Uses of ICT by Students: Nepal Case

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Abstract

Information and Communication Technology (ICT) help understudies to pick up information, help them with their everyday exercises and learning exercises. It’s not possible for anyone to disregard the significance of ICT in their everyday life. ICT assumes extraordinary job in an amazing achievement. ICT in training areas alludes to the investigation and moral act of encouraging e-learning and other inventive mechanical methodology in instructing and learning techniques which is the learning and improving execution by making, utilizing and overseeing fitting mechanical procedures and assets. The principle point of this paper is to find Nepalese secondary school understudies' frame of mind towards the utilization of ICT. The study was conducted on four factors Learning Behavior, Teaching Behavior, Computer use and Information and Communication Use. The study was led among 102 secondary school understudies. This examination utilizes numerous relapse information investigation and gives analyst elucidation on information. This examination contributes in further exchange on frame of mind of understudies towards selection of ICT in Nepal.

Keywords: Virtual Reality, e-learning, VR for Education.

I INTRODUCTION

Information and Communication Technology (Blurton) is defined as diverse set of technological tools and resources used to communicate, create, disseminate, store, and managing information [1]. ICT in instruction segments alludes to the investigation and moral act of encouraging e-learning and other inventive mechanical methodology in educating and learning techniques which is the learning and improving execution by making, utilizing and overseeing fitting innovative procedures and resources. ICT can be one of the main tool or mechanism to improve the quality of education and to eliminate physical boundary to properly gain right knowledge from different experts through the use of various online technologies mainly through the Internet.

Nepal is a low-income country with poor infrastructure of academic institutions and faces several constraints in upgrading them. Ministry of Education (MOE) has consistently been involved in efforts to digitize school-based education system by application of ICT as per their ICT in Education Master Plan 2013 – 2017 [2]. As well as, various NGO’s and INGO’s are promoting the ICT in education. Despite of it, lack of proper content, digital infrastructure, training for teachers are some crucial factors responsible for slow pace of development. It is believed to be cost-effective intervention to invest in early education by application of suitable ICT tools to prepare the next generation of productive human capital for economic development. Normally, ICT is perceived as a tool rather than invention or

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cognitive deployment over time dominates the scenario in context to Nepal. No one can neglect that the proper use of ICT assists students to develop their knowledge, helps to gain better results in exam and to grow attitude towards good education. Students normally use ICT for communication, entertainment, news, solving problems, online learning and online education. ICT can be one of the basic tools that supports the mental development of an individual and drive them to creative thinking and activities [3,6,11].

II LITERATURE REVIEW

There were various articles from similar domain and were based on developing countries like Tanzania, Ethiopia which have similar socio-economic condition as that of Nepal and were hovering around developmental issues by application of ICT. It was extracted that the usability of any technological artifact or course is limited unless it is thoughtfully situated in context of all elements that support in an environment in which it is intended to be implemented [10]. The challenges in research and development arise due to difficulties in satisfying context specific needs and demands. It has been identified that information-based and human-centered approach of technology transfer is the most fundamental need in developing countries [9]. It is important to develop a pedagogical model of ICT application in school curriculum that would enable the local students to understand basic concepts and applications of ICT in various sectors. Three most important factors; pedagogical approach, socio-economic context and technical environment are crucial to be taken into consideration in developing design-based model to be introduced in school environment that will influence the motivational and cognitive characteristics of students and teachers [8]. In lights of literature review, it has been speculated that each context has its own specific need based on cultural, behavioral and pedagogical approaches which also account for influencing students as well as teachers in process of technology supported teaching-learning methods. This has outlined the need of design-based research in context of ICT and development through education in Nepal.

In the context of students’ education through ICT, some researcher found the students are more attracted to graphical software [5] and students’ uses ICT more in homes as playing games than in schools [4,7]. Furthermore, ICT plays a key role in digital curriculum, governance, and success of education at all level around the globe, as well in Nepal [12-16]. In this study, we examined the attitude or students of Nepal towards using ICT in both home and school. Further, [17] the authors elaborate an important role of the software component for the ICT.

III RESEARCH MODEL

The research is carried out to examine student’s attitude towards using ICT in both home and school. For this propose, questionnaire was developed for survey that consists of demographics variables such as age, gender, religion and education. The model was constructed on the basis of three independent variables Learning Behavior (LB), Teaching Behavior (TB) and Computer Use (CU) and one dependent variable (ICT User) to access students’ attitude towards using ICT.

The questionnaire was developed on seven Likert Scale that ranges from Extremely Disagree to Extremely Agree. The set of questionnaires are divided into two factors Learning and Use as follows.

Figure 1: ICT Use with LB, TB and CU

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The researcher has stated a set of hypotheses as follows:

H1: Learning Behavior significantly effects ICT Use.
H2: Teaching Behavior significantly effects ICT Use.
H3: Computer Use significantly effects ICT Use.
H4: Learning Behavior, Teaching Behavior and Computer Use together significantly effects ICT Use.

IV DATA COLLECTION

This research applies quantitative research method that applies survey technique among 10+2 students and applied stratified random sampling technique. The physical survey was conducted among 102 respondents of various 10+2 colleges of various part of Nepal.

V RESULT & DISCUSSION

According to R2 value in Model Summary, LB, TB and CU combine has 38.9% of the variance in the ICT Use and has significant affect in determining ICT Use. According to ANOVA table, the overall regression model was significant since, 

\[ F(3, 98) = 20.828, \ p < 1.6689 \times 10^{-10}, \ R^2 = .389 \]

Overall, regression analysis is statistically significant, when predictor variables are grouped together. Therefore, LB, TB and CU predict ICT Use significantly.

According to Coefficients table, it is dedicated to predict the effects of individual predictors on dependent variable. For it, the p-value is evaluated against an alpha of 0.05. So, taking Learning Behavior, the p-value is equal to 0.000004 that is less than 0.05. So, Learning Behavior is a significant predictor of ICT Use. Taking, Teaching Behavior, the p-value is equal to 0.000119 that is less than 0.05. So, Teaching Behavior is a significant predictor of ICT Use. Whereas, taking Computer Use, the p-value is equal to 0.168 that is greater than 0.05. So, Computer Use is not a significant predictor of ICT Use.

VI CONCLUSION

As the result obtained, Hypothesis H1 satisfies, that is, Learning Behavior significantly effects ICT Use since individual as well as grouped p-value is less than 0.05. Hypothesis H2 satisfies that is, teaching Behavior significantly effects ICT Use since
individual as well as grouped p-value is less than 0.05. Hypothesis H4 satisfies that is, Learning Behavior, Teaching Behavior and Computer Use together significantly effects ICT Use since its p-value is less than 0.05. Whereas, hypothesis H3 rejected, that is, Computer Use significantly effects ICT Use since its p-value is greater than 0.05. The further analysis can be carried out with high volume of survey data and detail analysis can be performed to obtain better result.

REFERENCES