

30 Digital Literacy Skills for the High-Performance Society and Economy of the 21st Century

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30.1 Abstract

In today's societies and economies the need for digital information literacy skills and knowledge is omnipresent. "Information literacy" incorporates the ability of a person to recognize his/hers information needs, seeking motives, information evaluation skills and thereafter effective and efficient utilization of the available information within his/hers work and/or life practices. Indeed, digital information literacy becomes very important for professionals of all economic sectors as well as for people occupied with their life roles. This paper provides some theoretical evidence based on a review of the literature, for an initial theoretical exploration of how information literacy skills support professional and social roles. Some important theories of social and employee information seeking behavior are presented.

Keywords: digital information literacy, skills, work roles, everyday life, information seeking, information literacy.

30.2 Introduction

People interact with digital information both at their workplace and in their everyday activities. Indeed, the digital information environment heavily impacts our lives in many different ways. Broadly speaking the concept of information literacy places information in workplace (professional roles) and everyday life contexts (citizenship, health, leisure etc.). A vital aim of information literacy is to support lifelong learning and personal development [see 1].

The purpose of this paper is to theoretically investigate the relationship between information, information seeking behavior and information literacy within professional and social spaces.

30.3 Information needs and information literacy dimensions

A "need" is usually defined as an "inner motivational state" that drives an individual to act and seek information [see 2]. According to Coles' view, which Case stated as follow "an information need is a requirement that drives people into information seeking" while personal actions are related to internal needs [see 3 in Case 4]. According to UNESCO definition [see 5], a "well-informed" person, is the person who has the ability to determine the breadth of its information needs. Moreover, is the person who knows how to seek information, to judge and evaluate the available information resources, to integrate information into his or her existing field of knowledge, and finally use it effectively to achieve a goal [see 6].



Figure 1: Seven Pillars of Information Literacy [see F1]

Information needs recognition initiate the information seeking behavior and constitute an integral part of information literacy. Indeed, the Standing Conference of National and University Libraries (SCONUL) have developed a framework of seven dimensions, named “seven pillars” of information literacy [see P7] starting from information needs recognition as an essential skill, and thereafter moving to more complicated information literacy skills such as information synthesis and information creation. In each “pillar” a person could develop from “novice” and “beginner” to “expert” as they progress through his/ her learning life [see 7]. To our view, the above mentioned model provides an excellent structure for understanding information literacy. However, digital information literacy (DIL) according to Bawden is defined as “a set of attitudes, understanding and skills to handle and communicate information and knowledge effectively, in a variety of media and formats” [see 8]. The basic competencies of digital literacy include internet searching (information retrieval), hypertext navigation (browsing), knowledge assembly and content evaluation [see 8].

30.4 Social and professional roles within information seeking theoretical frameworks

The recent literature gravitates towards studying the contribution of digital information literacy in our life activities and roles e.g. citizens, parents, students, consumers and hobbyists etc. [see 4]. However, each social and/or professional role may require distinct and/or overlapping digital information literacy skills. Moreover, individual characteristics (e.g. personality traits, internal motivation factors, attitudes towards the roles) also affect the development of the proper set of individuals’ digital information literacy skills for social and/or work activities [see 9], [see 10]. Therefore, digital information literacy skills should relate to their specific information seeking behaviour patterns and preferences. To our view, “information seeking behaviour” is the other side of the coin in relation to “information literacy” within the information seeking phenomenon. Hence, two prominent theoretical frameworks are presented bellow for information seeking behaviour, and thereafter are used for exploring digital information literacy.

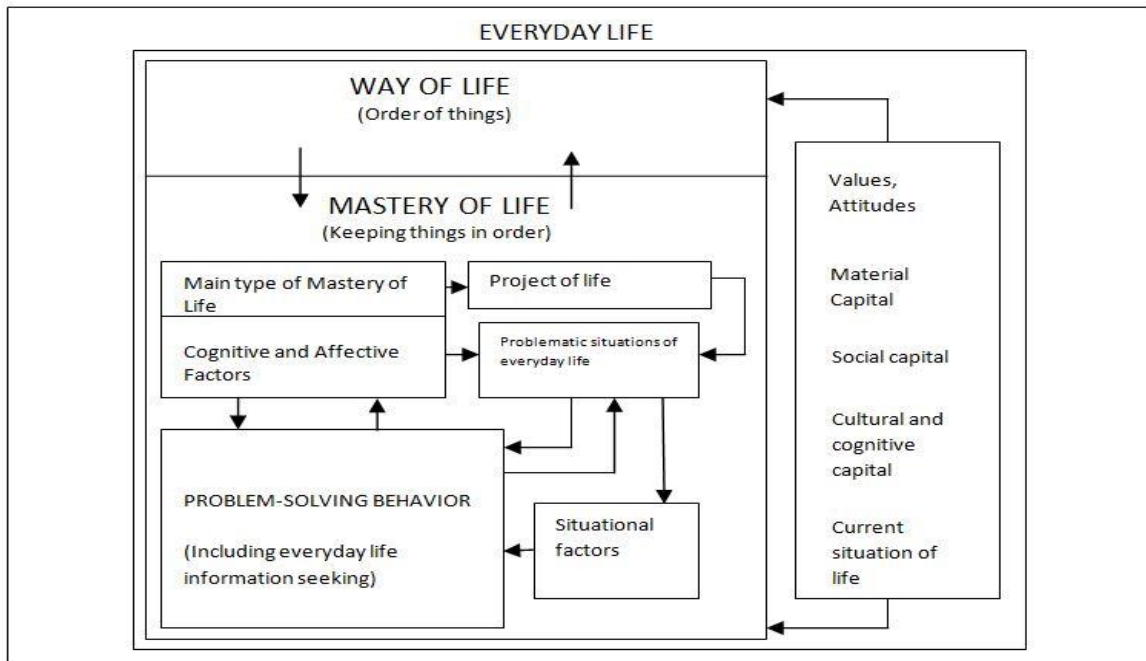


Figure 2: *Everyday Life Information Seeking (ELIS) Model [see F2].*

The first model is referred to as “Everyday Life Information Seeking” (ELIS model, Figure 2) proposed by Reijo Savolainen [see 10]. This model is motivated by the study of information seeking behavior within social and everyday life-line roles and is based on the “way of life” concept which aims in keeping the “order of things” or, as characteristically it is stated, aims in “mastery of life” –which is the ability of incorporating information seeking, evaluation and utilization when addressing daily problems. The model has been applied when studying hobbies e.g. photography, blogging, travelling, shopping [see 9]. The ELIS model place emphasis on peoples’ cognitive and affective aspects of their way of life [see 10]. Also suggests that emotions, values and context and other circumstances of life affect their “way of life” and their ability to “master life” [see 10].

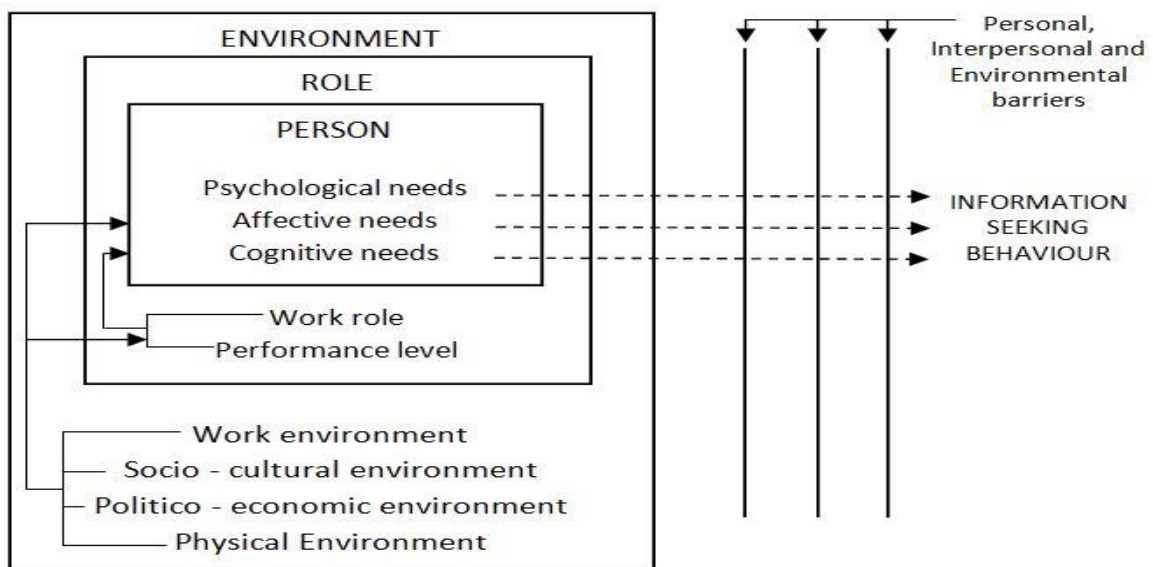


Figure 3: *Wilson's 1981 model of information-seeking behaviour (revised) [see F3].*

The second theoretical model which is named after its founder (Wilson's theoretical model, Figure 3), address information seeking behavior within professional/work roles e.g. scientists, journalists, artists, lawyers, doctors etc. [see 11]. Professionals should integrate digital literacy skills into their everyday practices and thereafter link the retrieved information into their existing professional knowledge [see 11]. Wilson's model point out that individual work roles relate to human needs (e.g. physiological –food, shelter, clothing–, emotional –success, reward– and cognitive needs) which generate information needs which in turn are addressed to specific information resources for their satisfaction [see 13]. Decision making within the often hazardous work-environment frequently requires usage of specific information resources e.g. specific scholarly journals, archive material, digital libraries etc. Therefore, the appropriate information literacy skills are required for effective and efficient use of complex online information resources [see 12]. In that sense, Wilson's model aims at "uncertainty reduction" when making work-related decisions through the professional's "information needs satisfaction" concept.

30.5 Discussion

Proper information enhances social and professional roles' performance. Trusted, reliable and high quality information has a positive impact on society and economy as a whole. The available literature clearly suggests that the appropriate information plays a critical role in economic, social, and political life at a national and international level [see 14]. On the other hand, although this is clearly suggested in the literature, the underlying behavioral patterns (e.g. peoples' information seeking behaviors) and/or the necessary information literacy skills are rather understudied. The considerations related to "information economy" and "information society" needs to include the abovementioned facets. Indeed, although information is regarded as an important economic resource or asset for most (if not all) economic sectors, the information seeking behaviors of the corresponding professionals or the required information literacy skills have not been yet been studied in detail. Moreover, the public space is bursting with digital information. Digital information usage is intense for both the public and for the professionals. For example, citizens seek information in order to exercise their civil rights and duties, and the general population sought for information in order to make better choices as consumers of products and/or for leisure, to socialize and in general to "master" their lives [see 15].

We have briefly identified that society and economy are linked with the digital literacy skills of individuals, which boost their productivity and encourage social interaction [see 15]. On the other hand, the lack of digital literacy skills may often lead to unreliable information utilization or increased anxiety. Thus, new research, theories, educational programs (professional or non-professional) and activities are required in order to stress the integral role of information in all disciplines and/or roles. In consistent with that, it's also important to measure the impact of information literacy in different roles, to distinguish how they may affect the economy and society as a whole. Finally, situational and cultural factors need also to be studied for the new digital information environment.

30.6 Conclusions & further research

This study has underlined some core theories which determine the successful information seeking and the role of information literacy in society (life roles) and economy (work roles). Moreover, in a non-static sense, information seeking and information skills impacts on politics, economic climate, education and online communication realization (e.g. social media). Future work could explore some aspects of the above mentioned phenomena and exhibit the objectives and activities related to the full understanding of the importance of information as structural components of our lives.

30.7 References

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