachers were asked to indicate the level of availability of listed types of educational information, while the learners were asked to indicate the level of their access to such information at school. Results of their responses are presented in Table 4.

**Table 4: Availability and access to the needed information by learners**

Type of educational information	Availability index (Teachers)		Accessibility index (Students)	
	Mean score	Standard Deviation	Mean Item score	Standard deviation
Ethics/Value Education: (12 Core values such as endurance, honesty, hard work, etc)	2.00	1.00	4.57	1.07
Security education	2.00	1.00	4.57	1.17
First Aid Education e.g. rescue operations, emergencies, self protection strategies	2.67	1.53	4.53	1.17
Soft skills education e.g. leadership skills, communication skills, confidence skills etc.	1.33	0.58	4.53	1.28
Family life education	2.67	0.58	4.53	1.14
Skills and vocational education	2.33	0.58	4.50	1.25
Diet education e.g. nutrition, balanced diet	2.00	1.00	4.50	1.25
Information on classroom assignment/ homework	1.67	0.58	4.47	1.25
Literacy education	2.00	1.00	4.47	1.22
Information and Communication Technologies (ICTs) Education	3.00	1.00	4.43	1.33
Information on the subjects taught at school	1.67	0.58	4.37	1.45
Guidance/counselling e.g. career guidance	2.33	0.58	4.37	1.47
Citizenship/civic Education	2.00	1.00	4.37	1.50
Reading/ Library culture education	2.67	0.58	N/A	N/A
Total mean item score	2.16	0.90	4.48	1.25

1=Readily Available; 2=Available; 3= rarely available; 4=Not available; 5=Not available at all.

1=Easily accessible; 2=Accessible; 3= Not Sure; 4= Not accessible and 5=Not available at all

Spearman rank correlation (r) = 0.07

- FGD reported that the “school library” is accessible to teachers only
- The School “Librarian” reported that it is more of a bookstore
- Personal observation reveals a room with six book shelves and a table containing disorganised books

**Table 5: Access to information and communication technology (ICT) tools by learners**

Information Literacy tools	Desktop computers		Laptop computers		Television		Android/Win Blackberry dows phone				Internet Access	
	N	%	N	%	N	%	N	%	N	%	N	%
I own one	2	6.7	6	20.0	5	16.7	25	83.3	13	43.3	21	70.0
Family owned	0	0.0	19	63.3	25	83.3	5	16.7	15	50.0	6	20.0
School owned	25	83.3	2	6.7	0	0.0	0	0.0	0	0.0	2	6.7
Public library	0	0.0	3	10.0	0	0.0	0	0.0	0	0.0	0	0.0
I own one and Family owned	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
I own one and School owned	3	10.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
I own one, Family owned and School owned	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	2	6.7
All Information Literacy tools	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	3.3

**Table 6: Challenges of access to information by learners**

Statement	Mean item score	Standard deviation
Educational information provided or available is inadequate	2.37	1.07
Information provided does not cover every aspect of NSC (Matric) examination syllabus	2.33	1.30
Information provided is not relevant to my educational aspirations or future plans	3.10	1.30
I am not satisfied with the amount of educational information I have access to in my school	2.80	1.35
My school does not have a school library/media centre	3.27	1.36
The information I need is not always available	2.53	1.07
Most often the school library is not opened for students' use	1.57	0.68
It is difficult to identify relevant information	2.23	0.82
I find it difficult to locate the educational information I need	2.40	1.16
I don't know of a public library close to my school/home	3.53	1.28
The public library is too far from my school/home	2.73	1.23
I don't find relevant information at the public library	3.10	1.24
The public library opening and closing hours are not convenient for me	2.57	1.22
Community librarians always assist us in locating the relevant information we need	2.57	1.10
I perceive that ICTs are indispensable tools to accessing information	2.80	1.10
I am not capable of using ICTs tools in accessing information	3.00	1.23
I find it inconvenient searching for educational information at the public library	2.83	1.46
Most often the information I needed is not available at our school library	2.20	1.16
My school is not connected to the internet through which I can access educational information	2.83	1.34
I do not have access to internet at home	3.17	1.46
The library does not loan out its materials. You can only use them within the library	2.70	1.24
The library does not assist in borrowing information resources from other libraries	3.00	1.20

*1= Strongly Agree, 2= Agree, 3= Not Sure; 4= Disagree and 5=Strongly Disagree*

### **Availability and accessibility of Information by Respondents**

Results from Table 4 have shown that while the teachers claimed that the information needed by the students were available, the learners claimed inaccessibility of needed information. A plausible explanation, among others, for the discordant views about the reality of availability is lack of access to the educational information. The learners were requested to indicate their access to ICT tools required for accessing information. The result is presented in Table 5.

### **Information and Communication technology tools accessible to learners**

From Table 5, 83.3% of the learners indicated access to school's desktop computers, family's television and personal Android/window phone respectively; 63.3% of the learners access laptop

computers owned by their family; 50% of the learners have access to blackberry owned by their family and 43.3% personal ownership; while 70% claimed access to personal internet connectivity and 20% have home internet access. However, it should be noted that observation revealed that the school has twelve computers without internet facilities. Focus Group discussion reported restricted access to school computers and lack of internet access. The majority of the learners indicated access to personal Internet connectivity, while very few indicated access to family owned internet. This could be possible through subscription to internet on their smart phones.

The respondents were asked to indicate the challenges confronting their access to information. The result is presented in Table 6.

### Challenges of access to information

As indicated in Table 6, it can be seen that some of the statements on challenges of access to information attracted mean scores below 2.50 which is a proof of access challenge. Such include: educational information available is inadequate; information provided does not cover every aspect of NSC (Matric) syllabus; most often the school library is not opened for use; it is difficult to identify relevant information; I find it difficult to locate the information I need; most often the information I need is not available. Further, the Table reveals that mean scores of some statements of access challenges falls between 2.50 and 3.50, which is an indication of uncertainty. Among this category are: information provided is not relevant to my future plan; my school does not have a school library; I don't find relevant information at the public library; the public library opening and closing hours are not convenient for me; my school is not connected to the internet; I do not have access to the internet at home; the library does not loan out its materials; the library does not assist in borrowing information resources from other libraries. A plausible explanation on these expressions of uncertainty may be the effect of learners' carefree approach to information provision and services.

### Discussion of findings

Learners in this study prefer to access information in their indigenous language although their language of instruction at school is English language. This is similar to the findings in Gharieb (2007) and Mdlongwa (2012) that learners are favourably disposed to information in their language which brings to fore the importance of bilingual education. Bilingual education advocates the use of both the mother-tongue and English language for learning. Scholars have argued that naturally, understanding of intellectual concepts becomes less challenging when learners are taught in their first language (Brisk & Proctor, 2012; Quinn, Lee & Valdés, 2012; Cheuk, 2012; Bunch, Kibler & Pimentel, 2012; and Cummins, 2001). The provision of information resources in English language whereas learners prefer to access the information in their indigenous language (Xhosa) as seen in the study suggests an access barrier. Chipeta (2008), Molawa (2009), Wessels (2010) and Buchholz, (2011) all affirmed the fact that lack of information in the

indigenous language of the people is a barrier to information access.

Further, the present study found learners' educational information needs to be many and varied. These information needs spread across two broad categories: academic attainment needs and life skills needs. The underpinning logic behind this classification is the global awareness and call for acquisition of what is termed 21st century skills or soft skills, without discounting the educational needs of the learners. Agosto and Hughes-Hassel (2006) adopted a classification that is similar but not comprehensive regarding the 21st century skills acquisition. This study further revealed that the learners emphasize the need for information to further their educational pursuit. This result agrees with other studies that share commonality of location and respondents (Otoide, 2015; Adesoye & Amusa 2011) but disagrees with Udofia (2012) significantly on the relegation of the need for information on educational pursuit.

Students reported that information resources at the school library are inaccessible to them. Although the teacher-respondents claimed that information was available, personal observation of the school library reveal that the information materials are obsolete, dusty and unutilised. Information is pivotal to total development, and research has confirmed that the information must be available and accessible to the people before it can be useful to them (Ugah, 2008; Kiptalam & Rodrigues, 2011; Ani, 2013). Despite the fundamentality of available and accessible information to the cognitive, social, and emotional development of individuals, its dearth persists (Ugah, 2008; Owate & Iroha, 2013; and Benard & Duelle, 2014). The current study reports that none of the supposedly available information is accessible to the learners, thus, validating the fact that availability is not equal to accessibility (Ugah, 2008). However, beyond the availability and accessibility of educational information, access is the chord that connects accessibility to use.

Access to needed information is not automatically guaranteed because there is accessibility to the information (Lievrouw, 2000; and Ribot & Peluso, 2003). There are mechanisms of access to information that emphasize the need for learners to possess the tools that will enable them to benefit from available and accessible information. Information and communication technology

(ICT) is one of such mechanisms. In this study, besides insufficient units of desktop computers in the school, the restrictions placed on learners' access to these computers were discovered. Reports from the FGD revealed restricted access to school computers and lack of Internet access. During the FGD sessions, a student revealed: "ever since I was in Grade 8, we never have access to the school computers". To keep the computers secured, administrators have shut them away from learners' usage. This has, however, constituted barriers to the learners' access to needed educational information. Furthermore, learners reported inadequate provision of information resources, lack of training in information literacy, low socio-economic background, lack of encouragement, restricted access to the library, lack of qualified personnel (ICT and library), and a discouraging library environment among others as challenges confronting their access to information. This is consistent with studies by Lilley (2008), Molawa (2009), Ndlovu (2010), Wessels (2010), Pathon-Ash (2012), Padma, Ramasamy and Renugadevi (2013), Owate and Iroha (2013) and Benard and Dulle (2011).

### **Recommendations**

Based on the findings from the study, the following recommendations are made:

Given the passion and expression of preference for access to information in indigenous language (Xhosa), consideration should be given to provision of educational information in the learners' first language. Tshotsho (2013) posited that in order to realise the goal of quality education among children from South African rural areas, due consideration should be given to mother tongue education.

There is also the need for functional hybrid school libraries for learners to access both print and electronic resources and qualified librarians. Furthermore, learners should have unrestricted access to the school library and the computer laboratory, internet and adequate ICT facilities to enhance access to information required for the attainment of quality education.

A clear educational policy regarding the school library that includes the duties and obligation of the librarian should be declared by the Department of Basic Education (DOE). Implementation, close monitoring and continuous compliance with the policy must be ensured. Information resources should be made

available to the learners in both English and local indigenous language. This was noted by one of the members of the Equal Education movement when it was said that: "Libraries are vital because most South African homes do not have books" (Equal Education, 2011:9). Credit-rated information literacy and library culture education should be incorporated into school curriculum and made compulsory for learners.

### **Conclusions**

This study has shown that contrary to the general assumption that South African high school learners have access to information services and resources; useful and needed educational information is neither available nor accessible to those in the school surveyed. This might not be an isolated case but a representation of the predicament of schools in rural settings. It was discovered that information on First Aid Education, Family life education, Information and Communication Technologies (ICTs) Education, and Reading/ Library culture education were rarely available to the students despite the fact that the students identified them as part of their information needs. The first concern, therefore, is for educational authorities to ensure provision and availability of educational information.

This study provides empirical justification for the Equal Education Campaign advocating "1 School, 1 Library, 1 Librarian" (Equal Education, 2011:8). The issue of language in the provision of information resources also brought to fore the concept of bilingualism with special emphasis on the positive effect of additive bilingualism on access to educational information. Availability and easy access of information is of great importance to academic attainment, while access is highly affected by the structural and relational parameters embedded in the cultural institution and the individual learner.

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