

## **INFLUENCE OF DIGITAL DEVICES IN ACADEMIC ACTIVITIES: SPECIAL REFERENCE TO ICT SPECIAL STUDENTS IN FACULTY OF ARTS AND CULTURE, SOUTH EASTERN UNIVERSITY OF SRI LANKA**

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### **ABSTRACT**

Now the world is growing very highly in the field of Information and Communication Technology (ICT). People are using many Technological devices and advanced technologies in their daily life. Mostly Digital devices are impacting on human life vastly. Technology has reached the hearts and minds of almost all people and become their prime obsession. They are ever on the lookout for what the next innovation is going to be. On this basis, a study was carried out to explore how digital devices are influencing in academic activities among students. This research was done among ICT Special students, Faculty of Arts and Culture, the South Eastern University of Sri Lanka at Oluvil. The population of this study comprised 60 ICT specialization students from the second, third, fourth years from Arts Faculty, and the methods mainly adopted were the semi-structural questionnaire and the focus interview. This research revealed that digital devices have considerably influenced students. Learning outcomes of the students are highly appreciable in the Higher Education context. Laptops, Desktop pcs, Mobile Phones, Smart Watches, Tablet pcs and many other devices are used by students in the classroom. All devices are influencing in their studies and their life. Some students are using Mobile phones for entertainment purpose. Some students are using for Study purpose. In this way, The Main problems are to find out how digital devices are influencing in the student's education and how it is affecting their studies, identify the effects related to the over usage of digital devices and so on. The main focus of this research is to provide the proper ways and recommendations for using digital devices.

**Keywords:** digital, devices, academic, influence, education

### **INTRODUCTION**

Digital Devices are the simple physical unit of equipment that contains a computer or microcontroller. Today, Smartphone, tablet, smartwatch, laptop, iPad are some examples of digital devices. People cannot live without digital devices. There are many newspapers and media stated the good and bad effects of the digital devices and it may transcend to the learning performance of the students over the years. For the gain of mankind, technology has always seemed to grow and flourish. The countless achievements of technology have left everyone in every part of the world today enjoying the comforts and easiness provided by technology. All the countries are connected to each other and interlinked, So, we want to thanks to the technology, Modern technology has greatly improved people's lives through different fields such as work, medicine, business, industry, and especially education. However, we can't say and confirmed that technology is all good in itself.

Technology is a two-sided world and we have to see to what extent it has really helped and improved people's standard of living. There are many possible effects on using it. And it depends only on the way the users used it. It is very important for people to know how to use it for their benefit and should not abuse its use. Rather than rely on

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it totally, technology should be properly used.

We analyze internal and external variables that condition the use, functionality, and acceptance of digital device: Digital resources potentially beneficial in the development of university studies within the Higher Education. For this purpose, we have used a questionnaire to analyze the incidence and factors that condition the use of digital devices in South Eastern University of Sri Lankan students who are studying in the ICT field, in the following academic years such as second-year (2016/2017), third-year (2015/2016), fourth-year (2014/2015). Around 85% of students are using digital devices like laptop and Smartphones in the classroom very effectively. Few of them are using those devices only for basic call and messaging purpose. The use of digital devices applied to the development of personal, academic, and professional competencies is part of the university goal. The key concept adopted in this framework is the use of university methodologies, tools, and resources that encourage the transferability of skills to personal, social, academic, and professional contexts and, thus, being able to create an effective foundation for life-long learning. Aravind Raj (2018).

## **METHODOLOGY**

The local study was in the South Eastern University of Sri Lanka. From where the ICT special students were studying in the faculty of arts and culture. First, we conducted a focus group interview and Individual interview with faculty of arts and culture, dean office staffs, regarding the total students in ICT special. There are around 350 students in arts faculty, in that about 60 students are studying ICT special degree in the second, third, fourth year. We used quantitative research techniques to check whether, how the digital devices influencing in academic activities. This research was designed on using the semi-structured questionnaire for the purpose of data collection. The data was collected very efficiently to keenly detect the concern objective under research study. A questionnaire consisting of 25 questions was designed. With the help of questionnaires, all data are collected easily with the help of digital devices and paper-based systems. Collected data was then analyzed on Spreadsheet software. The frequency tables and percentiles were used to display the results.

The questionnaire consisted of four parts, the first part of the questionnaire gathered the respondent's background. The second part of the questionnaire was dedicated to collect data on the variety of digital devices used by the students, the third part of the survey was focused on how the digital devices adversely influencing on academic activities. The fourth part of the survey was designed to identify the Misuse of digital devices. Respondents provided information through both closed-ended and open-ended questions on these topics.

Questionnaires were distributed according to 3 academic years who are studying ICT special in the Faculty of Arts and Culture at the South Eastern University of Sri Lanka. These ICT special students were chosen because these students are highly related to digital devices. Arts and Culture is the one major faculty, in that ICT special students have very much chances to use the digital devices for their every purpose of learning.

Following table explains the usage of Digital devices by the students.

Table 1 Digital Devices used by the IT Special Students

Year	Laptop/PC	Smart Phone	Smart Watch	Tablet/iPad	Nothing
2 <sup>nd</sup> Year	19	20	1	2	0
3 <sup>rd</sup> Year	20	20	0	1	0
4 <sup>th</sup> Year	17	16	1	3	0

## LITERATURE REVIEW

There have been loads of research papers that are identified with e-learning, on the web or mixing learning, the number of research papers that spotlights on Google study hall as a method for learning is as yet restricted, however.

Aravind Raj (2018) did research under the heading of “The Effects of digital devices to the learning performance of Students”. In his research, he mentioned that the research provides analysis and evaluation of the effectiveness of digital devices. He used an analytical way to measure the effectiveness of the learning activities. The results of his study indicated that the majority of the students are using Smartphones to study and find the notes. Results of data analyzed showed that all ratios are above averages. In particular, comparative performance is good in the areas of ease of access, perceived usefulness, communication and interaction, instruction delivery and students’ satisfaction towards the digital device learning activities.

Based on Lam, Paul; Tong, Aiden, (2012), they stated that ‘in this technology world using of digital devices are giving a better motivation for conducting courses and interactions, active exploration of online information and participation rates. In his point of view, that the digital devices are most useful to the student’s educational purposes and not only for the students but also for the Teachers. Teachers can use these devices in their learning and teaching purposes widely.

Based on Freeman Dyson, (2008) he stated that “Technology is a teaching aid: Computers offer an interactive audio-visual medium. PowerPoint presentations and animation software can be used to learn information and notes in an interactive way. Owing to the audio-visual devices, this way of learning invites greater interest for the students. The method is equally helpful for teachers. Projectors and screens facilitate simultaneously.

Based on Yesilyurt M.E, Basturk R., Kara I. (2014) they are finding many problems in the usage of digital devices in the classroom. They have published a journal article under the heading of “The effect of Technological devices on Student’s academic success”. They said, most of the students are using computers and laptops in their home. Therefore, they can get vast knowledge easily. Many young students are very interested to learn through digital devices. They are getting bored to learn in the traditional classroom methods. So, they said, Students are becoming a success with the help of digital learnings. But they are explaining the negative side of the over usage of digital devices. Some students are addicted to mobile phones and the Internet. They are always using these kinds of things highly. That is influencing their marks and academic activities.

According to the technological devices may affect the learning performance of the student in negative result if they failed to use properly those devices in the right way.

## PROBLEM STATEMENT

Problem: This study aimed to know the effects of the Digital Devices in the learning performance of students in the Faculty of Arts and Culture, South Eastern University of Sri Lanka. Specifically, it attempts to solve these following problems.

1. Find the satisfactory level of the students those who are learning by using digital devices.
2. Effects of common technological devices to the performance of the students. Positively and Negatively.
3. Find out the way of using digital devices efficiently to improve learning and knowledge.
4. Difficulties to get digital devices by poor students and challenges.

These problems are inspired us to conduct research about the influence of digital devices among students. We have focused on how students should interact with digital devices in order to attain positive and effective learning with the help of these devices.

## RESULTS AND DISCUSSIONS

In this section, the survey results are presented and analyzed. We have selected the populations from ICT Special Students (2<sup>nd</sup>, 3<sup>rd</sup>, 4<sup>th</sup>-year students of faculty of Arts and Culture SEUSL). Because these students are mostly related to digital devices and also, nowadays mobile companies are producing devices for younger students. The total number of people participated in this survey was 60. The ratio of females to Males participating in this survey was 54:6, respectively. Therefore, this confirms with the objective of the survey to investigate educated people who are exposed to different forms of digital technology. The participants of the survey were students from 2<sup>nd</sup>, 3<sup>rd</sup>, and 4<sup>th</sup> year of ICT Special Students, Arts and Culture, South Eastern University of Sri Lanka. We were given 25 questions in the questionnaire.

The following chart explains the usage of the digital devices by the ICT Special Students in Arts Faculty, South Eastern University of Sri Lanka.

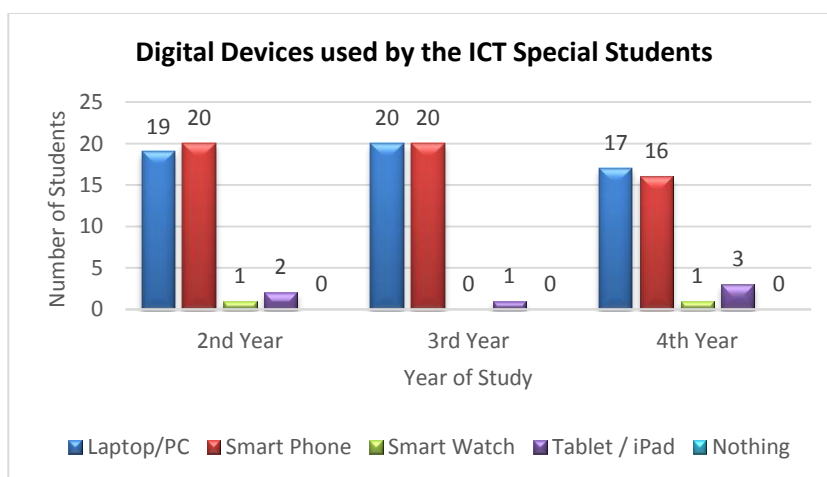


Figure 1 Digital Devices used by the students

## **FINDINGS**

End of the study we found something related to the influence of the digital devices that are

- It is noticed that many of the digital learning applications are available on the online digital platform.
- Most of the students are using Mobile phones and other digital devices for their study purposes.
- Most of the students are eager to learn if they have resources like mobile phones and other devices.
- We should provide enough resources for their knowledge.
- Most of the students will be used as technological devices in the near future.
- Challenges faced by poor students to get digital equipment.

## **RECOMMENDATION**

Research work has donated hugely to the success of digital learning. But there are still some issues, which need to be addressed to take this technology to the next level and make sure that it is used by a majority of the population. Provide better resources to the students are noticeable mater. Some students do not have any digital infrastructure facilities to learn through digital devices.

A better way to improve the students' knowledge is implementing digital infrastructure widely. introduce new and practical based subjects, Implement the Digital Board facilities, providing the WiFi facility for all students are very useful to the student's education. They will start to learn new technologies by using digital devices.

## **CONCLUSION**

The study was conducted to overview the influence of digital devices in academic activities. Without doubt, ubiquitous learning forms a new educational paradigm that stems from new media and technology resources based on the principles of mobility, collaboration, and active participation. This provides alternative learning interactions and access to a great variety of contents and resources. The results from this research in ICT special students set one of the first maps of factors that condition the uses and incidence of digital devices in South Eastern University of Sri Lanka.

The study presented here had three main objectives. First, it aimed to identify the factors that foster innovation with digital devices among ICT special students at South Eastern University, through the development of a scale and the subsequent analysis of its psychometric properties, such as validity and reliability. Secondly, finding the beneficial level of digital learning among students in positively and negatively. The third one, it aimed to compare the different factors that condition digital devices adoption according to SEUSL principles and generic competencies. In relation to the first objective, the results obtained during the construction and validation of the Scale of Factors that Foster Innovation with digital devices among university students was satisfactory. According to the reliability coefficients obtained for both the scale on the whole and each of its dimensions, the instrument was found to be a reliable tool for measuring the factors that influence the promotion of digital devices innovation among university students.

Innovation should be considered a value at university, a characteristic that sets it apart from the rest. In this sense, innovation with digital devices requires the establishment of communications channels and opportunities for thought, reflection, and collaboration, to foster the effective and efficient engagement of the teaching

staff, management board, and students. To this end, it is vital that universities express and reflect this digital device innovation-oriented philosophy in syllabuses. However, an adequate university context alone is not enough to ensure ubiquitous and digital innovation with ICT. From their hypothetical distance, education authorities also play a key role and have much to offer. This second key element interacts with the first one in a number of basic aspects, such as the provision of resources and infrastructures, teacher training, guidance, and counselling. The final key element is the teachers and professors themselves, who are the key figures and direct executors of any educational innovation in their subjects. We conclude that digital devices with high penetration among the age group studied (18-26 years) can enable college students to improve several indicators of generic competencies.

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