Impact of ICT on Higher Education Students Performance: A Case Study of Government First Grade College, Kengeri, Benagluru

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ABSTRACT

Information and connection technology (ICT) nowadays is the part and portion of our diurnal person. Even the students also are expenditure a fate of their tense worn the ICT or internet facilities. This meditation has prospect the brunt of ICT on the achievement of students at the undergraduate level. The inquiry match was taken from an assembly of students' meditation in the undergraduate open at dissimilar training of GFGC, Kengeri. The contemplation found that there is no sign narrative between the habit of ICT and the deed of the students but the ICT application overcame the deed of the students negatively. Finally, the contemplation insinuates that individual footstep should be taken by the scholarly or told institutions to encourage the application of ICT for focus academician discourse so that the students may be liberality much of second-hand ICT.

KEYWORDS: Information and communication technology, ICT addiction, Undergraduate student, Student performance.

INTRODUCTION

During the last two decades, higher teaching institutions have clothe greatly in advice and intelligence technologies (ICT). ICT has had an adult strike in the college close, in brigade and in doctrine and literature methods. One perplexing subject is the energetic brunt of these technologies on lucubrator feat and on the repayment of instruction. Many academician researchers have proof to confirm this investigation in the paper and empiric clear. They have drunk two cardinal difficulties. On one agent, scholar deed is solid to celebrate and there is still confounder concerning its sort. On the other workmanship, ICT is developing technologies and their operation are stubborn to separate from their surroundings. There is no flag delimitation for bookworm deeds.

The flag anear concentrates on feat and curricula, how students hear the road and get their degrees or their marks. However, a more expanded explanation apportionment with competencies, ability and attitudes able through the teaching enjoy. The parsimonious demarcation like the attention of the outcomes of any veer in higher instruction,

while the more wide sort indispensably a more composite tactics of judgment and a converge on the toil sell. The outcomes of instruction are mightily confirmed in the exertion fair.

The relationship between the application of ICT and lucubrator exploitation in higher culture is not obvious, and there are negatory springs in the erudition. The earlier sparing inquiry has failed to stipulate a visible agreement consequence of the sign on students' accomplishments. Starting from this prick, the drift of this papery are two-infold: first, we summarise the leading findings of this large science and inferior, we give two complementary explanations on the negatory termination. Our first explication is that most of the science has centered on plain realization of ICT while it is more suit to expect the oblique outcome through the old-fashioned groove. Since sap deed is principally resolved by a bookman's characteristics, instructive surroundings and teachers' characteristics, ICT may have a slam on these determinants and accordingly the hatch of training. The diversity observed in the performances of students is thus more told to the differentiated blowy of ICT on the flag determinants.

OBJECTIVE OF THE STUDY

The broad objective of the study is to find out the relationship between the use of ICT facilities and the performance of the undergraduate-level students.

The specific Objectives are:

- ✓ To recognize the argument for students' admission to ICT facilities;
- ✓ To search how and how much students waste their age by worn ICT.
- ✓ To find out the relationship between students' customs of ICT on scholarly and no-scholarly views and their production.

LITERATURE REVIEW

The use of ICT and its impact on student performance in higher education is not immaculate and there are mixed results in the literature. Earlier research has failed to provide a clear harmony regarding the effect of ICT on students' success. Firstly, some studies could not show a realistic impact of ICT on students' performance in higher education. The evidence on the effect of computers and internet in schools on students' performance is much more limited. Kirkpatrick and Cuban (1998) found that the effect of computer use on student performance is questionable. Similarly,

Goolsbee and Guryan (2006) report that increased uses of computers and internet connections have had no measurable impact on any measure of student achievement. Additionally, Conrad (1997) found that, although Internet use increases enjoyment, there are no statistically significant gains observed in student academic performance. In the same way, Trucano (2005) identified that ICT impact on schools and concludes that the impact of ICT use on learning outcomes is unclear. Identically Sosin, Blecha, Agawal, Bartlett; and Daniel (2004) conducted a study in the USA in 2002 and they found a significant but small positive impact on student's performance due to ICT use. However, they show that some ICT seems to be positively correlated to performance while the others are not. Moreover, some other researchers show mixed results like Coates and Humphreys (2004); Banerjee, Cole, duflo, and linden (2004); Leuven, Lindahl, Oosterbeek and Webbink (2004); Brown and Liedholm

(2002); Angrist and Lavy (2002); demonstrate that there is no evidence of ICT playing a key role in higher education.

On the contrary, some studies show a factual impact of ICT on students' achievement. Agarwal and Day (2000) find that creative use of the Internet allows the use of small-class interactive techniques in larger classes and has a beneficial impact on student performance. One important assumption by (Polly, 2011: 12-14) "Technology has been shown to positively influence student learning when students explore technology-rich tasks that simultaneously require them to use higher-order thinking skills, such as analyzing or evaluating information or creating new representations of knowledge." A very important study conducted by (Balanskat, Anja, Roger and Kefala, 2006) the result reveals that, ICT impact on competency development, teamwork, independent learning and higher-order thinking skills. Furthermore, 86% of teachers in Europe state that students are more motivated and attentive when ICT facilities are used in class. Not only ICT have a strong motivational effect and positive effects on behavior, communication and process skills, but also students feel greater responsibility for their own learning when they use ICT, working more independently and effectively. So it can be said that ICT helps to improve the quality of learning and educational outcomes. Moreover, Fuchs and Woessman (2004) use of digital technologies in higher education can have significant positive effects both on students' attitudes and achievement.

The similar positive results on impact of ICT on student performance were found in several studies such as Talley (2005); Sosin, et. al (2004); Coates et.al (2004); Li, Boeuf, Basu, and Turner (2003); Kulik (1999); Attwell and Battle (1999). Finally some other surveys like as, (Iqbal, & Ahmed, 2010; Hameed, 2006; Amjad, 2006; Khan, and Shah, 2004) argue that, in order to be successful, a country should improve its education system by implementing effective and robust ICT policies.

From the above studies we understand that there are mixed results regarding the relationship between the use of ICT in higher education and the students' performance. In our study, we try to find the exact relationship between these two variables would provide the real scenario.

The objective of the study is to measure the various impact of ICT on education and the consequences in implementing the ICT based education. For our study purpose students' CGPA is the basis of performance; a higher CGPA indicates higher performance and the lower CGPA indicates lower performance.

In order to achieve the objectives of this study we have used primary sources of information. Primary data have been taken from the respondents through a close-ended questionnaire. The sample size of the study was chosen from the Under Graduate students in the different disciplines of GFGC, Kengeri. The sample size consisted of 300 students (those who have completed at least 3 semesters with their results published) and a questionnaire was provided to them in order to fill it in. The questionnaire was divided into two main areas. The first part of the questionnaire sought demographic characteristics, living conditions, and academic status of the respondents in the sample. The second part of the questionnaire focused ICT facilities available for students and the purpose of internet use. This part attempted to examine whether the respondents have computer and Internet access, whether they use these for their academic purposes or other purposes like watching movies, social networking, listening to music or browsing only for entertainment. In terms of data analysis, correlation analysis was used, applying SPSS, to identify the

impact of ICT on the CGPA (performance) of the students. The correlation was calculated between these variables 'CGPA' and 'access to ICT'.

ANALYSIS AND FINDINGS

Performance comparison of the respondents

Table I: Scale for the variables shown in the table 3

Variable Scale	Scale
Browsing nonacademic sites	*1=Most of the time* *2=Sometimes* *3=Rarely* *4=Never*
Social media accounts with	*1=Facebook* *2=Twitter,* *3=Both Facebook and twitter,* *4=Google plus 5=Others*
Frequency of use of social media	*1=More than once in a day* *2=Once in a day* *3=At least once in week* *4=At least once in a month*
Hours spent on social media per week	*1=Less than 10 hours* *2= 10 – 20 hours* *3=20 – 30 hours* *4=More than 30 hours*
Primary use of social media	*1=Keep in touch with friends, family and peers* *2=Keep in touch with academic friends for academic purpose* *3=Others*

Table 1 (appendix-I) shows the performance (CGPA) of the respondents and comparison of performances on the basis of the percentage of the total scale of results. It is noticed that the performances of the students are gradually decreasing (from 81% to 76% to 73.25%).

Table II: The scales of the variables shown in the table 4

Variables	**Scales**
Browsing recreational sites	*1=Most of the time* *2=Sometimes* *3=Rarely* *4=Never*

Browsing internet for watching movies and other recreational clips	*1=Most of the time* *2=Sometimes* *3=Rarely* *4=Never*
Downloading movies and dramas from internet	*1=Yes* *2=Not yet* *3=Never*
Respondents can't even keep themselves away from using internet during exam. (because of habit)	*1=Yes* *2=I don't do this during my exam*

Academic Use of ICT Table 2 (appendix-I) shows the descriptive statistics of the variables regarding the academic use of ICT. The scale for the first variable (Hours spent on web browsing per week) is 1=Less than 10 hours, 2= 10 – 20 hours, 3= 20 – 30 hours and 4=More than 30 hours. The scale for the rest of the variables is the same, that is 1=Most of the time, 2=Sometimes, 3=Rarely and 4=Never. The descriptive results of the above table (table 2, given in appendix-I) show that most of the respondents use more than 15.6 hours of internet and other ICT facilities per week which means about 2 hours per day (since the mean value is 1.56) but they rarely use these to download books (mean value 2.42) or to browse some information which will be helpful for their exam preparation (mean value 2.35). Sometimes the respondents use the internet to prepare their lecture sheets or to prepare their presentation slides (the mean value of the second variable: Browsing the internet to prepare the lecture sheet and the third variable: Browsing the internet for presentation slides and other information are 1.90 and 1.65 respectively). That means the time they spent on web browsing per week major of them they spent for non-academic or social media or recreational purposes. However, the results of the tables will make it clear.

Non-academic and Social use of ICT Table 3 (appendix-I) shows the descriptive statistics of the variables regarding Non-academic and Social use of ICT. The scales for the variables shown in the table 3 are given in the following table:

In the results, (table 3, appendix-I) it is noticed that that most of the respondents use about 15.1 hours of internet and other ICT facilities per week (mean value 1.51) on different social media accounts (basically Facebook sometimes tweeter: mean value 1.49). So from the table 2 and 3, it is found that the respondent's total hours for web browsing is more than 15.6 per week while they spend time on social and other non-academic purposes is about 15.1 hours per week. That means the half an hour spent per week is for academic purpose only. This finding supports the result of the table 1(appendix-I) that is the time they spend on web browsing per week major of which they spent for non-academic or social media or recreational purposes. So the respondents spend very much little time in web browsing and the internet for their academic purpose (about 1 hour) per week.

ICT Addiction Table 4 (appendix-I) shows the descriptive statistics of the variables regarding ICT Addiction. The scales of the variables are given in the following table:
The table (table 4) shows the mean value of the variable (Regular use of the internet as a habit) is 1.66. That means the regular use of the internet is becoming a habit of some respondents. For this, some of them cannot keep

themselves away from using the internet during the time of exams. (mean value 1.7). So these two causes may lead to the low performance of the respondents using ICT. The following correlation tables will give a concrete decision regarding this hypothesis.

Correlations between non-academic & social use of ICT and Students performance The above table (table 5, given in the appendix-I) shows the correlation statistics between the variables of academic and social use of ICT and Browsing non-academic sites and hours spent on social media per week and students performance. And it is found that there is no significant positive or negative correlation between the performance of the students and the variables (.049 and .082 respectively). So this result says that though the respondents use majority of their time spent for social or non-academic media browsing it has not so much effect on their performance (CGPA).

This survey found that some of the students are much more addicted to the regular browsing of internet even the time exam they cannot keep themselves away from it. The following table says whether this tendency of the students affect their performance or not.

Correlations between the variables of ICT addiction and Students' performance The above table (table 6, given in the appendix-I) shows the correlation statistics between the ICT addictions and regular use of the internet as habit & respondents using Internet during the exam (because of habit) and students performance. And it is found that there is no significant positive or negative correlation between the performance of the students and using the internet during the time of exam (because of the regular internet using habit), but there is a negative correlation between the regular use of the internet as a habit and the students' performance. That means whether they use the internet is not so crucial, but the most influential factor is whether they use it as a habit or not. So it can be decided that the habit-based regular use of the internet or ICT (the researchers named it ICT addiction) affect the performance of the students negatively. This is the major cause of low performance of the students using ICT.

RECOMMENDATIONS

➢ It has been found through this muse that students, who do manner ICT, a necessity it mostly for nonacademic views. In mandate to ensure that the ICT facilities made are accessed to heighten scholarly action.

➢ There should be enough logical second within the Platonist institutions in usage to tolerate all students having methodical outbursts to ICT facilities but extremely tense oversight. Some students are avoiding the use of ICT.

➢ Such invention should be reversed with initiatives taken by the instructive institutions themselves if we are to enjoy the endowments of technological improvement.

➢ Educational institution's extremity to take an energetic get-up-and-go to induce the students to ICT by foreground ways through which it can be of immense prevent in exaggerating their Platonist achievement. This would force the necessity of ICT much more relative to academician labor..

➢ Parents tend to be very betroth that the fruit of one's loins should not be too much hide of second-hand ICT for leisure intend. Because ICT inclination could be the purpose of light achievement as well as physiologic imbalance.

CONCLUSION

In this dispensation where technology is playing a serious party in our help activities inclose the scholarly circus, so it is the noble tempo we tax the strike of ICT in our quotidian darling and betroth its actual utility as much as possibility. In this firm, this contemplation communicate a performance that the consuetudinary usage of ICT which is high ICT devotion assumes a negative on the deeds of the students. If appropriate walks are taken by the academician or told institutions to prefer the custom of ICT alone scholarly instance excitement into compensation the findings and recommendations of this meditation, the students would be ameliorate liberality second-hand ICT.

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