Chapter 16

Critical Analysis of an Amazon Program of Digital Inclusion: Navegapará in the City of Belém

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ABSTRACT

This chapter aims to present a study of the digital inclusion program of the Government of the State of Pará, named Navegapará, particularly its educational components within Infocenters of Belém. During the period from March to September of 2012, 26 schools were selected, along with certain teachers and directors from the schools. A questionnaire was applied to better characterize the sample of schools visited, and it was possible to carry out a critical analysis of the data obtained and verify the potential of the program, as well as to show some points that must be reviewed, such as providing good training for teachers and ensuring that equipment is in good condition. These are still valid data in that they provide fundamental indicators for the appropriate development of digital inclusion and educational informatics within the schools.

INTRODUCTION

The role of schools in developing countries such as Brazil includes not only the task of supplying a formal education but also acting as a privileged locus to foster digital inclusion. According to Lima, Silva, Jambeiro, and Brandão (2011), information and communication technologies (ICTs) must enable access to information and support certain rights. Otherwise, they can work as another form of exclusion and limitation.

Regarding digital inclusion, according to Navegaporá (2009), it is a wide concept that means not only access to a computer connected to the Internet but also fostering the improvement of the life quality for the population via ICTs.
Regarding the use of ICTs in education, it is necessary to make the technology physically accessible. Having enough teachers and equipment that is in good conditions are essential to placing the technology in the school environment. The challenge is huge not only for the government but also for the teachers, principals, and all the staff members of the school.

Education using ICTs mandates radical changes, so this revolution cannot be solely teachers’ responsibility. Principals, secretaries of education, and managers at different levels must be committed to the pedagogical innovation, according to Neves (2009).

The public system of education is normally dependent of the policies, programs, and investments of the government at the federal, state, and municipal levels to subsidize the actions needed in the educational process (formation, infrastructure, minimum curriculum, purchase of equipment, etc.). Regarding digital inclusion, a great deal of experiences are taking place in Brazil due to the programs and projects created by the government. Among these, we highlight Navegapará, a digital inclusion program offered by the State Government of Pará since 2007.

The aim of this chapter is to present the results of a study performed by Magalhães (2012), in which the author studied a representative sample of infocenters from the city of Belém to analyze whether the Navegapará program was able to generate conditions in public schools of the city of Belém (capital of Pará) that foster digital inclusion.

BACKGROUND

Information and communication technologies (ICTs) are a group of resources and technologies related to information and communicative processes that allow the generation, storage, process, and reproduction of information. These ICTs have been used as tools for learning to a remarkable degree, which can be perceived both in theoretical discussions and in the elaboration or construction of a large number of educational tools. However, before making these tools available in schools, it is necessary to have a critical view of how these tools would be used, which should take into account the previous experience potential users have had with technologies. Because a large proportion of Brazilians do not have access to ICTs, the mere presence of ICTs in a school may not help the students. Having fair access to ICTs is seen as promoting effective social inclusion, but this may not take all the circumstances of the students’ lives into account. This is just another consequence of longstanding differences in the distribution of power and income, according to Eliasquevici (2007).

Being digitally connected is necessary to foster interaction between the citizens and the world of information and communication. However, in Brazil, this is still far from reality, despite the increasing numbers of people connected to the Internet. Data from National Research through a Sample of Households (2012) disclosed by the Institution of Geography and Statistics of Brazil indicate that about 46% of ten-year-olds have not yet accessed the Internet. The reality of the State of Pará, located in the north of the country, is no different. More than five thousand cities listed in the Census of 2010 were surveyed, and it was found that the capital of the State of Pará lies in the 17th position, with 54.77% of the population having access to the Internet. Although having access to Internet is not a decisive factor in being digitally connected, these data are alarming because guaranteed access is crucial.

With regard to digital inclusion, it is commonly believed that to include citizens digitally means to guarantee access to computers for all people and simply teach them how to use Office packages. This thought results in false conceptions of digital inclusion (Soares & Alves, 2008). This situation is widely observed, for instance, in communities