Information Literacy: 'Medicine' in Improving Ways of Managing Information Explosion to Information Seekers

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ABSTRACT: We are now living in the information society and global village of which we are bombarded with huge sums of information which is not all relevant to us. It is therefore imperative to be well equipped with information literacy skills so as to curb the information explosion. Simply being exposed to a great deal of information will not make people informed citizens, they need information literacy skills. Information literacy comes as a 'medicine' in curing the information exposition. Information seekers can tackle information explosion by employing strategies such as information literacy education, development of information search skills, library education, user orientation, bibliographic user instruction, information fluency and all other information literacy competencies.

Keywords: information literacy, information exposition, information seekers, information management, information, knowledge, information fluency, user education, librarian.

I. Introduction

Akita (2016) warns us "never believe all that you hear. Always verify the original source of information." Information has always been a valuable commodity but the amount of information created has proliferated. If it was in the case of currency, it would be devalued and inflation would occur, however in the case of information, there is increasingly real value placed on sensible and appropriate information. The scenario of information exposition has however, posed a challenge of being overloaded with information. There is need to filter the relevant, useful and appropriate from the useless information and information literacy acts as the filtering lens. How to access the relevant information is now the dominant factor today? There is need to determine what information we need, where to get it, how to select it and utilise it to advance individual and collective development. Much has been written and published in digital form, but still forests continue to fall so that information in print can be published and disseminated. That information in digital form can also be printed. The paperless society seems to be a myth as people still can print to have effective reading. What is now needed is a cure for information explosion and the prescription is information literacy. Information literacy is not simply a response to the demands of the information society, but an important set of intellectual accomplishments that can aid in the realisation of the learning society. This article explores different ways in which information literacy can ease information exposition. It is a medicine in improving the management of information explosion.

II. Purpose of the article

The purpose of the article is: To

 Show how information literacy can improve ways of managing information explosion to information seekers

III. What is information?

Information is organised and processed data for a purpose. The purposes of information include informing, alerting, educating and entertaining. Information can be broadly defined as any pattern that can be recognised by some system (for example, a living organism, an electronic system or a mechanical device) and/or that can influence the formation or transformation of other patterns (The Linux Information Project, 2005). Information is not knowledge though there are some information that can be knowledge as that information can lead to action and performance. Mitchell, (2000:15) gives the example that if the raw data is -10 degrees, then information would be "it is -10 degrees outside" and the knowledge would be that -10 degrees is cold and one must dress warmly. In other words, knowledge is closer to action while information could be seen as documentation of organised processed data. Evernden and Evernden (2003:134) observe that we deal with huge volumes of data every day. There is every expectation that organisational information will continue to increase

and we will be forced to cope with more and more information, so it is vital to be able to separate the useful, from the useless. This then calls for information literacy.

IV. Information explosion

Information explosion is a situation whereby information seekers are overwhelmed with available information. Bundy (2014) also pose the same sentiments when asserting that information explosion is a situation in which users and managers of information are bombarded with huge volumes of information. It is the increased availability of information thus it is in abundance whether print or electronic published or not. Wilson (2001) calls this information overload.

V. Information literacy

ACRL (2000) defines information literacy as the ability to access, evaluate, organise and use information effectively. It is the process of acquiring knowledge of attributes on how to fulfill an information need. American Library Association (ALA, 2016) alludes that information literacy is the ability to access, evaluate, organise and use information from variety of sources as well as the set of competent skills needed to find, retrieve, analyse and use information. Candy et al (2014) aver that information literacy skills are the integrated set of skills pertaining to research strategy, evaluation and knowledge of tools and resource that are developed through the acquisition of attributes relating to persistence, attention to detail caution in accepting sources. The American Association of School Librarians (AASL), a precursor in the IL field, and the Association for Educational Communications and Technologies state that "information literacy is - the ability to find and use information – is the keystone of lifelong learning" (Byerly et al, 1999). Hepworth (2000) adds that information literacy is the ability to understand the processes and systems for acquiring current and retrospective information such as systems and services for information identification and delivery. It involves the ability to evaluate the effectiveness and reliability of various information channels and sources including libraries for various kinds of information needs, mastering certain basic skills in acquiring and storing one's information needs in such areas as databases and spreadsheets.

Users "should have both information-gathering strategies and the critical thinking skills to select, discard, synthesize, and present information in new ways to solve real-life problems" (Byerly, 1999). Thus, the information peace or source's ability to effectively meet information seekers' information needs acts as a yardstick for that information's relevancy. Information literacy extends beyond library skills and beyond the use of discrete skills and strategies to the ability to use complex information from a variety of sources to develop meaning or solve problems (Kuhlthau, as cited in Stripling, 1999). Gill (2002) supported by Andretta (2005) opine that information literacy has gone beyond simply acquiring the skills to use information tools such as computer literacy, library literacy and to find information sources but it includes lifelong learning, critical thinking and professional development. Information literacy results in an effective participative and social responsible citizen. Information literacy encompasses all other forms of literacy, traditional library, which is the ability to read and write, media literacy which is the ability to critically evaluate an manipulate media information, numerical literacy, the ability to understand and solve problems with data and numbers, computer literacy and library literacy.

VI. Information literacy process

The information literacy process is illustrated in the following diagram:

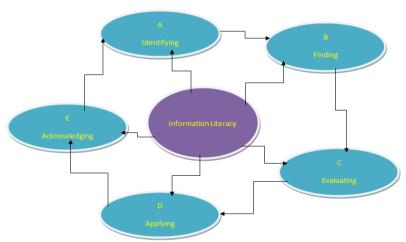


Figure 1: Information literacy process

Information literacy = identifying +finding+ evaluating + Applying + Acknowledging.

The process of information literacy involve identify what information is needed, finding the best sources of information, evaluating the sources of the information critically, applying the information or using the information for example on assignments, articles and to solve a particular problem as in bibliotherapy. There is need to acknowledge the sources hence avoiding plagiarism. Plagiarised information does not hold water and it is a very serious academic offence. Having skills for the whole process of information literacy improves ways of managing information explosion.

VII. Information Literacy As way of managing information explosion to information seeker For the information literacy equation to balance well there is need for the support of other strategies that enhances the information literacy process. These include information literacy education, development in information search skills, library orientation, user education Bibliographic User Instruction, information fluency, filtering data and information, self auditing and examination, 'ask the Librarian' and giving yourself a break.

7.1 Information literacy education

Information literacy education should create opportunities for self directed and independent learning where learners become engaged in using a wide variety of information sources to expand their knowledge, construct knowledge, ask informed questions, and sharpen their critical thinking (Lupton, 2004). People should be taught information literacy that is why in most universities there is a compulsory course for information literacy. This should also apply in organisations, there is need for training of information literacy to every individual in the organisation. This would actual save the time of employees as they would not waste time collecting, storing and dissemination unnecessary information. Hepworth (2000) delineates that, the conviction that all individuals ought to have organised and systematic opportunities for information literacy skills instruction, study and learning at any given times throughout their lives is a firm declaration for the need of information literacy search skills.

7.2 Development of information search skills

Information search skills can incorporate the library information search skills and the online information search skills. Thus information seekers should be able to locate the materials that they want from the library through the assistance of catalogues and other metadata. They need to know how to select the best sources of information from a multitude of sources and choose the best information from those different sources. They should also be able to apply online search skills which include the use of Boolean logic. Boolean operators define the relationships between words or groups of words. They can be used to improve search engines. Boolean operator 'AND' is used to narrow a search so that one gets a limited set of results but relevant hence leading to a precise search. For example librarianship and Records Management. The search should contain both librarianship and records management. If it only contains librarianship, it is will not be displayed. If it only contains records management, it will not be displayed. The 'NOT' operator is also used to narrow a search for example a girl not a boy. The Boolean operator 'OR' has the effect of expanding a search for example a boy or a girl. This means that the search would include both boys and girls. This results in effective and efficient information retrieval. Information Retrieval is the science of searching for documents, for information within documents, and for metadata about documents, as well as that of searching relational databases and the World Wide Web (Kobayashi, and Takeda, 2000). Information seekers should be in a position to use the internet and search engines. Senn (1998:127) describes a search engine as "program invoked from within the browser that scans the network by using a keyword or phrase. Turban et al (2001:226) assert that "search engines are programs that run a list of web sites or pages. The information seekers should also be in a position to use of wildcards. Wildcards makes the user able to simultaneously search for several words with the same stem. Entering the term educat* will allow the user to conduct a search for educator, educators, education and educational as at the same time. This then serves time and brings in more efficiency and productivity in search engines.

7.3 Library orientation

Library orientation has to do with adjusting the new library user to the library. For example in a university, the library orientation would be carried out for new students as soon as first semester begin or just before.

7.4 User education

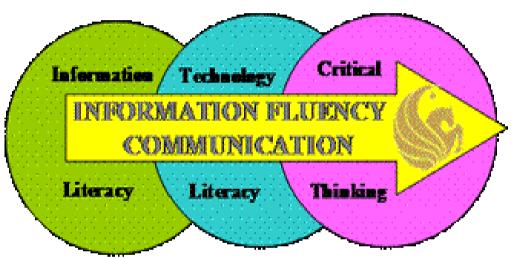
User education is primarily concerned with ways of introducing the user to the general techniques of library usage and services available for a particular library as well as the arrangement and facilities of that particular library.

7.5 Bibliographic user instruction

Bibliographic user instruction is the user training on how to effectively and effectively find information. It helps in ease identification of the information and using the information. It also involves activities like how to conduct research, writing papers and assignments. Information seeker should be in a position to differentiate a fact from opinion. They should identify authorities in that information discipline. Users are informed of the ills of plagiarism and consequences. They will be taught how to acknowledge sources both hard copies and electronic copies. Thus users would be well equipped with academic writing skills.

7.6 Information fluency

Information fluency is capability or mastering of information competencies (Lau, 2006). UCF (2016) defined information fluency as "the ability to perform effectively in an information-rich and technology-intensive environment." Information fluency is the ability to gather, evaluate, and use information in ethical and legal ways. Information fluency encompasses and integrates three important skills: information literacy, technology literacy, and critical thinking (UFC, 2016). These three skills are not mutually exclusive but overlap in many areas. Having and using these skills means having the ability to communicate information in appropriate and effective ways, which is an important measure of information fluency. This then cures the illness of information exposition.



(Source: UCF, 2016)

Fluency means not just accessing information on the Web, but creating your own Web pages. Not just downloading MP3 music files, but creating your own digital-music compositions. Not just playing SimCity, but creating your own simulated worlds (Resnick 2001). The information fluency would result in greatly managing information explosion. This result in sustainable information competence as in this rapidly changing world, these information literacy skills are far more important than memorising facts as facts can be obsolete tomorrow. Today's knowledge might be tomorrow's ignorance.

7.7 Filtering data and information

Information explosion can be cured by a mechanized way of filtering data and information collected. Association of College and Research Libraries (2000) proffer that information overload could lead to stressful situation for information users. Personal information users can overcome information explosion or overload by monitoring communication facilities such as unsolicited text messaging services on cell-phones, faxes, personal computers, inundating advertisements on television, print and electronic newspapers and e-mail. Spams could be detected on e-mails to reduce being inundated with unnecessary information.

7.8 Self auditing and examination

Personal users of information can overcome the problem of information overload by doing self –auditing as well as self examination of what information is right and appropriate (Bundy, 2004). They can also learn what other are doing successfully to curtail data and information tsunami which include watching appropriate selected programmes on television, inventing personal solutions to information deluge and if one's methods works, the best thing is to share with others. By sharing, one gets to know more.

7.9 Ask the Librarian

One can ask the librarian on how best he/she can deal with information explosion. Even on virtual libraries, there is 'ask the librarian facility'. They can be educated on open sources which include JabRef tutorials, Lib Gen, Bookboon.com and www.4.shared.com and also about proprietary sources. Information seekers, if they want to do internet search, they can ask the librarian as most librarians are interested in educating people about internet search techniques which help information seeker get better refined advanced search results.

7.10 Giving yourself a break

There is need for give yourself a break from information explosion by just having a time to yourself, relaxing, thinking, reflection and planning. A break will also make us have time with our families and have physical socialisation which results in really strengthening the family bond and ties. One would then go back to his information seeking journey well refreshed.

VIII. Recommendations

The following recommendations are given for information literacy to prosper:

- Information literacy skills should be merged with the curriculum. It should be actually be part of the curriculum starting at the pre-school level to post doctoral levels. It should then not end there it should be also be continuously improved such that it will be a lifelong learning process. If one learnt information literacy five years ago, he should learn it today as so many things have changed.
- Every organisation should introduce information literacy training such that human capital are well equipped with the cure for managing information exposition. At work places people are bombarded with various kind of if information of which it is wise to be equipped with information literacy skills to filter the unnecessary from the necessary. The Human capital should be having information literacy spectacles than are worn every day and always to guide against information exposition.
- Organisations should also employee librarians. It is no longer the norm that librarians are only found in academic, public and special libraries, they should also be found at the centre of the organisation and be at the centre of decision making as they make sure that appropriate information is obtained maintained used and reused as well as discarded when no longer necessary. This then results in informed decision making. The special librarian in an organisation should not be just found in his/her library. She/he should be anywhere where necessary in the organisation to see to it that information literacy is promoted hence result in organisational information competency.
- Librarians should be capitalising on every contact with information seekers of which we feel everyone is an information seeker, as an opportunity to teach information literacy skills. Librarians are always up to date with the rapidly changing information field and understand better the nature of information society hence are very useful in curbing information explosion.
- Top management support for information literacy programmes is called for. The information literacy facilitators should clearly air out the value of information literacy such that they easily get buy in from the top management and also from everyone.
- There is need for a shared information literacy vision, mission and objectives. This results in effective information literacy planning.
- Information literacy leadership is called for in order to see to it that the 'gospel' of information literacy is preached and mastered by everyone one for efficiency and effectiveness.

IX. Conclusion

Information literacy is actually a 'medicine' that cures information exposition. The information process should be covered in full such that everyone is equipped with those skills. There is need for the use of information literacy education, development of information search skills, library orientation, user orientation, bibliographic user instruction, information fluency and all other information literacy strategies that can be utilised by different individual which can work for them. Information literacy should be taught from pre-school education to post doctoral education and for the rest of one's life as new aspects are coming and people should embrace them through continuous information literacy learning. Every organisation should employ librarians who are well versed in information literacy to impart those skills to the human capital such that time and other resources would not be wasted as a result of information explosion.

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Profiles of contributors and photographs

Dr. Chipo Mutongi: A Talent Development Officer in the City of Harare, worked as a Librarian at the City of



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