

Digital Natives

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Abstract- *Digital natives are children who have had a significant exposure to technology, which has molded the way they interact with digital tools. Early exposure to technology like the Internet, computers, and mobile devices fundamentally changes the way digital natives learn and operate. They are highly literate with ICT (information and communication technology) and they gather information through their gadgets. This paper provides a short introduction to digital natives.*

Keywords: *digital natives, digital immigrants, net generation, millennials, naturalized digitals*

I. INTRODUCTION

“Digital natives” (or net generation) refers to the children raised in a digital, media-saturated world. It may also apply the young generation of students (K through college) who are “native speakers” of the digital language of computers, videos, video games, and social media. Digital natives have grown up surrounded by electronic gadgets and information technology and they cannot do without computers, video games, mobile phones, and other hi-tech devices. They have a culture of connectivity and online presence.

The term “digital native” was introduced in 2001 by Marc Prensky. The concept became popular among parents who clash with their children at home over Internet technology issues such as gaming, texting, YouTube, Instagram, WordPress, Twitter, and Facebook [1]. Educators, researchers, practitioners, and policy-makers have also expressed their interest in knowing more about digital natives.

Prensky differentiates between two types of people: “digital immigrants” and “digital natives.” Digital immigrants are people who were exposed to technology later in life. While digital Immigrants live in two cultures (the pre-digital and the digital), digital natives are only exposed the digital culture. While those who are born after 1980 are called digital natives, those born prior to 1980 are digital immigrants. While digital natives are assumed to be inherently technology-savvy, digital immigrants often have some difficulty with information technology [2].

II. CHARACTERISTICS OF DIGITAL NATIVES

Some regard all youths as digital natives in the modern age if they were born after 1980. These youths are different. The way they study, work, write, and interact with each other is different from the way we grew up. They live much of their lives online and do not differentiate between online and the offline. They meet online before meeting in person. They get their music online. They carry mobile devices at all times. Major aspects of their lives are regulated by digital technologies. They have spent their entire time using computers, the Internet, videogames, digital music, cell phones, computer games, e-mail, and instant messaging [3]. They would prefer using Google to dictionary when it comes to looking for the meaning of a word because they have Google at their fingertips. In short, they are immersed in technology on a daily basis. There is a good chance that you have been impressed or annoyed with some of the skills the digital natives possess.

III. TEACHING THE DIGITAL NATIVES

Digital natives naturally find traditional modes of education boring, unappealing, and irrelevant. They are used to receiving information fast. They are multi-tasking in that they can juggle a number of activities all at once [4]. They can perform numerous tasks simultaneously – such as doing homework, chatting online, sending e-mails, and updating their Facebook pages. They can learn successfully while watching TV or listening to music.

If digital natives are different, then the way we teach them ought to be different as well. Education must change drastically and fundamentally to appropriately cater for the needs of this new generation of technically adept young people [5]. Teachers should be given access to technology and time to learn and implement it.

Our methodology and content must change. The traditional body of knowledge no longer suffices to understand the world and to address the major issues of the 21st century. For the digital natives, the school and library of today are no longer the only places to acquire knowledge. They are technology-savvy and always connect to the world through their gadgets. It has been shown that they learn using tools such as Google, Google Scholar, Wikipedia, course websites, and text messaging.

For example, using Twitter in education can yield multiple benefits in teaching digital natives. It enables learning to take place anytime anywhere via mobile devices. It allows for teachers to address social presence, because students can post content and follow their peers and instructor and reply to tweets [6].

IV. CONCLUSION

A digital native is an individual who was born after the widespread adoption of digital technology. He is inherently an active user of technology and technology-savvy. Digital natives have high access to the Internet and use it extensively for school work and leisure. They have started entering the workplace and will be growing continuously as an employee segment. Right now, the digital migrants are ruling the digital natives.

Gender, cultural and economic groups adequately define digital nativeness. It appears that many children do not have the technology skills predicted by advocates of the digital native idea. Internet access remains stratified and some children are being excluded [7].

REFERENCES

- [1] "Digital native," *Wikipedia*, the free encyclopedia https://en.wikipedia.org/wiki/Digital_native
- [2] Q. E. Wang, M. D. Myers, and D. Sundaram, "Digital natives and digital immigrants: Towards a model of digital fluency," *Business & Information Systems Engineering*, vol. 6, 2013, pp. 409-419.
- [3] M. Prensky, (2001) "Digital Natives, Digital Immigrants Part 1", *On the Horizon*, vol. 9, no. 5, 2001, pp. 1-6.
- [4] F. McCarthy and M. Vickers, "Digital natives, dropouts and refugees: Educational challenges for innovative cities," *Innovation: Management, Policy and Practice*, vol. 10, no. 2-3, Oct.-Dec. 2008, pp. 257-268.
- [5] S. J. Bennett, K. A. Maton, and L. K. Kervin, (2008). "The 'digital natives' debate: a critical review of the evidence," *British Journal of Educational Technology*, vol. 39, no. 5, 2008, pp. 775-786.
- [6] S. Cleveland, B. C. Jackson, and M. Dawson, "Microblogging in higher education: Digital natives, knowledge creation, social engineering, and intelligence analysis of educational tweets," *E-Learning and Digital Media*, vol. 13, no. 1-2, 2016, pp. 62-80.
- [7] D. H. Tustin¹, M. Goetz, and A. H. Basson, "Digital divide and inequality among digital natives: A South African perspective," *African Journal of Business Management*, vol.6, no. 31, August 2011, pp. 9140-9150.

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