Dimensions of the Digital Divide

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INTRODUCTION

The digital divide is a term used to describe a difference in the use of digital (including social) media between and within populations. It concerns the extent to which engagement with digital media causes and is caused by varying demographic factors. The term was first used in 1999 (van Dijk, 2017) though an understanding that a gulf between those able to use and access information through digital media and those who could not, existed since the mid-1990s. The issue received considerable attention in the early to mid-2000s (for example, by the Organization for Economic Cooperation and Development (OECD)) yet in contemporary times the term seems to have drifted out of the public consciousness. However, there are still large differentials between regions of the world in terms of rates of access to digital media. There are also notable differences between communities in developed countries in terms of what forms of access people have and what they are able to do with this access.

As understanding of the divide has progressed conceptualizing the various reasons people are not able to avail themselves of the potency of computers and the internet has become more sophisticated. In this article, the authors contend that the idea of the digital divide can be understood to operate in a range of different 'dimensions'. Previous work on the topic has identified different historically situated 'orders' of the digital divide and in some ways the dimensions under consideration here match these. However, such accounts tend to locate the forms of divide as occurring sequentially and that the latest form of divide presents the most prescient problems. In contrast the authors contend that the differing forms are still present and that the problem is a multi-faceted one which requires a multi-level approach to address. In this chapter the authors consider the three main dimensions that impact upon a person's ability to make use of digital media.

BACKGROUND

In its simplest terms the digital divide refers to a form of social stratification that is simultaneously enacted and furthered by an individual's ability to utilize digital media to render their own self-interest (Leaning, 2017a). That is, our access to and use of digital media in part determines our social opportunities but is simultaneously related and determined by forms of social inequality (Ragnedda, & Mu, 2013). It impacts an individual's ability to use digital media to assist them in their lives but also impacts upon their engagement with political processes. Accordingly, the digital divide is both a problem for individual people and also for the operation of democracy and citizenship.

In this article the authors first consider the physical (access to the equipment to connect) and material (ability to afford the expense of connection) digital divide and rates of access across and within a

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number of countries. Second, the authors then look to the issues of training and education that impact upon people's ability to access computing technology. Third, the authors look at what people are actually doing online and will note that demographic differences between people are often also manifest in their forms of behavior and ability to leverage digital communications to their advantage.

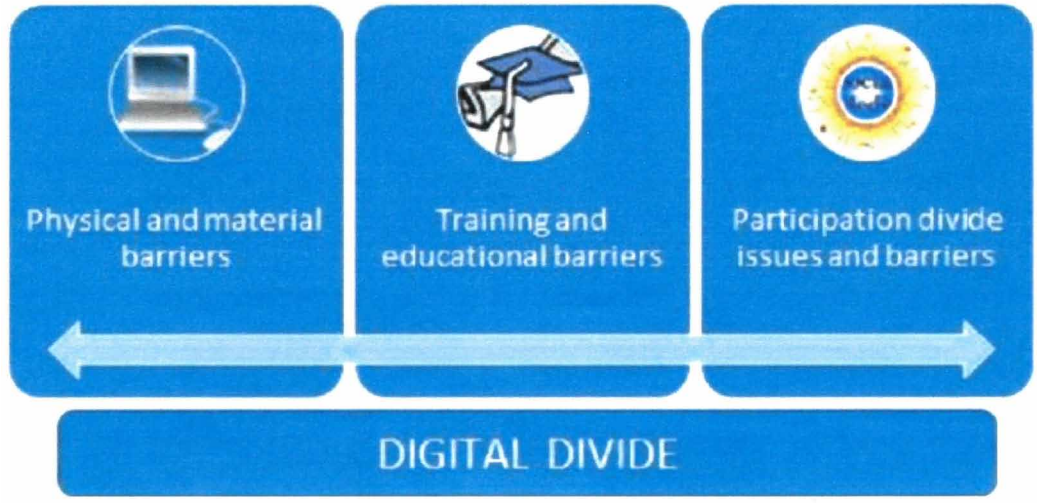
The authors term these different barriers as different dimensions to highlight their interrelatedness and concurrency. It is felt that to refer to the problems as barriers or orders implies that the issues occur sequentially. While they were identified sequentially, treating them in this manner means that the complexity of the issues and the interrelatedness of the three issues may not be fully appreciated. Instead the authors refer to the issues as dimensions of a complex problem. The dimensions the authors identify here operate in concert and thus cannot be addressed in a piece-meal or singular fashion.

FOCUS OF THE ARTICLE

This article will look at different aspects of the digital divide. The article is structured so that the broad themes (different dimensions) cover the following aspects, as reflected in Figure 1:

- physical and material barriers;
- training and educational barriers; and
- participation divide issues and barriers.

Figure 1. Dimensions of the digital divide in contemporary society



The authors now explore and discuss these each of these different dimensions in the hope that readers may have their awareness and understanding of these digital divide topics strengthened.