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Research Article

Fostering StudentsDigital Literacy In The Age Of The Internet In The Pandemic Era

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Abstract.
Being digitally literate is an ongoing process in which students must consistently keep up by actively learning and trying out new technology tools and resources, building skills with these technologies, and most importantly using this technology to meet their needs and achieve their goals. This paper considers how students can respond to digital media literacy in the internet era. It begins by exploring digital literacy and digital media literacy more specifically. Then, it approaches how digital media should be selected according to students characteristics, authenticity, appropriacy and sufficiency and then emphasizes the importance of the internet and it wide ranging utility. It argues that the advantages of digital technology give valuable contribution for the students. The paper aims to explore extensive use of potential digital media to empower the students, enlarge their knowledge, enhance their communication skills and enjoy better living condition and elevated status in society. The article concludes that digital literacy should be seen as part of global education in era of internet and the use of digital media properly.

Keywords: Digital literacy; internet; pandemic era; digital media

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1. Introduction

Media literacy has traditionally meant being a wise consumer of mass media. The Association for Media Literacy (AML) statesonits website that media literacy involves helping students to develop an informed and critical understanding of the nature of mass media, the techniques that they use, and the impact of these techniques. Ultimately, it aims to foster an understanding of various media, which includes knowledge of their strengths and weaknesses, biases and priorities, role and impact and artistry and artifact.

With the advancement of media technology and the changes it has brought to our culture, the definition of media literacy has evolved. "Media literacy implies having access to, understanding of, and creating/expressing one self using media" [1]. It explains that everyone has accessibility to use digital media. Of comextends in [2]" this tripartiterelationship and defines media literacy as the ability to access, understand, and create communication sina variety of contexts". From this perspective, the term

"digital literacy" better describes literacy in the digital age and stresses the balance of demystification and creation of media in the context of digital media convergence.

The term digital literacy was introduce din 1997 by Paul Gilster in his book Digital Literacy where the author offersits definition focussing on the ability to understand, appreciate and use the information in multiple formats that the computer can deliver. Gilster [3] insists that "one should not consider digital literacy simplyas "abook about how togetaround the Internet". More over, the ability to evaluate and interpret the information isessential. What matters is that through digital literacy one acquires basic thinking skills and core competences without which he could not orientate and perform tasksin an interactive environment.

The Gilster's concept was alsoused by other authors seeking to provide a more accurate understanding of digital literacy which includes a combination of different kinds of literacy based on computer/information competences focused on the skills to evaluate information and gather knowledge together with a set of understanding and attitudes[4]. The term digital literacy was extended and now it includes all sets of specific skills and competences needed for searching, evaluating and handling information incomputerized form. Bawden [4] sees digital literacyasa "frame work for integrating various other illiteracies and skill-sets, though it does not need to encompass them all".

"Indetermining the concept of digital literacy, some authors tend to understand it as aconnection with the skills and competencies needed for effective use of the Internet and digital technologies" [5] [6] [7]. Martin [5] consists that digital literacy involves the convergence of several types of literacy: ITliteracy,informationliteracy, technological literacy, media literacy, and visual literacy which acquired neworin creasingly important role witht headvent of digital environments. "Each of the authors who adhere to a similar perception has gone from focusing on specific skills to the realization that the literacy is more integrative quality linked with the deployment of skills and competencies in the context of tasks or problems of real life" [5]. Due to the development of a range needed skills, the learner can understand the scope of information channels and resources to gain confidence for the accuracy, reliability and the precision of the obtained information to have more control over their own learning.

In exploring the frame work of digital competence [8] it defines that "it is not sufficient to be claimed that digital literacy includes all the skills and competencies required for Internet literacy, ICT literacy, information literacy and media literacy". There are other components that come into the picture of digital literacy and build a frame work that determines the concept of new literacy needed for living, working and citizen ship in the 21st century. Ferrari [8] presents a comprehensive definition of digital literacy, which

is built on different areas of learning- knowledge, attitudes and skills required to identify, locate, access, retrieve,store and organize the information. The focus here is primarily on solving problems, building new knowledge through technology and media in a critical, creative, flexible, ethical manner.

Moreover, Digital competence is determined by the European Unionas one of the eight key competences for lifelong learning, which due to its versatility allows it to acquireother key skills (eg, mathematics, learning how to learn, creativity) and ensures active participation in society and economy [9]. This competence involves ''the confident and critical use of Information Society Technology (IST) for work, leisure and communication".

2. Discussion

Both educational theorists and practitioners agree that digital literacy has to be defined and developed inrelation to general educational objectives: if ICT use is a basic skill, it must be included in all areas of school instruction. Digital literacy seems to have a beneficial effecton basic skills and competences. There is a growing body of national and international evidence demonstrating the positive impact of digital technologies on measur able learning outcomes as well. A study implemented by the British Educational Communications and Technology Agency (Becta) reveals that the integrated use of technology enables arange of positive outcomes for children and youn people, including improved progress for both girls and boy sin Key Stages 1 and 2 (age groups: 5– 10 years). In Key Stage1, students talented in math progressed much faster when their digital literacy was developed and when mathematics and science was taught using ICT tools and resources. Especially impressive gains in knowledge and learning motivation were foundin English at Key Stage 2. The impact on attainment foundin secondary school was also impressive. At the General Certificate of Secondary Education (GCSE) examinations,studentswithwell-developed digital literacy skills scored better in all areas. Classes that were taught completely online or inablended learning environment on average produce better learning results than those classes teaching face-to-face alone.

Digital literacy has positive effects on skills important for success ful learning also. Students can access information more easily, as agrowing amount of data is available in digital repositories that are much easier to access than traditional, paper-based resources for learning. Managing information is a digital literacy component that students acquire and use in their private lives when joining online communities and keeping up with the diverse networks they are apart of. Integratingand evaluating information,

on the other hand, are skills that have to be taught in the classroom, with the teacher acting as anexpertin evaluating information, showing students the differences between reliable and use less digital resources.

The most important components of digital literacy are common for future computer users and ICT professionals: accessing, managing, evaluating, integrating, creating, and communicating information individually or collaboratively in a networked, computer-supported, and web-based environment for learning, working, or leisure. These skills are directly related to basic competences; there fore, digital literacy is as relevant as traditional literacies—such as reading and writing, mathematics, or the management of social behaviour. Below is anover view of the relationships of digital literacy components and basic competences.

Accessing information, defined as identifying information sources as well as having the techniques for collection and retrieval of such information, is a basic component of all literacies. Digital literacy significantly broadens the scope of potential sources of knowledge. However, information search in this are arequires moresophisticated information management skills than traditional literacies that use resources whose validityand authenticity is relatively easier to assess. When using an Internet-based knowledge portal, applyingan existing organizational or classification scheme to evalu-ate its content isnotal ways possible. Books and journals, for example, maybe validated by there putation of their publishers; most websites, however, do not bear the labelofa well-knowninstitution. Evaluating information (making judge mentsaboutitsadequacy, currency,usefulness,quality, relevance, orefficiency) comes to play here. Being able to determine the authority or time of the information retrieved online requires digital literacy skills that only the expertise and experience of education mayfurnish individuals with. Thus, information management has become acompulsorypart of digital literacy programmes—one that relies on other literacies and, atthesame time, furnishes students with knowledge that is applicable in other literacies.

Integration is another skill that is relevant for all basic competences. In the case of digital literacy, it involves the interpretation and representation of information using ICT tools. Here, the most challenging task is to synthesize, summarize, compare, and contrast information from multiple sources. Integration poses technical challenges: often, different types of data must behandled simultaneously. Therefore, integration requires visual as well as verbal literacy, because texts, charts, and images have to be contrasted and interrelated. Teaching programmes that create synergies between ICTs and discipline- based studies are the most valuable to develop this interdisciplinary set of skills.

Creation of new knowledge is at the core of all basic literacies. Like wise, generating new information digitally by adapting, applying, designing, inventing, or authoring information is also at the core of digital literacy. ICT swere first considered technical skills that may support creative processes. With the development of increasingly innovative computer- supported research and design tools, however, they proved tobe much more: today, ICTs have given rise to new creativemethods and genres both in science and the arts.

Finally, communication is an important component of basic literacies, and one that has been profoundly changed by thee mergence of digital literacy. ICTs provide means for transmitting information faster, more persuasively, and to a wider audience than any communication tool ever before. Digital literacy may support other literacies through the use of themost appropriate and relevant media in order to adaptand present information properly in a variety of sociocultural contexts.

In order to develop adequate 21st century skills among students, educators should be authentic ICT users and integrate digital literacy with other core competences in their professional and private lives. Young teachers born in the digital age may be good models of diverse, enjoyable, and empowering ICT use, but are not necessarily literate in the education alutilisation of ICTs. Teachers' digital literacy mustin volve knowledge and skills about educational policy and ethic aluse of ICTs, and they must keep a head of innovation in digital pedagogy. Teachers' digital literacy must in corporate the ability touse ICTs effectively in teaching, learning, professional development, and school organisation— different sets of skills are required in each of those areas.

3. Conclusions

As this implies, the value of digital technology depends to the students, on how they are given access to the skills and competencies they need, how far the process of using digital media can be controlled and evaluated, and how far the new technology meet up their needs and skills. It also depends, more broadly, on the social contexts that surround it – on the motivation of the students and on the ways they use the tools to prepare them facing education in global era.

Acknowledgments

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