

Chapter 8

Gender Differences in ICT Studies: A Study of Selected Public Secondary Schools in Ogun State, Nigeria

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ABSTRACT

This study provides an empirical investigation of gender differences in ICT studies in selected public secondary schools. It describes gender differences in terms of students' attitude, perception, and choice of ICT subjects, parental influence, age, and religion. The study engages survey of selected public secondary schools in the region and in-depth interview of relevant stakeholders for the primary data. The study findings are anchored on existing literature, relevant theoretical positions, and data from statistical analyses. It concludes that equal opportunities in ICT studies for male and female students will empower all groups to contribute maximally to science and technology revolution for achieving needed economic and national development in the country.

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INTRODUCTION

The dearth of female students in ICT-related studies is glaringly on the increase in many public institutions especially the secondary schools where basic infrastructure including electricity is lacking. One explanation for the obvious gender gap is as a result of gender inequality rather than lack of women's ability to acquire the requisite skills to function adequately within the sector (Odukoya, 2005). Another possible explanation lies in the fact that the significant others (family, schools, peers, etc) play a major role in influencing whether the young people decides to pursue STEM related studies or pursue a career in those domains or not (Zarrett, Malanchuk, Davis-Kean, & Eccles, 2006). A number of studies Eccles (1994), Zarrett et.al. (2006), Vekiri and Chronaki (2008), Lang (2012), Gras-Velazquez, Joyce, and Debry (2009), Sáinz et al. (2009), Yansen and Zukerfeld (2014), Yansen and Zukerfeld (2014), Trauth, Quesenberry, and Morgan (2004), Pechtelidis, Kosma, and Chronaki (2015), Pechtelidis, Kosma, and Chronaki (2015), Nelson (2014), Moakler and Kim (2014), Christoph et. al. (2015), Cheryan, Master, and Meltzoff (2015), Cheryan, Master and Meltzoff (2015), Zagami et.al. (2015) and George and Suleiman (2015) have identified some social-cultural factors causing gender differences in ICTs studies.

This study is an investigation into the causes of gender differences in ICT studies at the secondary educational level where least attention of scholars and researchers in contemporary times have been focused.

BACKGROUND

The primary focus of this research is on gender differences among students of public or government owned secondary schools in Nigeria. Secondary education is a preparatory ground for higher education and ultimately the labour and the job market. Relevant foundation of ICT studies, skills and knowledge at this level will form a major basis for higher education (Universities, Polytechnics etc.) and ultimately employment in ICT domains and relevant fields. In today's 21st century, the demand for ICT professionals continues to rise, yet the availability of experts is insufficient to meet the rising demand. The insufficient number of women in technology and ICT-related subjects and studies has been the focus of interest of the scientific and educational communities during the last decades (Eccles, 2007; Cohoon & Asprey, 2006; Margolis & Fisher, 2002; Sáinz, 2007; Zarrett & Malanchuk, 2005). Previous studies by Development Information Network (DEVNET, 2005) include- Gender and Technology, ICTs as tools to challenge inequality and promote women's empowerment, Gender and ICT, Policy issues and Engendering the Information Society to mention a few- The way forward seem not to address the gender gap in ICT studies right from the Secondary school to the higher institutions of learning where manpower for ICT are produced. This missing link in the study of ICT at the public Secondary schools is what this study intends to fill. Thus, the study identifies and seeks to address the following research questions:

1. Are there gender differences in ICT studies in public secondary schools in Nigeria?
2. What are the causes of gender differences in ICT studies?
3. What are the means of bridging the gender gap in ICT Studies?

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