

Transitioning From Digital Literacy to Digital Citizenship: Issues and Challenges of Information and Library Professionals

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ABSTRACT

Efforts are afoot globally to make literacy the driving force at all levels of the teaching-learning processes and at all echelons in Higher Educational Institutions. UNESCO has always underscored the crucially important services of Library and Information Professionals (L&IPs) who are instrumental in motivating and facilitating the return of adult males and females to academic pursuits. Of late, in many and varied contexts encompassing not only educational institutes of every description but also work settings of all kinds, two critical aspects are being acknowledged as the real imperatives viz., Information Literacy and Browsing the Internet for building a knowledge society. Digital Literacy (DL) skill is a more contemporary concept but is limited to practical abilities to effectively and critically navigate, evaluate, and create information using a range of digital devices and technologies. This article examines the issues and challenges of L&IPs in the transformational journey of DL to Digital Citizenship.

Key Words: Information Literacy (IL); Digital Literacy (DL); Library & Information Professionals (L&IPs); and Higher Educational Institutions.

INTRODUCTION

Education is the basis through which all citizens can effectively communicate facilitating the achievement of building an information or knowledge society. Library & Information and Library Professionals (**I&LPs**) are instrumental in motivating and facilitating the return of adult males and females to academic pursuits. Some of their imaginative services in the form of non-print activities such as giving lectures, screening films, and forming discussion groups are really praiseworthy. Of late, in many and varied contexts encompassing not only educational institutes of every description but also work settings of all kinds, two critical aspects are being acknowledged as the real imperatives viz., (i) Information Literacy (**IL**) and (ii) Browsing the Internet

[Cheuk, 1998]. In the words of Fourie & Krauss (2010), Information Literacy refers to the set of abilities that enable individuals to “recognize when information is needed and to locate, evaluate, and use effectively the needed information” (American Library Association, 1989). Aharony (2010) has stated that people in the 21st Century are flooded with and exposed to humongous amounts of information in every facet of their lives and they are required to tailor them to suit their own unique circumstances and individual needs. Acikalin (2009) and Sorensen (2007) have categorically announced that internet searching has become a part of IL of the contemporary world and understanding these two skills would definitely enhance everyone’s capacity to access information from a range

of resources. There are a host of problems humanity faces today such as COVID-19 pandemic, poverty, hunger, unemployment, and domestic violence to several issues of the environmental protection. To effectively face and successfully support the day-to-day life problems, people are expected to improve the quality of the learning resources they generally lay their hands on. Attainment of universal literacy is unfathomable in the absence of the critically important role that L&IPs play in the entire education ecosystem of any country.

In the context of HEIs, libraries are the key players for the community of users. The mission statements of public libraries generally outline the core services they extend to the public at large focusing primarily on information, literacy, education, and culture. In this direction, L&IPs have a significant and innovative role to play in collecting and making available knowledge pertaining to the past and the present while serving all the stakeholders of the society. They are mandated to provide free and equitable access to information in all its formats *viz.*, written, electronic, or audio-visual, while also strengthening the democratic processes of a nation through learning and vocational training.

Paramount Importance of Information Literacy (IL)

Extensive and explosive proliferation of information resources and perennial breakthroughs in the form of emerging technologies and their convergence are the hallmarks of the contemporary environment of the modern world. It is in this scenario, IL becomes a matter of paramount importance of the highest order. IL is emerging increasingly important in the present day environment of rapid technological change and proliferation of information resources. Individuals are faced with diverse and abundant information choices—in their academic studies, in the workplace, and in

their personal lives—mainly due to the escalating complexity of information sources and formats. Information is available through libraries, community resources, special interest organizations, media, and the internet. Increasingly, information comes to individuals through unfiltered channels, raising questions about its authenticity, validity, and reliability. Also, information is available through multiple media—including graphical, aural and textual modes—and all these present new challenges for individuals in evaluating and understanding the content. The uncertain quality and expanding quantity of information pose big challenges for society. Abundance of information in itself is not enough to build an information society. What matters most is having the necessary skills and abilities to effectively use that information.

Digital Literacy: Concept, Meaning, and Definitions

In simple terms, Digital Literacy (DL) skill is a more contemporary concept but is limited to practical abilities to effectively and critically navigate, evaluate, and create information using a range of digital devices (such as laptops and smart phones) using digital technologies. Bawden (2008) defines ‘Digital Literacy’ as the set of attitudes, understanding, and skills that are required to handle and communicate information and knowledge effectively, in a variety of formats and media. It is the knowledge, skills, and behavior used in a broad range of digital devices such as smart phones, tablets, laptops, and desktop PCs, all of which are seen as a network rather than computing devices [Wikipedia (2018)]. It is not out of place to mention here that DL initially focused on digital skills and stand-alone computers, but the focus has rightfully moved from stand-alone to network devices. It is illuminating to note what Bell and Shank (2008) had stated about DL in their

work. “Digital literacy is the ability to use digital technology, communication tools, or networks to locate, evaluate, use, and create information. It is the ability to understand and use information in multiple formats from a wide range of sources when it is presented *via* computers. It is also a person’s ability to perform tasks effectively in a digital environment. DL includes the ability to read and interpret media, to reproduce data and images through digital manipulation, and to evaluate and apply new knowledge gained from digital environments”. In other words, it is a powerful tool for enabling individuals to locate, organize, understand, evaluate, and analyze information using digital technology. As an important component of literate societies, DL principally involves a working knowledge of current high-technology and an understanding of how it can be used. In this context, the role of L&IPs is expected to be proactive in holding the mantle of leadership while assuming the responsibility of educating the community of users to make them digitally literate.

Quintessentially, DL is all about a person’s acquired ability to use technology competently in order to interpret and understand the digital content in all its forms and assess its credibility and also a capacity to create, research, and communicate with appropriate digital tools. DL is the ability to use information and communication technologies to find, evaluate, create, and communicate information requiring both cognitive and technical skills (ALA, 2012).

DL has certain primary distinguishing characteristics as enumerated below:

- a. It supports and helps develop different types of traditional literacy,
- b. It’s a life-long practice,
- c. It’s about skills, competencies, and

critical reflection on how these skills and competencies are applied, and finally

- d. It’s about social engagement.

Digital Literacy (DL) forms the Basis for Lifelong Learning

Digital Literacy (DL) forms the basis for lifelong learning and developing lifelong learners is very much central to the mission of HEIs in providing the resources and services to students, teachers, and researchers at different levels. In any HEI’s ecosystem, all the stakeholders are constantly dependent on information that is current and contemporary for a variety of their activities—either education or otherwise. It is aimed at developing the intellectual abilities of reasoning and critical thinking by the learners. It is also expected to assist them in constructing a framework for ‘*learning how to learn*’ and provide the foundation for continued growth throughout their careers. It is a major contributor to and a key component of lifelong learning as it extends learning beyond formal classroom settings. It provides practice with self-directed investigations as individuals move into internships, first professional positions, and increasing responsibilities in all areas of their life. All interventions that are designed to promote and achieve Digital Literacy (DL) can be leveraged to bring about social change and also for achieving economic development of a nation. After all, the advancements being made in the technological sphere do have their own concomitant benefits in the form of newer and more economic opportunities for the downtrodden and the underprivileged. The underserved and the unprivileged would certainly stand to gain on account of enhanced delivery of basic services. The overall governance and management of every sector of an economy would get a fresh impetus leading to a transformational change in the society as well. It is precisely

for this very same reason, progressive universities of the West never lag behind in updating their curricula for keeping the digital literacy drives to catch up with the technological breakthroughs happening at neck break pace.

Digital Literacy Skills of Library & Information Professionals (L&IPs)

Generally, personnel working in the libraries include professionals, semi-professionals, and non-L&IPs. Competent information providers and information professionals are the key element in the provision of education. We need to examine what the digital literacy skills of L&IPs are for providing the services in hybrid environments at HEIs for imparting quality education. They support the teaching-learning activity for the large numbers of skilled manpower. L&IPs are now developing the necessary applications for the information organization, storage, retrieval, and access. They also administer the information systems besides deciding on system acquisitions by various organizations, information resource centers, information agencies, archives, and libraries. However, to support them, the policies that are being implemented in the libraries of HEIs should be promising. These professionals are expected to play an actively critical role in any nation's social, political, and cultural spheres.

An understanding of the users must guide information systems design, just as knowledge of technical possibilities and constraints must shape user services towards building a knowledge society.

Issues and Challenges of Library and Information Science (L&IS) Professionals in a Digital Era

It is widely accepted that the Library and Information Science (L&IS) professionals are mandated to provide the resources and

services at the appropriate level to support the intellectual, cultural, and technical development of students, teachers, and researchers. If they are not tech savvy, they would never be able to rise to the occasion and render proper service delivery to their users. They are required to be proficient in the use of computers and educational software besides handling a wide array of digital gadgets in a world generally being referred to as a 'global village'. Members of faculty, researchers, and student community can't be effectively served if library professionals are not skilled at these resources. Acquiring and utilizing the digital literacy skills such as accessing the email and interacting with and navigating the internet are not just important but become an imperative. Digitization, digitalization, and digital revolution have become ubiquitous in this highly networked world that is marked by globalization, information explosion, and ever increasing use of digital technologies. In a knowledge economy, acquisition of hybrid information resources and their organization, retrieval, and dissemination to multiple and varied kinds of users is a daunting task for the L&IS professionals. Moreover, making available tailor-made information and helping the users in accessing and utilizing the same is a huge challenge for any librarian anywhere in the world. In a HEI's ecosystem, even the computerization of library operations itself is progressing only at a snail's pace in some of the Indian Universities and Colleges. The three aspects of provision, maintenance, and management of information resources in many academic libraries are posing a serious challenge to the 21st Century library professionals.

Need for Digital Literacy for Libraries in the 21st Century

Citizens of this 21st Century require codes of conduct and communication skills to ensure that the powerful media and technologies are

used responsibly and ethically. Most of the DL skill sets are interdisciplinary in nature. Some of them are: (i) Information, media, and technology; (ii) learning and innovation skills; and (iii) life and career skills. Individuals need to master these three skill sets in order to be digitally literate in the 21st-century [Martin (2006)]. Differences do exist in the level of DL depending mainly upon the age and education level of the users. This has been amply demonstrated by Van Deursen and van Dijk (2009) through their research studies. Honey *et al* (2005) studied on the critical issue of using technology to improve student achievement. The findings discovered that the DL skills are most critical to academic success of the students. Their research especially underpinned and authenticated them in the areas as: “*Communicating effectively using online platform; analyze and interpret data; understand computational modeling; manage and prioritize tasks; engage in problem solving and ensure security and safety; and use strategies known to acknowledge, identify, and negotiate the 21st Century risks*”.

Ability to Use Digital Resources in HEIs is the New Survival Strategy

Information resources like CD-ROM, Internet, OPAC, e-books, e-journals, and e-databases are generally referred to as ‘*digital resources*’. They can only be accessed by the use of computers and other Information and Communication Technology (ICT) devices. As the chief custodians of modern libraries, library professionals are required to create digital libraries as well as institutional repositories. They are expected to make these materials available through library web pages and they can’t be accessed and retrieved without the use of a peripheral device that is directly connected to a computer. CD-ROM drive or any device that is connected to a computer network or the Internet comes in handy for this purpose.

Features of a Digitally Literate Person

In general terms, a digitally literate person is able to search for and understand desired information, express and share opinions or thoughts freely, and have a better understanding of those of others (Kwon and Hyun, 2014). In other words, he is the one who is competent enough to handle and manage digital information in an efficient and effective manner. Such a person typically possesses certain primary distinguishing characteristic traits and hallmarks. Some of them are enumerated by the American Library Association (2012). A digitally literate individual generally—

- i. Possesses a variety of skills—both technical and cognitive—required to find, understand, evaluate, create, and communicate digital information in a wide variety of formats;
- ii. Is able to use diverse technologies appropriately and effectively to retrieve information, interpret results, and judge the quality of that information;
- iii. Understands the relationship between technology, life-long learning, personal privacy, and stewardship of information;
- iv. Uses these skills and the appropriate technology to communicate and collaborate with peers, colleagues, family, and on occasion, the general public; and
- v. Applies these skills to actively participate in a civic society and to contribute to a vibrant, informed, and engaged community.

Stumbling Blocks that Come in the Way of Effective Use of Digital Resources

A common perception among the general public at large is that accessibility of the internet search engines like Google, Yahoo,

and others is always easy and convenient. As this is a situation where a single keyword search could result in thousands of hits, no matter the topic! But the reality is otherwise and there is a contrarian view to this perception. In reality, most of the time, the use of library's digital resources by librarians and library users is hampered and gets limited due to their failure in accessing them. This problem can be overcome if the users are trained in choosing a particular database that is currently available in the libraries and are sensitized in becoming more selective in the search words they employ for retrieving the required information and be more selective in the search words they use (Waldman, 2003). Some of the barriers to the use of electronic resources available at libraries generally are: (i) lack of an adequate ICT infrastructure and their affordable online access, (ii) absence of in-depth digital skills and information searching skills among library staff and users.

They are also expected to keep themselves abreast of various kinds of digital literacy skills. In this context, they are needed to use a variety of internet searching tools to develop their digital literacy efficacy. Library professionals are required to demonstrate their IT skills in productively making use of the e-mail and Internet, MS-Office and Desktop Publishing Tools, Mobile phone, and social networks and also possess knowledge of Multimedia Applications (A-V), e-conferencing, Graphic Designer drawing, as well as functional knowledge of programming languages. Avenues available for the Acquisition of Digital Literacy Skills for Self Development. There are several internet searching tools that enhance their L&IS Professionals' competence. In this context, Digital Libraries, Institutional Repositories, Online Bibliographic Databases, Subject Gateways in their respective subject specific

disciplines, Web OPAC, and various relevant and related Websites can be cited as some of them. It is also observed that they use OPAC to begin with as a standard practice once they get into the Library and Information Science profession and continue to remain on the watch out for other resources that are available locally. Librarians acquire digital literacy skills mostly through attending workshops/seminars, formal education, IT programmes, and also through training offered by in-house library management. Of course, the role of *trial and error* efforts on the part of individual professionals, support obtained from the peer groups and colleagues, Online Education and Training received from overseas institutes and Indian agencies, Self-study and instruction from User's Guides, and visiting You Tube channels can neither be undermined nor ignored. Unfortunately, by and large, the degree of usage of digital literacy skills on the part of L&IS professionals leaves much to be desired in the Indian context. It is hoped that their usage would become more frequent and the level of use of DL skills would remain more than moderate in the days to come. Of course, the relevance and influence of the use of DL skills on the service delivery among the L&IS professionals need not be exaggerated. This fact has to be acknowledged and it is very much essential that their proficiency has to be maintained at a highly positive and efficient level.

Organizational Support Needed for Honing and Sharpening the DL Skills

It goes without saying that any kind of endeavors on the part of L&IS professionals to acquire and demonstrate DL skills do call for the undivided attention and unstinted support of the HEIs. The encouragement can come in the form of opportunities for career progression, platforms for collaboration with other parties, assistance through course

material and formal education, proper and adequate infrastructure, funding for training of every description—be it in-house, online, or from outside of HEIs where they work. However, there are different kinds of constraints and bottlenecks on the path of acquisition and utilization of DL skills to the L&IS professionals. Such decelerating forces may manifest themselves in the form of disruptions in the supply of electricity, lack of uninterrupted internet services, non-availability of required digital resources of quality in adequate quantity that are available, accessible, and affordable. There are multiple issues related to age of the users, technophobia, dissatisfaction on the job, exorbitant cost of digital training, failure to create and maintain a highly conducive learning environment, proper knowledge management practices, and building a learning organizations that continue to pose tough challenges for all the member organizations of the Higher Education System in India.

Transitioning from Digital Literacy to Digital Citizenship

Digital Literacy (DL) is a part of Digital Citizenship (DC). Broader in its scope, DC refers to and encompasses all the norms of appropriate, responsible, and empowered behavior on the part of the people when using technology and all other digital tools. It tells them how they should act when using digital tools and while interacting with others *online*. It is the bounden duty of all the L&IS Professionals to make every stakeholder of HEI ecosystem digital citizens. For this to happen, they need to become and remain as better stewards of technology in a highly digitized world. Here, several aspects generally come under the gamut of DC such as the following:

- i. Simple and basic computer skills like learning to use a mouse and how to type, etc.

- ii. One should always avoid speeches that spread hatred or cause harassment while indulging in online conversations,
- iii. Encouraging yourself and others not to illegally download content or otherwise disrespect digital intellectual property.

Lessons on DC are never complete unless three principal and simple maxims viz., “***Be safe, be savvy, and be social***” are kept in mind. Full electronic participation and engagement of the technology users in societal aspects through digital access is a necessary preliminary. But people advocating the concept of digital accessibility need to keep in mind the fact that digital divide is a common phenomenon across all societies especially in developing economies and underdeveloped countries. For any progressing nation, digital citizenship becomes an imperative as it helps native denizens to make the best choices online while being mindful of the most apt and appropriate technology use and also being aware of the digital footprint they are leaving behind.

Access to technology and to online learning resources especially post-COVID times is made available in educational institutions from the very elementary level itself. And learners are being assigned to technological devices and tools that have to be used both at home and schools. Now the social media sites that are within the reach of the learners and public at large are aplenty. We have witnessed bludgeoning popularity and extensive use of social media apps such as Facebook, Instagram, Twitter, YouTube, and TikTok is growing at an exponential rate. Of late, visiting and checking such sites have become a very common place and a habitual standard practice for people of all categories. It is in this context, imparting knowledge by the L&I professionals about

the *dos* and *don'ts* of posting content, sharing information, and interacting with others online is beneficial to teachers, students, and also the administrators. Today, the technology got superimposed and became integrated into the instruction and learning processes than ever before.

The Internet is an incredibly wonderful place to expose oneself to new things, make learning curves, build digital relationships through online interactions, and following the most popular celebrities of the society also. However, they should exercise utmost caution and discretion to save themselves from harmful effects of online risks. Sharing someone else's private or personal information has the danger of causing either embarrassment or even humiliation. Using technology to share, send, or post any digital content that is false, harmful, or negative about any other individual through text messages, social media, or online apps is called '*cyber bullying*'. In order to protect one person online and to always maintain positive digital relationships, all citizens should accord top priority to avoid this serious issue of cyber bullying which can become unlawful or criminal if it crosses the limits. Digital citizenship calls for an obligation on the part of people to exercise extreme caution while posting something on line—be it information, a picture, a photo, or content of any nature. Digital Citizens are well advised to always keep in mind the acronym '**THINK**' as it acts as a reminder and helps them take informed decisions in whatever they share with the digital world outside. They should ensure whether it is TRUE, HELPFUL, INSPIRING, NECESSARY, and KIND in nature before posting it to the rest of the world. In case the answer to any of these five questions is not affirmative but negative i.e., NO, they should desist from doing so. In this backdrop, L&I professions have the bounden duty to make every effort to build

positive and useful digital experiences for the current and future generations of citizens of any nation.

When technology use is happening as a standard practice in all kinds of teaching-learning environments, ensuring that every learner has the affordability to use a personal device or internet at home becomes very much critical in the interest of adhering to the canon of equitable "*digital access*". Devices and items of intellectual property do get exchanged in digital space as part of *digital commerce*. However, every citizen has to have a basic understanding of the tools and safeguards that become necessary in this exchange process. Equally important is the principle of digital communication and collaboration whereby people manage relationships *online* through most appropriate means while sharing information and expressing their thought processes. Users of digital technology need to religiously respect all the rules of conduct under the digital etiquette rule or canon. Establishing and communicating the permissible benchmarks and expectations help sensitize the members of the citizenry to engage themselves in gentlemanly conversations and online dialogues. Making the most desirable consumption choices does call for people to understand the technology—both its use and misuse—while subjecting the content for a thorough analysis with a critical mind. This is also a part of digital literacy or fluency which is mandated to discern fact from fiction, truth and technology *vis-à-vis* myth and mythology. After all, technology can never be employed without escaping from the concomitant physiological and psychological impingements it brings into the users.

Of late, understanding fully the implications of elements such as screen time and cyber

bullying is becoming necessary as an essential component of the principle of ‘digital health and welfare technology’. In a highly technology-driven world, structures need to be kept in place so that the users always get protection from being unnecessarily cheated or unduly exploited while using technology. For such a thing to become a reality, every civilized digital world needs very stringent digital laws to be implemented ruthlessly and dispassionately. In a digital society, rights and duties are coextensive and coterminous. People need to understand that they can’t take their digital privileges and rights for granted as they are always coupled with the attendant responsibilities. Yet another hallmark of a digital citizenship is digital security and privacy that is always embedded into the ecosystem as a top priority. In order to safeguard one’s private and personal information, adequate precautions need to be taken to prevent security lapses and breaches. Unless thoroughly well thought through procedures are designed and kept in place there is every possibility for such things to happen and recur in future as well.

Gateways for Overcoming the Roadblocks for Digital Literacy Skills and Competencies of L&IS Professionals

L&IS Professionals are ‘*boundary spanners*’ in their work settings as they are commissioned to deal with very significant publics both inside and outside their organizations. The only way by which they can become resourceful and remain relevant in this information age is by constantly updating their knowledge and upgrading their DL skills. Or else, they outlive their own utility and become redundant to work for HEIs. In this context, proper training for acquiring and applying the most needed DL competencies and to become tech-savvy becomes a Hobson’s choice for them. Personnel with no proper DL skills are obviously unqualified and are unfit to work

for digital libraries of the modern era. Hence, checking their credentials and suitability at the time of recruitment becomes a *sine qua non* to filter the unwanted candidates from getting into the portals of HEIs. Even universities become handicapped in making progress and succeeding in some of these DL initiatives for reasons beyond their control. For example, availability of uninterrupted power supply and affordable and unlimited internet connectivity can only be addressed and majorly dealt with only by governmental agencies. The best and the only way one can expect the movement for imparting and improving DL competencies of the L&IS professionals is to espouse the ‘*Training the Trainer*’ theme and provide the much needed fillip and boost while fighting for their just cause. In other words, personnel that are sent for DL training of any kind and to any place can be made to train their own associates and colleagues in the same profession and also the primary members of the user community. Making available all the required technological resources within the digital libraries becomes a necessary preliminary for this purpose.

This is expected to provide the needed momentum for skill development strategies and exercises designed for spreading the DL capabilities extensively and intensively in a digital society. While it is an important thing to make available the most appropriate digital resources, motivating the librarians to use them optimally should not be made an option but should remain as a sheer survival strategy. For this, suitable policies that deal with ICT need to be conceptualized, formulated, and developed for digital libraries and the same need to be unequivocally communicated to all the stakeholder users. Even governmental regulatory agencies can exert pressure either through persuasion or executive *fiat* on the

top management of HEIs. As libraries have a clear role to play in all the three components that constitute literate societies, (i) including enabling populations to acquire and use basic skills, (ii) providing an abundance of printed matter, written records and visual materials, and (iii) facilitating text-based information and lifelong learning opportunities. Libraries have become important channels for disseminating the information available in multiple formats to those who are in need of information.

Application of ICT has changed the role of librarians from *caretakers* to *gatekeepers* of information. All kinds of academic resources have changed now-a-days to digital environments, which are to be provided to the different types of users in the libraries. So it is very much necessary for L&IS professionals to keep themselves up-to-date on different types of literacy skills for using digital tools and technology. It is suggested that training programs may be conducted at regular intervals to all professionals, so that they can catch up with the latest trends and train the users as per the changing scenario.

CONCLUDING COMMENTS

Every citizen can become tech-savvy only by educating oneself and others about the nuances of each one of the iterations of the digital tools and technology platforms that are providing modern ways of communicating and sharing with those near and far. While literacy, in its narrowest sense, refers to the three 'R's—read, write, and arithmetic, it assumes a different meaning in the context of digital communication. A capacity to comprehend and decide about the best fit from among e-mail, social media, education collaboration tools, etc., for a given situation and knowing about the way they need to be used is the need of the hour on the part of the learner as

well as L&I professionals. Digital literacy alone can blast off to smithereens the myths and mythology surrounding events of the world as well as those in daily life while equipping the citizens with the needed theory and technology. It is very much essential that we need to protect a person fully when he is completing online transactions that involve purchasing products and services. Understanding all the nuances involved in e-commerce becomes extremely crucial in this regard. For example, when we think of Bitcoin and block chain, immediately we get reminded of the fact that e-commerce is still an evolving process where a diligent citizen spends his money and manages it most responsibly.

Hence *buyers beware!* Respecting others is as important as respecting oneself. This is the fundamental principle behind being social and gentlemanly while conducting with dignity, decency, civility, and poise in society with others. They have the potential to perform what was earlier a herculean task to do even digitally. Now, it has become easier to teach citizens to be more civilized and considerate to fellow human beings. Even *acculturation* processes and acknowledgement of others' cultural norms by all the parties concerned gets easier when you find yourself as a global digital player online. Digital citizenship fundamentally expects all the stakeholders to treat other human beings with empathy and respect. These key elements of digital citizenship are being taught in HEIs through lecture sessions intended to impart the much needed sensitization. If L&I professionals succeed in formulating policies and rules adequately supported by the much needed legislative frameworks and legally enacted statutes, one can be hopeful that every citizen would become a well educated learner and a better online user. The most ideal way any society can have the best possible digital citizens is

to effectively teach them to become proficient in managing their respective digital footprints that the internet never forgets and forgives.

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