THE ROLE OF INFORMATION LITERACY IN SOCIO-ECONOMIC DEVELOPMENT: A SURVEY OF TERTIARY INSTITUTION STUDENTS IN BULAWAYO, ZIMBABWE

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ABSTRACT

Information literacy (IL) advances the living standards of people by enabling them to make informed decisions which translate into socio-economic development. The purpose of this study was to investigate the role of IL in socio-economic

development among students in Bulawayo, Zimbabwe. The objectives were to: find out how students obtain IL skills; examine the importance of IL to students; examine the relationship between IL and information communication technologies (ICTs); examine the relationship that exists between IL and socio-economic development; and find out the challenges faced by students in obtaining IL. A survey was conducted among 191 students in Bulawayo. The data was collected using questionnaires and interviews. The findings revealed that most students acquire IL through lectures and this enables them to make informed decisions related to socio-economic development. The study recommends that authorities in tertiary institutions should ensure that there are sufficient ICTs available to enable IL acquisition for all students.

Keywords: information literacy, socio-economic development

1.   INTRODUCTION

Information literacy (IL) (a term accredited to Paul Zurkowsk who coined it in 1974) is used to describe a number of initiatives in higher education that seek to meet the broad demands of the information society. Information and IL skills are needed by any society in order to enable decision making, whether socially, culturally, politically, economically, technologically or in any other sphere of life. Skills to locate, access, evaluate, and use information are vital for individuals' lifelong education, whether at school, in their daily activities in a remote rural community, or in an urban setting in as much as skills to save and preserve information are equally important (IFAP 2012). Across the world, educators in primary, secondary, tertiary and professional education contexts have been developing strategies and policies for designing learning opportunities that will enable learners to take advantage of the information and communications technology (ICT) infrastructures available to them (Bruce 2004). This will allow students to be information literate in order to meet their information needs for the rest of their lives, not just for academic purposes.

IL encompasses knowledge of an individual's information concerns and needs, the ability to identify, locate, evaluate, organise and effectively create, use and communicate information to address issues or problems at hand. It is a prerequisite for participating effectively in the current information society and is part of the basic human right of life-long learning. Therefore, IL includes the ability and willingness to: understand the value of information; recognise entrepreneurial opportunities in the sector and select appropriate information sources; and translate information into knowledge to be used productively and tactically for developmental purposes. It is a vital part of decision making in every area of life and not only in education. It allows people to determine what information is needed; how much of it is needed; how to get it effectively and efficiently; how to analyse the information as well as its sources; and then select and store the desired information for use in order to

accomplish the desired aim. Thus, it is a vital of students' lives in order for them to meet their information needs, thereby contributing to socio-economic development.

In this information age, IL requires individuals to be aware of and respect the legal and ethical issues that relate to the use of and access to information. This is especially so for students who come across a lot of information as they work at developing themselves. Issues of information access and use lead to copyright issues and plagiarism issues. Today, IL is inextricably associated with information practices and critical thinking in the ICT environment (Bruce 2004). ICTs bring challenges of their own when it comes to accessing, producing and sharing information, thereby increasing the necessity to develop IL among students at early stages of their education. IL advances people's standard of living as they are able to make informed decisions concerning their personal growth. This, in turn, translates into socio-economic development, which is the social and economic development of a nation or society, which then contributes to national development.

IL has always been critical for the survival of human beings and for ensuring their sustainable development. According to Moeller, Joseph and Lau (2011), since the dawn of human civilization, in every sphere of human activity, access to information, and the creation and application of new knowledge have contributed to the evolution of societies and the economic welfare of people. Currently, IL plays a key role in the development and dissemination of information. The situation has created a challenge in terms of knowledge and skills that people should possess in order to handle and use information effectively for socio-economic development. IL has grown and gained power and recognition all over the world, both academically and professionally. The significance attached to IL has led many tertiary institutions to initiate IL programmes that will equip students with enough knowledge and skills for sourcing and effectively utilising information for their personal development. This is the case in Zimbabwe where most tertiary institutions offer courses on information and communication skills.

IL is very important to every society as it enables people to understand various issues and become enlightened and active members of society. For developing countries, such as Zimbabwe, IL is very significant as it enables citizens to be empowered with the necessary information which is vital for socio-economic development. This is why most tertiary institutions offer information and communication skills courses that ensure that by the time students leave the institutions they are information literate and ready to be absorbed into the information age. Thus, information literate people can participate in the national development process and are able to combat the challenges that may affect them in society. Becker (in Kasanda 2013) notes that IL is important and necessary as it acts as a social instrument or tool for developing human resources and information of human capital needed to bring about the desired development.

2.   PROBLEM STATEMENT

IL enables individuals to locate, identify, evaluate and use information in order to perform any given task with ease at any given time. It is a life-long skill desired by many people because anyone with such skills is able to adapt to any environment with ease. Those without IL skills find it difficult to survive the pressures of life relating to the need for information, especially in academic circles where research is crucial for success, or as they say, 'publish or perish'. In most cases poverty and high unemployment levels could be easily eradicated in Zimbabwe if people were information literate. IL has a part to play in education since it is vital to individuals' socio-economic development and success in various areas of life. For students to be able to compete on the global scene they must have information and communication skills which are fundamental for competency in a world where change and escalating digital information is the norm. Since IL is crucial to effective learning in the 21st century, students should be equipped with such IL skills that will help them to be able to feed themselves intellectually in order to make decisions in life (at school, work, in society) and to meet every challenge and opportunity that life brings, thus aiding socio-economic development. In Zimbabwe, as one of the African countries with a literacy rate of over 90 per cent, there is a need to develop IL skills that could help people, students in this case, to counter the effects of poverty, unemployment and functional literacy among other challenges characterising their everyday life. However, the reality is such that even if most institutions offer courses on IL, not all students have the information and communication course as part of their curriculum. This translates into the fact that some students are still information illiterate and finish school without IL skills, which will affect their prospects of developing further in life.

3.   PURPOSE AND OBJECTIVES OF THE STUDY

The purpose of the study was to investigate the role of IL in socio-economic development among students in tertiary institutions in Bulawayo, Zimbabwe. The study was guided by the following objectives:

- To find out how students obtain IL skills.
- To examine the importance of IL to students.
- To examine the relationship between IL and ICTs).
- To establish the relationship that exists between IL and socio-economic development for students.
- To identify challenges faced by students in becoming information literate.

4.   SCOPE OF THE STUDY

The study focused on students from two tertiary institutions in Bulawayo, Zimbabwe, namely, the National University of Science and Technology and the Bulawayo Polytechnic College. The study sampled 191 students. Four lecturers who teach courses that have to do with information and communication skills were targeted as well as two librarians, one from each institution's library.

5.   LITERATURE REVIEW

The extant literature related to IL was examined. In conducting the literature review, the researchers intended to become well acquainted with the problems and issues associated with IL and socio-economic development.

5.1. IL and ICTs

Bawden (2001) states that literacy involves the ability to use a language in its written form; therefore, a literate person is able to read, write and understand his/her native language. While literacy is about being able to read and write, IL requires more than the ability to read and write. This is because information is now delivered in a variety of media through ICTs and the Internet. In the information age, information is becoming essential for socio-economic development, thus raising the need for ICT literacy as well. ICT literacy is an important part of IL. Correia (2002) states that recent developments in ICTs have made it easier for individuals to access information. The author goes on to say that this is so because the impact of the Internet and other digital resources enable people to use more methods and sources than before to satisfy their information needs. Bawden (2001) brings out the significance of the all-encompassing multi-literacies as critical tools of the information age.

According to the United Nations Educational, Scientific and Cultural Organization (UNESCO 2008), IL encompasses knowledge of an individual's information concerns and needs, and the ability to identify, locate, evaluate, organise and effectively create, use and communicate information to address issues or problems at hand. Hence, it is a prerequisite for participating effectively in the information society, and is part of the basic human right of lifelong learning. Therefore, IL skills enable people to locate, access, retrieve, evaluate, interpret and act on information. Alexandria (in Lau 2013) goes on to say that IL is a tool that empowers people from all walks of life to seek, evaluate, use and create information effectively to achieve their personal, social, occupational and educational goals. These sources serve to emphasise that, in the information age, IL is a must for every individual, even more so for students.

Doyle (1994) defines an information literate person as one whom:

- Recognises the need for information.
- Recognises that accurate and complete information is the basis for intelligent decision making.
- Identifies potential sources of information.
- Develops successful strategies.
- Accesses sources, including computer based and other technologies.
- Evaluates information.
- Organises and integrates information for practical application.
- Integrates new information into an existing body of knowledge.
- Uses information in critical thinking and problem solving.

Therefore, IL allows people to participate in community involvement and development as well as to make informed decisions on any challenges that they may come across.

ICTs can be used to produce and communicate such needed information. In the information age, networked computers and communication systems are becoming part of the daily life of a significant part of the population worldwide (Correia 2002). However, due to challenges – such as economic underdevelopment; lack of resources, technological structures, education and training opportunities and skills – there is now a separation into people with access to the ICTs and those without, thus creating a digital divide. The same digital divide has a negative impact on the adoption of IL.

Development is gradual growth toward advancement and power (Zahedi 2003). It has economic, political, social, technological and cultural parts. Development can occur on an individual, community or even national level. Considering factors, such as culture, economy, hygiene, education, and so on, leads to a broad but unified concept of development (Bahramzadeh 2003). Taken as a whole, development is all those actions that lead society toward an organised system of individual and collective living conditions relating to desirable values (Sharif al Nasabi 1996). With that in mind socio-economic development is best advanced by people who are aware of their need for information, and thus can recognise, find, access, evaluate, relate and make use of the needed information to solve a particular problem in their lives.

5.2. IL activities

There are various IL activities that can be used to equip students with IL skills, and these can be used in class, the library or any other form of training given to learners. Thus, IL skills can be passed on by lecturers, librarians and facilitators. According to Kavulya (2003), library orientation is one of the mandatory activities of IL and takes place in the first and second weeks when new students report to the university.

Library orientation aims to equip the new students with the skills they require to utilise the library's resources effectively.

6.   METHODOLOGY

A mixed methods approach was adopted for the study as it focuses on collecting, analysing interpreting and presenting quantitative and qualitative data in a single study. A survey was carried out at two tertiary institutions, namely, the National University of Science and Technology and the Bulawayo Polytechnic College. A survey was preferred for the study because it is widely viewed as very effective in collecting and analysing information about people's perceptions and larger populations (Kumar 2005).

The total population was ±10 000 students from both institutions and the population of final year students was 2 890. A sample size of 191 was determined by applying Yamane's (1967) formula using a precision of ±7 per cent. Random sampling was used to sample the final year students since it can be used with large populations and it avoids bias. Purposive sampling was used for sampling key informants, who included four lecturers who teach information and communication skills courses from these two institutions and two librarians, one from each institution. Purposive sampling also known as judgemental sampling was used for the academic staff because it allowed the researchers to use their knowledge of the population and to select certain groups or individuals for their relevance to the issue under study (Aina and Ajifuruke 2002).

Questionnaires and interviews were used for data collection in the study. The justification for using questionnaires was that they are very cost effective when compared to face-to-face interviews, especially for studies involving large sample sizes, such as students in tertiary institutions. Interviews were suitable for the smaller sample size of librarians and lecturers. To ensure validity and reliability the questionnaires were piloted to ten students before distribution to the main sample. The quality of instruments used in research was vital because the information that was obtained through them was used to arrive at conclusions and this made a pilot study an important part of the research (Frankel and Wallen 2000).

Data analysis was done both qualitatively and quantitatively by statistically analysing scores as well as aggregating words into categories of findings. The data was then presented in the form of frequency tables, charts as well as text. Whereas the quantitative method sought to describe and analyse the results statistically, the qualitative method sought to arrive at conclusions by explaining students' information literacy as it was.

7.   FINDINGS AND DISCUSSION

A total of 191 questionnaires were distributed to students at these two institutions and 178 were returned, representing a 93.2 per cent response rate. Six interviews were conducted with lecturers and librarians.

7.1. Distribution of respondents by gender

Figure 1 summarises respondents' distribution by gender. Out of 178 final year students who returned the questionnaires, 96 (54%) were males and 82 (46%) females.
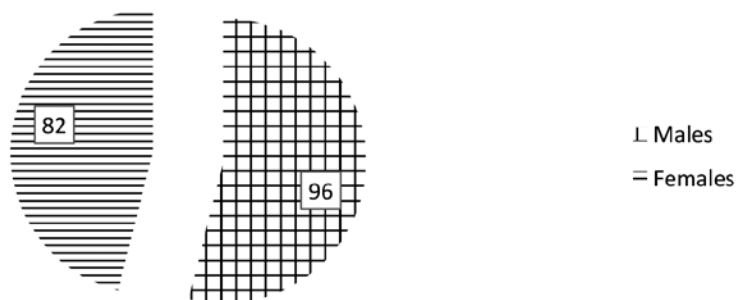

Figure 1: Distribution of respondents by gender

7.2. Acquisition of IL skills

The respondents said that they obtained IL through lectures (127); library orientation tours (155); discussions with peers (48); and other means (37). The other means stated were research and one-on-one consultations with librarians and lecturers. The librarians said that they assisted students to obtain IL through their cataloguing system as well as facilitating adoption of use of e-resources alongside print media for library users. The lecturers said that at times, students came up to them to ask about how and where to find information for their research. Table 1 shows the frequency of the responses on how students acquired IL; some reported more than one source of IL.

Table 1:   Acquisition of IL by respondents (N = 178)

Responses	Frequency	Percentage (%)
Through lectures	127	71
Through library orientation tours	155	87
Through discussions with peers	48	27
Through other means	37	21
Unaware of information literacy	25	14

In tertiary institutions students mainly acquire IL through their lecturers and library orientation; however, 25 (14%) students from the sample reported that they were unaware of IL. Thus, these students still remained with challenges of effectively locating, accessing and analysing information even in their final year. The researcher had to explain IL to them.

7.3. Importance of IL

One hundred and twenty-four (70%) of the students stated that IL was important because it enabled them to interpret, retrieve and analyse the authenticity of information before using it; 164 (92%) said that IL increased the ease of passing exams by providing them with the information that they needed for their studies and allowing them to have wider access to a lot of information which would otherwise not be at their disposal. The librarians emphasised these issues by saying that IL was important for students because it made the students aware of alternative information sources, such as e-resources in addition to the usual print sources. The lecturers, on the other hand, said IL contributed to students submitting well researched work therefore improving their pass rates. They also said that IL had increased students' use of ICTs which, in turn, is a vital skill in this information age. Thus, IL is indeed important to students in the information age as it provides them with information that is vital for their personal development.

The students further reported that IL was important in socio-economic development in that gave them information that they need for seeking jobs; starting their own businesses; continuing with their studies; accessing loans for entrepreneurship; as well as communicating with people who had the same social and economic interests as they had and sharing ideas. The students who were information illiterate said they discovered that IL was important and was required in executing duties during their industrial attachment.

7.4. Relationship between IL and ICTs

Students reported that they had access to ICT infrastructure in computer laboratories that were found in every faculty. However, they said that there were not enough computers as they were used by both undergraduate and postgraduate students in a faculty as most of them did not own personal laptops. Some students used their smart phones. Therefore, access was limited to lecture time and this time was insufficient for satisfying their information needs. One hundred and sixty (90%) of the students stated that ICTs were vital and a prerequisite in becoming information literate.

7.5. Relationship between IL and socio-economic development

On the relationship that exists between IL and socio-economic development, the students stated that IL provided them with the information they needed to make informed decisions both socially and economically, such as in job hunting, investing and entrepreneurship (153 or 86%); enabled the acquisition of the skills needed for lifelong learning and maintaining literacy even after formal education (92 or 52%); through using ICTs as well and some e-media it was easier to share vital information across boarders (59 or 33% as well as enabling networking over long distances among people with similar interests, such as using LinkedIn (27 or 15%). The students responded that being information literate was a welcome advantage during their industrial attachment as it helped them to execute their duties efficiently.

The lecturers and librarians agreed to this relationship by saying that IL was a requirement of lifelong learning that: enabled freedom of association; encouraged entrepreneurship; helped serve as a problem-solving tool; and allowed ease in participation in civil society. Thus, the study findings revealed that there was a relationship between IL and socio-economic development. IL is a requirement of socio-economic development as it helps people have access to and know how to use the required information even in the job industry.

The students also said that with the advent and use of social media (e.g., Facebook, Whatsapp, Twitter, LinkedIn, Viber, Messenger, SkillPages, etc.), they were able to communicate, share and distribute information, which could be about job and business opportunities.

7.6. Challenges faced by students in obtaining IL

The students indicated following challenges in obtaining IL:

- The lack of up-to-date information due to outdated information sources.
- Poor or at times lack of internet connectivity when required.
- Excessive power cuts which were a nationwide problem.

- ICT infrastructure was insufficient, therefore the students had to take turns to use it; others did not own smartphones.
- Information overload and students being overwhelmed by too much information.
- Computer illiteracy due to minimum exposure to ICTs.

The librarians indicated the following challenges in obtaining IL:

- Inadequate and/or outdated material because there were insufficient funds to acquire up-to-date materials.
- Inability, on the part of the students, to use e-resources as well as understand the cataloguing systems used by the libraries even after they had been oriented.
- Some students missed orientation sessions and therefore had difficulties in using the information resources that were offered by the libraries.
- Students who were computer illiterate found it hard to use ICTs and other e-resources offered by the institutions of learning.
- Most students were unaware of the copyright law and thus committed a lot of plagiarism, which is a crime in IL.
- Students used unreliable websites such as Wikipedia for research. Thus, some students still failed to gauge the authenticity of information that they came across on the Internet.

Students in tertiary institutions face a variety of challenges in acquiring IL skills. If they are able to overcome these challenges, then the students could indeed become information literate and both contribute to and benefit from the information society.

8.   CONCLUSION AND RECOMMENDATIONS

The study found that students do recognise that IL is an important prerequisite of decision making in all areas of life, including economically, socially and academically. Therefore, IL plays a vital role in ensuring students' socio-economic development in tertiary institutions in particular and the nation at large in Zimbabwe. IL works as an interactive, contextual learning opportunity that teaches students how to be independent, critical and active learners as well as citizens for the rest of their lives. This is due to the fact that IL enables students to have access to and retrieve the information that they need to make decisions socially and economically. Such decisions concern their education, literacy, employment, entrepreneurship, health, investment, security and participation in civil society. However, students in tertiary institutions face quite a number of challenges in obtaining the goal of being information literate and these challenges ought to be addressed. Among these challenges are: the shortage or at times lack of the specific required information; inadequate ICT infrastructure; and information overload and computer illiteracy. In

that regard, even though most students are fully utilising IL for their socio-economic development, some (14%) are still lagging behind on this basic necessity in today's competitive information age because of being computer illiterate. This negatively affects their performance in their studies; hinders their marketability in the job market; as well as becomes an obstacle to their information needs. Therefore, as stated in the recommendations, more still needs to be done to ensure that students become information literate so that they can develop themselves and in turn develop the nation as a whole. Thus, it can be concluded that IL plays a crucial role in effective lifelong learning and socio-economic development in the 21st century for the youth.

The following recommendations are made:

- Authorities in tertiary institutions must ensure sufficient ICT infrastructure to enable the delivery of IL to all students enrolled in their institutions. This involves ensuring that there are enough computers with good Internet connectivity in order to meet the information needs of their students.

- Librarians should plan to have workshops, other than the basic orientation to libraries, for first-year students. These workshops should be done to train small manageable groups of students on IL skills as well as emphasise copyright and plagiarism issues. These can be done per department to ensure that the special needs and concerns of students in that particular group are catered for.

- More severe and punitive measures should to be put in place for students who plagiarise or commit any other form of intellectual theft so that they learn early the importance of copyright law as well as other legal and ethical issues in dealing with information.

- Universities can also introduce bridging courses in computer literacy in order to cater for students who reach tertiary level while being computer illiterate and continue to be so until they finish their studies as they experience challenges when it comes to the technological aspects of IL.

- Considering the undisputed importance of IL in the information age, the Ministry of Primary and Secondary Education, together with teachers and information and communication specialists, should consider introducing IL skills in the curriculum for secondary education. This will ensure that by the time students enrol for their tertiary education they are not only computer literate but information literate as well.

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