Editorial: Information and digital literacy initiatives 2

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This special issue is the second part of 'Information and digital literacy initiatives' (see Information Development 37:3). While starting to prepare this editorial, specifically on January 30, we were saddened to hear the news about Paul Zurkowski's passing in Washington, DC, at age 89. He has been widely acknowledged as the originator of information literacy, by using for the first time the concept in his seminal work 'The information service environment relationships and priorities' (Zurkowski, 1974). As we appropriately introduced the terms IL and digital literacy in the editorial for our previous issue (Machin-Mastromatteo, 2021), I wanted to share some key points from Zurkowski's document to commemorate his life and contributions to this field of research and practice, and to frame this special issue.

In his document, Zurkowski (1974) starts by defining information literacy and describes the importance of developing it, he then continues to present different information resources and the relationships between the private information industry and libraries (e.g., publishers; you may find this section a bit dated, but remember that there was no open access, nor there were other more recent developments that empowered smaller stakeholders to compete, something that is widely considered in contemporary information literacy research and practice); as well as posing some policy questions related to freedom of expression, information services, governmental services, and education, which are still useful.

Zurkowski (1974) defines information literate people as those who have acquired skills and techniques for using information with the general purpose of problem-solving by developing information-based solutions. Conversely, he clarifies that information illiterates, although capable of reading and writing, do not value information appropriately, nor they can "mold information to their needs" (p. 6). Although the essence of the positive term has endured, the negative counterpart is most often referred to as functional illiteracy. However, among other things, he stressed that being information literate increases the perceived value of information, which is something I think that anyone has seen as a typical trait among those who do not value information and that has created many information-related issues from the seventies until now.

Another interesting point is that he calls for the development of a national program of "universal information literacy" by 1984. More recently, and working with his collaborator, Jeffrey Kelly, they set up the Universal Information Literacies Association nonprofit association and published together the book 'Action literacy', which collected several texts

on the topic and for the occasion of the 40th anniversary of the text from 1974 (Zurkowski and Kelly, 2015). This compilation's contents center on activities for teaching and assessing information literacy in the classroom and at the workplace, and on setting up local and international alliances around this topic. They also present some remarks for the "next 40 years of information literacy", which includes drawing a closer connection of information literacy with the development of citizens, establishing community-led information services (which certainly switches the attention from the commercial industry, as I noted above), and setting up an "Information Action Coalition" as a partnership for promoting information literacy.

Regarding the contents of this special issue, as with the previous one, the articles compiled here represent the breadth of information and digital literacy research and practice in many of the diverse scenarios where they can be conducted. I have organized them following the same rationale as well. We open the issue with four articles reporting experiences within academic contexts, then two papers within a workplace context, three experiences that aided marginalized groups, and a general overview on how information may aid in the human and societal development, which provides a very assertive conclusion to this second special issue on information and digital literacies. In the following paragraphs I present each of the works included in this issue.

Faraja Ndumbaro and Mohamed Kassim, both from the University of Dar es Salaam (Tanzania), contributed 'The use of OPAC query logs to support evidence-informed information literacy training at The University of Dar es Salaam', in which they centered in conducting a mixed-method analysis of search queries within their OPAC's log files to determine users' behavior, while they also analyzed the contents of an information literacy course at their institution to compare it with users' searching habits. They highlighted the value of these logs for conducting this kind of research and for improving both information literacy courses and the OPAC's features. Their results include relevant insights into searches with zero hits, search strategies (free text, advanced and Boolean search), search reformulation patterns, and about enriching information literacy courses by providing users with specific contents that may aid them to improve their experiences and use of the OPAC, specifically for developing search strategies involving the use of Boolean logic and evaluating results.

Next, from the University of Ibadan (Nigeria), Adeola O. Opesade and Mutawakilu A. Tiamiyu submitted 'Scientific information literacy, attitude and persuasiveness in decision making among Nigerian university students', in which they started from the assumption that the use and acceptance of scientific results may be attributed to society's inadequate attitudes toward science and a low scientific literacy level. From such a position, they administered a questionnaire to 315 graduate students at their institution to explore their scientific literacy, attitudes to science, and to compare how scientific knowledge, instead of cultural issues, determined personal decision-making. Although religion was a stronger factor for influencing decision-making (especially for deciding on personal matters), rather than scientific knowledge (which affected decisions related to nutrition, health, and career choices), as expected, students' attitudes toward science were positive and the persuasiveness

of scientific knowledge was positively affected by individuals' critical thinking and knowledge of the scientific method. Given the relationships between the attitudes toward science with the levels of scientific literacy and scientific knowledge, it would be interesting to conduct a similar study outside of an academic environment to assess if such relationships turn out to be stronger when surveying other social stakeholders. Particularly because it seems that, in general, society, politicians and the public opinion are showing poor attitudes toward science and that has led to underestimating its importance and value and having a negative perception of researchers and research institutions, which may aggravate issues such as functional illiteracy, fake news, and disconnections between scientific endeavors and society.

Nidal Al Said and Butheyna Zuheir Al-Rawashdeh from Ajman University (United Arab Emirates) and Al Balqa Applied University (Jordan), respectively, authored 'Information and computer technologies in media specialist preparation', in which they present a qualitative overview of 17 case studies to identify the competencies required by media specialists to be competitive in the workplace. Their results concluded that the most important competences were those related to technology literacy, stress tolerance, big data, and lifelong and independent learning to keep acquiring hard and soft skills.

In 'Research data management and sharing awareness, attitude, and behavior of academic researchers', Muhammad Rafiq (University of the Punjab, Pakistan) and Kanwal Ameen (University of Home Economics Lahore, Pakistan) employed a questionnaire developed by researchers from the UK and Turkey to survey 260 researchers from four Pakistani universities regarding their research data management (RDM) behavior, which included assessing their awareness, attitudes, and practices. They highlighted that Pakistan lacks national and institutional RDM policies and this partially reflects researchers' responses and behaviors, as well as the needs for institutions to provide the infrastructure and training required to improve RDM, particularly for working with data management plans. Although RDM involves very specific and specialized skills that are useful for researchers, it is a very important topic nowadays, when scientific communities and institutions are developing initiatives (or at least have the intentions) for working under the principles and best practices of open data and open science, as open access is no longer considered to be enough for developing rich research ecosystems. Such ecosystems involve the production, communication, dissemination, sharing, management and evaluation of every scientific stakeholder, process, product, and material.

From Muhammad Asif Naveed (University of Sargodha, Pakistan) and Mumtaz Ali Anwar (University of the Punjab, Pakistan), 'Information anxiety in the workplace: Scale development and validation' includes the development and validation of a 33-item instrument to measure information anxiety in the workplace, that produced appropriate reliability values with two pilot samples at various Pakistani institutions. This instrument was organized in six dimensions of study related to the use of information: task anxiety, need recognition anxiety, finding anxiety, evaluation anxiety, access anxiety, and usage anxiety. Authors have argued that this instrument may help information literacy training, both at a

curricular level and in workplace environments, where it may aid in improving performance and productivity by alleviating information anxiety.

In ‘Information needs and behaviour of Egyptian doormen/women: An exploratory study’, Essam Mansour from South Valley University (Egypt) examined the information needs and behavior by setting up six focus groups. The findings included that doormen and women have not appropriately addressed their information needs, which were mainly related to work tasks and family, while they prefer to use oral and informal sources either in person with their family, relatives, employers or through mobile phones and social media. Time, illiteracy, and financial difficulties were found to represent the largest challenges they faced.

Chandrani Maitra and Jennifer Rowley from Manchester Metropolitan University (UK) submitted ‘Using a social media based intervention to enhance eye health awareness of members of a deprived community in India’, where they report the findings behind an intervention they conducted with women from West Bengal with low education and high unemployment rates. Such intervention consisted of six educational sessions through WhatsApp to promote eye health awareness. From these sessions, they formed focus groups with them to gather their opinions about employing this kind of intervention for promoting the awareness around this issue in their community. The researchers found that WhatsApp is a viable alternative for promoting health issues withing these deprived communities.

In ‘The effect of bibliotherapy on the development of self-efficacy of women with disabled children’, Semanur Öztemiz (Hacettepe University, Turkey) and Melike Tekindal (İzmir Katip Çelebi University, Turkey) conducted six sessions of bibliotherapy activities with mothers of disabled children to assess their self-efficacy. Nine mothers conformed an experimental group, while the other nine were the control group. Two chapters of the book ‘Feeling good: New mood therapy’ by David Burns were used in their sessions. They found statistically significant results which showed that the experimental group increased their self-efficacy scores after the bibliotherapy sessions when compared to the control group. The authors hope that their study will foster further interdisciplinary research about bibliotherapy, and they recommended that every institution helping groups with disabilities should consider including bibliotherapy to improve the emotional well-being of these groups.

Heriyanto and Selyna Anggitia from Diponegoro University (Indonesia), presented ‘Information experience of village library staff’ in which they analyzed the interviews with five librarians working at village libraries about their experiences in learning more about library management and improving their performance in such positions. Results were organized in three categories: information need, information network, and information impact. These librarians rely heavily on books and social media and through their will to improve and their ability to connect with other village librarians and other social stakeholders, they have been serving their communities better. These libraries are vital for preserving culture as well as for aiding farmers, fisheries, and home enterprises.

Kaiyan Da, from Xi’an Jiaotong University (China), helped us provide a very suitable conclusion to this special issue by authoring ‘Informational development: A new form of human development in future society’. From the assumption that everything is integrated by

matter and information, this philosophical paper starts by defining two sides of human development: material development (e.g., physical and emotional evolution, as well as social and spiritual traits) and informational development (genetics and identity properties, language, education and informational behavior, contents and relations). The author argues that informational development is required to survive in the future society and thus further develops the concept in five philosophical aspects, with the aid of classical and contemporary works: ontology, epistemology, evolution theory, thinking theory, and value theory. The relationship and pertinence of this article in this special issue might not be evident at first, but it receives a high recommendation for information literacy researchers, practitioners and advocates, as I believe that it provides a much needed philosophical groundwork, from which we can start thinking more deeply in the importance of this subfield, where we strive for (in essence) improving individuals' relationships and interactions with information, including production and consumption of information; all of which directly influences their informational development, as defined by Da. Hence, this article may help us to think more deeply about and elevate the aims, purposes, objectives, didactics, contents, and value of our information literacy endeavors.

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