



## Chapter 12

# ICT Use in Higher Education in Eastern States of India: An Analysis

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### ABSTRACT

*Information and communication technology (ICT) cannot be separated from our daily needs. ICT helps in reducing the disparity in wealth of educational resources. The uses of ICT in education add value in teaching and learning by enhancing the effectiveness of learning or by adding a dimension to learning. ICT may also be a significant motivational factor in students' learning. Uses of ICT in eastern states in India are lagging behind all other regions of India. In this background, the authors review the use of ICT by higher education students of four states in eastern India. They have attempted to find the factors responsible for use of ICT by the students. As the findings suggest, region, gender, education levels of households, type of courses, possession of computer and internet facility, consumption levels of households, and whether students stay in institutional hostel or not are the influencing factors to use of ICT.*

### INTRODUCTION

In the modern age Information and Communication Technology (ICT) cannot be separated with our daily needs. Higher education is in the process of challenge, thereby challenging the traditional system of education. India's achievements in the field of higher education in post-independence period are remarkable. There has been a huge quantitative expansion of higher education in India in the post-independence period. In 2016-17, there were 864 universities, about 40 thousands colleges, 35.7 millions of students

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and 1.365 million teachers in higher education in India (AISHE 2018). Higher education systems in India have grown exponentially in the last five decades to meet the demands of quality education for all. This aspect has further gained momentum due to swift advancements in ICT. Use of ICT in higher education is not only a technique for educational development but also a way of socio-economic development of the nation (Sarkar, 2012).

ICT infrastructure is one important way of stimulating growth in national innovation and economic productivity. It is clear from international evidence that there is a virtuous nexus and a clear link between ICT and productivity (OECD, 2012). Government of India has taken long-term initiatives like Digital India, Make in India, Smart Cities, e-Governance, push for digital talent through Skill India, drive towards a cashless economy and efforts to kindle innovation through Start-up India for making India a digitally empowered society and a knowledge hub (Karmakar and Jana, 2015). ICT is one of the economic development pillars to gain national competitive advantage. It can improve the quality of human life because it can be used as learning and education media. The boundaries between regular students and distance student diffuse with the use of ICTs (Jana & Maiti, 2020). The use of ICT in education add value in teaching and learning, by enhancing the effectiveness of learning, or by adding a dimension to learning, ICT may also be a significant motivational factor in students' learning, and can support students' engagement with collaborative learning. It increases its importance in people's lives, ICT literacy become a functional requirement for people's work, social, and personal lives.

Use of ICT by the students of higher education in eastern region is less compare to all others region and also the national average. In this background we propose to review the use of ICT by the students of higher education in eastern states in India based on following objectives.

## **Objectives**

The major objectives of the present study are as follows:

1. To explore the status of the use of computer and internet by the students of higher education in eastern states of India.
2. To find the determinants of use information and communication technology (ICT) by the students in eastern region in India.

## **LITERATURE REVIEW**

We mention here a brief review of literature on use of ICT in education. Alumu and Thiagarajan, (2016) explain how internet is becoming an integral part of Higher Education in the current scenario. E-learning is greeted all over the world, especially for academics, as the benefits are very satisfying, compared with face-to-face learning. According to Mondal and Mete (2016), the introduction of ICTs in the higher education has profound implications for the whole education process especially in dealing with key issues of access, equity, management, efficiency, pedagogy and quality. According to Irvin (2007) despite coming of age with the Internet and other technologies, many students in colleges lack the information and communication technology (ICT) literacy skills—locating, evaluating, and communicating information—necessary to navigate and use the overabundance of information available today. Krishnaveni and Meenakumari (2010) identify the various functional areas to which ICT is deployed for information

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