



Article title: Conceptualizing Information Literacy for National Development

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Conceptualizing Information Literacy for National Development

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The concept of information literacy is a subject of serious debate among scholars in the information profession. The controversy surrounding the subject may well be due to proliferation in the information and communication technology (ICT) and the diversity of the world's culture. In this paper: Conceptualizing Information Literacy for National Development, the study looked at the relationship between the concept of information literacy and national development, the definition of the concept as attempted by different authors. The study also x-rayed the socio-cultural construct (Theory) of the concept and American Association of School Librarians (AASL) theory. They identified individual elements of information literacy consistent the two theories which include: Recognition of information needs; location and evaluation of the quality of information; store and retrieve information; make effective and ethical use of information, and apply information to create and communicate knowledge. They concluded that, any country that strives for sustainable national development must of necessity strives towards ensuring that, its citizens achieve the status of information literacy in the context peculiar to such environment.

Key word: Information, Literacy, National Development.

Introduction

Information literacy is becoming increasingly important in the contemporary environment of rapid technological change and proliferation of information resources. Developed nations of the world have information as a common denominator which they use both as a resource and commodity. Information literacy therefore is an essential concomitant of national development. Information is available through libraries, community resources, special interest organizations, media - including graphical, aural, and textual, and the internet. Recent literature has displays a growing interest in IL within the workplace and communities, and in the need for a more holistic vision of IL (Webber & Johnston, 2017). This reinforces the move away from the skills focus of the earlier education models towards a broader, more flexible understanding of IL and the resources and practices that make up an information literate individual or community. This highlights the social aspects of IL and the recognition

of the practices, people, and interactions that make up information landscapes interactive, social and contextual spaces through which members navigate (Lloyd, 2017). IL achievement cannot therefore be measured against an educational achievement model more generic definitions of IL may be of greater use in disseminating greater conceptual understanding. Although it could be argued that attempting to define IL is counter-productive and that it is a flexible concept necessitating differing skills in different contexts, there is still a need to reach a more common understanding to enable effective advocacy (Hackett, 2018). The use of so many synonymic terms contributes to a silo effect within discussion and practice which in turn makes outward advocacy problematic (Lloyd, 2017). A lack of conceptual understanding leads to a lack of value appreciation and is a contributing factor in the lack of research outside the higher education environment (Crawford cited in Hackett, 2018). The lack of conceptual understanding is most evident in the tendency to narrowly construe IL as digital literacy. As the evolution of technology creates cases of relative information poverty the notion of the digital divide is an increasingly important issue for policymakers (Thompson, Jaeger, Taylor, Subramaniam, & Bertot, 2014). Bundy cited in Hackett, (2018) urges professional library organisations to reach agreement on the terminology, definition, standards for, assessment of, and importance of information literacy, while Webber and Johnston advocate for the recognition of IL as a discipline (Webber & Johnston, 2017). This would promote a common understanding, enabling a clearer and stronger message about IL's importance (Webber & Johnston, 2017). Since the Alexandria Proclamation the United Nations Educational, Scientific, and Cultural Organisation (UNESCO) has focused on media and information literacy with a focus on the role of education, rather than libraries, in delivering this (UNESCO, 2016). The International Federation of Library Associations (IFLA) have also adopted media and information literacy as their preferred term (IFLA, 2011; 2012), linking their advocacy with UNESCO's and attempting to highlight libraries'

contribution to literacy development. This point is echoed by those arguing for the development of local, national and international government policy on IL (Hackett, 2018). The concept is currently poorly understood by those in power and thus rarely included in the development of policy (Webber & Johnston, 2017). However, IL must be cast in quite explicit and concrete terms to ensure that citizens are able to successfully navigate information and participate in modern life. Linking IL provision to state policy can foster a more positive perception of IL and help clearly explain its benefits to society, and its potential in the achievement of government aims (Crawford, 2013).

In this paper, the authors look at the concept of information literacy for national development. The paper therefore explores the following variables: theories of information literacy and the elements of information literacy.

Defining Information Literacy

There are two components to the composite term: information literacy. These are briefly discussed as follows:

a. Information

In library and information science, information is a core concept, yet it is neither simple nor unambiguous. In its most conventional meaning, the term information in the information literacy context refers to (primarily textual) information sources published in print or digital form. However, at this time, it is not meaningful to restrict information to text only – information can be almost anything that carries informative potential (Limberg, Sundin and Talja, 2012). Buckland's classic conceptual analysis of 'information' quoted in Limberg, et'al (2012) serves information literacy purposes well. Buckland makes a distinction between information as process (the activity of informing or being informed), information as knowledge (that which is imparted through the process), and information as thing (physical entity). This means that information has several dimensions: it is related to and embedded in

specific activities, it is something that refers to content, and it has a material form and existence.

b. Literacy

The meaning of literacy has expanded from the skills of reading and writing to a web of abilities and competences. For instance, UNESCO's Literacy Assessment and Monitoring Programme (LAMP) defines literacy as the ability to identify, understand, interpret, create, communicate and compute, using printed and written materials associated with varying contexts. Literacy involves a continuum of learning enabling an individual to achieve his or her goals, develop his or her knowledge or potentials, and to participate fully in the community and wider society (UNESCO, 2016). Literacy here is not simply the ability to read and write, since people also need to be able to understand, interpret and assess texts, to evaluate statements, and to be able to take a standpoint when faced with flows of contradictory messages via various media and different types of sources. The point of departure of the LAMP definition is the empowering nature of literacy; literacy does not only transform individuals but is also the condition for individuals' power to transform society. Literacy therefore extends from a mechanical skill to the ability to think critically and challenge dominant ideologies (Limberg, et'al 2012). The rapid development of information and communication technologies (ICTs) and new media during the last decades has further increased the need for expanding the definitions of literacy. The new skills requirements related to the emergence of new media and technologies have been given names and labels, such as information technology literacy, digital literacy and media literacy.

Information literacy

As stated in the UNESCO's World Report Towards Knowledge Societies (UNESCO, 2016), information without transformation is only raw data. The use of information requires a mastery of cognitive skills, including critical thinking, and this in turn depends upon the

capacity to locate, evaluate and then use information. It initiates, sustains, and extends lifelong learning through abilities that may use technologies but are ultimately independent of them. Lupton, McDonald, and Selzer as quoted in Anyaoku, Ezeani and Osuigwe (2014), however presented a more detailed explanation of information literacy where the authors defined it as including library research skills and IT literacy but explained that the definition goes beyond this as it is not just about finding and presenting information, but it is about higher order analysis, synthesis, critical thinking and problem solving. It involves seeking and using information for independent learning, lifelong learning, participative citizenship and social responsibility. Information literacy forms the basis for lifelong learning. It is common to all disciplines, to all learning environments, and to all levels of education. It enables learners to master content and extend their investigations, become more self-directed, and assume greater control over their own learning.

Information Literacy and National Development

Development is realistically seen as a multi-dimensional process involving the totality of man in his political, economic, psychological and social realities among others". Development is a holistic phenomenon not a concept to be abridged in application or compartmentalized and approached as a uni-dimensional process. Essentially it should be man-oriented and not institutional-oriented. If we focus our attention on the individual citizens we can then think of what he needs at a particular time and how he can combat a number of colonial legacies which have held him down, Amucheazi cited in Ebeh (2014). Development, more importantly must be conceived in the context of a particular social system. In other words, it is wrong and indeed injurious to conceive of development in terms of system or system suited for a different cultural milieu. Ake in Ebeh (2014) was even more radical in his declarations. He argued that:

We ought to reject the concept of development. Instead of development we could think in terms of liberation.... If we think in terms of liberation

we can accept that we are not all that we ought to be without necessarily feeling inferior to someone else... or committing ourselves blindly to the path that someone else has taken.

From the above assertion, we can see what national development is all about. Meanwhile, information literacy empowers people in all walks of life to seek, evaluate, use and create information effectively to achieve their personal, social, occupational and educational goals (CILIP, 2014). Library information and knowledge management professionals help people understand and become part of the knowledge economy, to boost business competitiveness locally and nationally' (DCMS, 2016,). Professionalism is recognised only in relation to business: yet even in this context, vagaries surround the descriptions of how libraries and library professionals contribute to economic success. While the document is not intended to be an explicit record of the ways in which libraries and librarians function, the use of such passive descriptions dilutes their value, rather than clearly stating skills and contributions (Hackett 2018).

When we talk about national development we are concerned about quality improvement in the various sectors of our national life such as the political, ethical, socio-psychological, and economic spheres of national existence, which combined, to define and assure quality and productive existence for the citizens of a country. It is the accelerated economic, administrative, social, political, cultural and industrial changes in a condition considered desirable to achieve the progress of civilization. The crucial element in national development is the constant and joint effort by the citizenry to harness the force of nature and human potentials for they own material well-being. Training the mind to attain to these concepts of national development as seen above is the quality and quantity of information the citizens and exposed to. Libraries of different kinds exist to provide information tailored to the exact needs of the citizens in their various peculiar conditions. Libraries therefore become indispensable stakeholders in the national development.

A Socio-cultural Perspective of Information Literacy

Socio-cultural perspective of information literacy was propounded by Lev Vogostky in 1934. The socio-cultural perspective on learning emphasises the relationship between individuals and various forms of collective practices. For instance, a student is part of a university programme, which in turn forms part of a discipline which is situated in a specific university; a librarian is active in a workplace and is at the same time a member of an occupational group. It is by communicating through cultural tools that we participate in practices of various kinds. Within a practice different ways of communicating evolve that are more or less specific to that practice (Säljö, cited in Baji, F., Haeusler, C., Bigdeli, Z. and Parsa, A. 2016). Moreover these practices exist within a society that is evolving in itself. In order to participate in a practice and its activities individuals need to learn a specific language where certain concepts, theories and beliefs are central. Hence, information literacy implies learning to communicate appropriately within a specific practice. The socio-cultural perspective further underlines that this is also about being able to use physical artefacts for communication in a way that corresponds with the purpose of the practice (Lankshear & Knobel, Säljö, cited in Baji et.al 2018). This includes artefacts which enable us to find, work with and use information; for instance, scientific journals, databases and web sites. Both linguistic expressions and the physical artefacts into which these are built are seen as cultural tools that individuals may use for a specific practice. The notion of tool implies that the artefacts acted upon are created and used by people for specific purposes in a specific culture, in most cases in order to achieve something that would not have been possible without this tool (Säljö, cited in Baji,et.al (2018). Accordingly, in a socio-cultural perspective learning is referred to as the appropriation and mastery of communicative (including conceptual) and technical tools that serve as mediational means in social practices. We regularly devote ourselves to a range of activities in order to maintain social contacts, carry out work tasks or errands in everyday life. We blog, google, tweet, or search for books in library catalogues and

databases, etc. It is impossible to imagine these activities without the tools linked to them. The inseparable relation between action, physical as well as linguistic, and tool is central in a socio-cultural perspective on information seeking and learning information literacy. When we want to seek information Google offers us a sophisticated tool through which we are able to reach and use sources in a manner that we could not have dreamed of only 15 years ago. Today, with the prevalence of social media like Facebook, Twitter or blogs, and myriads of various other networked tools we are able to keep ourselves updated in ways difficult to imagine before these tools were conceived. At the same time, it is important to remember that a socio-cultural perspective implies that tools also bear limitations. The functions of search engines and social networking tools influence our possibilities for action through offering us both resources and restrictions; as information seekers we are at the mercy of Google's individualised ranking of search hits. Likewise, we are dependent on the functionalities offered by Facebook or Twitter. In a similar way, the language tools available within a scientific discipline shape to a degree what can be thought, said or written.

The integration of linguistic and physical tools is of particular interest for library and information science scholars who often study technologies where language and materiality go hand in hand. In print media such as books and journals, we see how content and form constitute a whole. In the digital world this is not as obvious. Texts can be easily copied from one context to another, they are aggregated in new services such as Google news and we get the impression that information is floating without relation to the physical artefacts (Tuominen, 2007). A socio-cultural perspective emphasizes the material aspects of digital information. For instance, the way in which a web page is structured and functions will influence the conditions for interacting with it.

A sociocultural perspective focuses on the practices where information literacy is applied, shaped and re-shaped. It mainly contributes to our understanding of how information

literacy may be seen in relation to the tools we use and act upon when carrying out information activities, widely conceived. It emphasizes action and interaction, and people as social beings in collective and material practices (Limberg, Sundin and Talja, cited in Baji, et.al 2016).

Standards of Information literacy

American Association of School Librarians (AASL) and Association for Educational Communication and Technology (AECT) cited in Grassian and Kaplowitz (2013) produced standards for student learning which have been updated to reflect the 21st century learning environment of students. These indicators provide a conceptual frame work and broad guidelines for describing the information literate student. They also provide a mechanism by which students can be educated as long life learners, thinking critically and ethically, with an understanding of the dynamics of group process. The indicators which can be seen below describe the content and process related to information that students must master to be considered information literate.

Category One: Information Literacy Indicators

Standard One: The student who is information literate accesses information efficiently and effectively. He recognizes that having good information is central to meeting the opportunities and challenges of day-to-day living. That student knows when to seek information beyond his or her personal knowledge, how to frame questions that will lead to the appropriate information, and where to seek that information. The student knows how to structure a search across a variety of sources and formats to locate the best information to meet a particular need.

Standard Two: The student who is information literate evaluates information critically and competently. The student who is information literate weighs information carefully and wisely to determine its quality. That student understands traditional and emerging principles for

assessing the accuracy, validity, relevance, completeness, and impartiality of information. The student applies these principles insightfully across information sources and formats and uses logic and informed judgment to accept, reject, or replace information to meet a particular need.

Standard Three: The student who is information literate uses information accurately and creatively. The student who is information literate manages information skilfully and effectively in a variety of contexts. That student organizes and integrates information from a range of sources and formats in order to apply it to decision making, problem solving, critical thinking, and creative expression. The student communicates information and ideas for a variety of purposes, both scholarly and creative; to a range of audiences, both in school and beyond; and in print, non-print, and electronic formats. This Standard promotes the design and execution of authentic products that involve critical and creative thinking and that reflect real world situations. The indicators under this Standard therefore deviate from the traditional definition of use. Rather than suggesting that students simply insert researched information into a perfunctory product, the indicators emphasize the thinking processes involved when students use information to draw conclusions and develop new understandings.

Category Two: Independent Learning Standards

Standard Four: The student who is an independent learner is information literate and pursues information related to personal interests. The student who is an independent learner applies the principles of information literacy to access, evaluate, and use information about issues and situations of personal interest. That student actively and independently seeks information to enrich understanding of career, community, health, leisure, and other personal situations. The student constructs meaningful personal knowledge based on that information and communicates that knowledge accurately and creatively across the range of information formats.

Standard Five: The student who is an independent learner is information literate and appreciates literature and other creative expressions of information. The student who is an independent learner applies the principles of information literacy to access, evaluate, enjoy, value, and create artistic products. That student actively and independently seeks to master the principles, conventions, and criteria of literature in print, non-print, and electronic formats. The student is able both to understand and enjoy creative works presented in all formats and to create products that capitalize on each format's particular strengths.

Standard Six: The student who is an independent learner is information literate and strives for excellence in information seeking and knowledge generation. The student who is an independent learner applies the principles of information literacy to evaluate and use his or her own information processes and products as well as those developed by others. That student actively and independently reflects on and critiques personal thought processes and individually created information products. The student recognizes when these efforts are successful and unsuccessful and develops strategies for revising and improving them in light of changing information.

Category Three: Social Responsibility Standards

Standard Seven: The student who contributes positively to the learning community and to society is information literate and recognizes the importance of information to a democratic society. The student who is socially responsible with regard to information understands that access to information is basic to the functioning of a democracy. That student seeks out information from a diversity of viewpoints, scholarly traditions, and cultural perspectives in an attempt to arrive at a reasoned and informed understanding of issues. The student realizes that equitable access to information from a range of sources and in all formats is a fundamental right in a democracy.

Standard Eight: The student who contributes positively to the learning community and to society is information literate and practices ethical behavior in regard to information and information technology. The student who is socially responsible with regard to information applies principles and practices that reflect high ethical standards for accessing, evaluating, and using information. That student recognizes the importance of equitable access to information in a democratic society and respects the principles of intellectual freedom and the rights of producers of intellectual property. The student applies these principles across the range of information formats -- print, non-print, and electronic.

Standard Nine: The student who contributes positively to the learning community and to society is information literate and participates effectively in groups to pursue and generate information. The student who is socially responsible with regard to information works successfully; both locally and through the variety of technologies that link the learning community to access, evaluate, and use information. That student seeks and shares information and ideas across a range of sources and perspectives and acknowledges the insights and contributions of a variety of cultures and disciplines. The student collaborates with diverse individuals to identify information problems, to seek their solutions, and to communicate these solutions accurately and creatively.

Elements of Information Literacy

The following IL elements are consistent with the definitions of IL developed for use in higher education. These are applicable across all domains of human development. These include: To recognise information needs, to locate and evaluate the quality of information, to store and Retrieve information; make effective and ethical use of information, and apply information to create and communicate knowledge. The nature of these IL elements is outlined below and the implications for the development of IL indicators are identified CILIP (2012).

Recognise Information needs. The awareness that information is required to solve problems in the workplace, to understand civic needs, and to provide for the health and wellbeing of family and community is the first component of IL. This is the first step also in differentiating IL from the passive reception of given information. This awareness of need is not a static capacity but one that needs to be applied to each and every situation as it arises. Of necessity people choose to accept some information as given, while recognising that other claims need to be questioned and tested by seeking additional information or confirming the accuracy of that information supplied.

Locate and Evaluate the Quality of Information. The skills required to locate information depend on the context in which a person is applying their IL skills. In the workplace, the information may be located in manuals, in published codes of practice, or in dedicated databases. In these circumstances, there is usually some assurance of the quality of the information source. However, increasingly people seek information using internet search engines where there is often no filter on the quality of the information located. This is of particular concern in relation to information on health and wellbeing, and also in terms of information relevant to social and environmental concerns. For instance, holocaust denial has spawned internet sites that look credible to the unskilled eye, but when the information is evaluated it can be established to lack accuracy and credibility. Education and training are needed to help people acquire the skills to not just locate, but also to evaluate information sources, and therefore IL indicators must include this skill.

Store and Retrieve Information: People have always appreciated the importance of storage of information and its retrieval for later use. Indigenous people often have sacred places where such information is stored and accessed to be transmitted to each generation. Firms maintain their accounts, stock, orders and, with the digital age, their customer profiles. People maintain not only their own libraries, but also in the digital age store knowledge that they

have created as well as phone numbers and music. The capacity to store and retrieve information is therefore an indicator of IL.

Make Effective and Ethical use of Information: Effectiveness of information use is likely to be encompassed in surveys of problem solving and critical thinking, as well as in aspects of literacy. Awareness of the ethical dimension of information use may not be well documented in existing surveys. If this is confirmed it will indicate a gap to be addressed in future development.

Communicate Knowledge: The purpose of IL is to enable people to create and use new knowledge and hence this component represents the product of IL practice. In surveys of problem solving and of adult literacy there may be items that address this component.

Conclusion

Looking at what constitutes information literacy, information literacy and national development can be said to correlate. Any country that strives for sustainable national development must of necessity strive towards ensuring that, its citizens acquire the status of information literacy within the context peculiar to it to enhance efficiency, free flow of communication, boost productivity and promote national coherence.

Recommendations

This article therefore recommends as follows:

1. Despite all of these positive trends and some semblance of agreement about what constitutes IL, controversies still exist about how to apply and teach the concept in the current educational climate and technological age. The concept should therefore be viewed in the context of individual/group peculiarities.
2. Critical thinking and evaluation are even more important to teach than ever before so as to enhance usability of information for national development.

3. We must also encourage our users to go beyond just thinking about the type of resources they are using to retrieve their information. To be truly information literate, one must first understand how information works as a social, political and cultural force and furthermore that our interactions with information contribute to these forces.

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