

# Internet Use and Academic Performance of the Students

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**Abstract:** This paper examines the impact of internet use on student performance. In this cross-sectional study, one hundred twenty survey responses were collected from plus two-level students from Birendranagar Surkhet. The respondents were selected from class 11 and 12 students randomly. Frequency of internet use, location of internet use, cooperation from teachers for internet learning and peer group influence on internet use for academic purpose has been analyzed with their academic performance. One sample t test was used to analyze the data. The finding concludes all these variables have positive impact if the student use internet for learning process. Similarly, the analysis shows that the student who used internet at home for learning purpose has found highest academic achievement.

**Key words:** *Frequency, Location, Peer group and Cooperation*

## I. Introduction

The use of technology has changed the world into digitalized form drastically in 21<sup>st</sup> century (Stanciua & Tinca, 2014). In the same way technology has gained more attention in education sector also. Because of its prevalence, low cost, easily participation of student, more effective way of learning and enjoy internet has become effective tool for the student performance. The most advanced and popular technology is internet. Internet is playing great role in today's changing education by providing innumerable resources and services (Sahin, Balta, & Ercan, 2010). Internet is one of the beneficial tools in this era of IT world not only for business but for academic point of view that enhances the skills and capabilities of student which assist them in studies and in professional life (Emeka & Nyeche, 2016).

The use of internet has made innumerable support in the education. Students are using internet for various educational purposes. Internet is useful for social networking, entertainment, communication, shopping and many other purposes. Similarly, students are also using social networking sites, messengers, email, you tube, search engines to complete their notes, for reading, to contact their teachers and classmates, and for getting information about their subjects. Internet provides free, easy, and immediate access to infinite resources.

Considering the impact on social and individual scale, the internet offers a huge potential study field from various perspectives: technology, applications, individuals and their behavior, society as a whole and, not finally, ethical and legal aspects (Stanciua & Tinca, 2014). A study focused their research on the internet application and their impact on the users' personality, emphasizing that applications like online search, e-entertainment, online social networking and games have changed individual behavior and the ways individuals interact with others (Tang & Yang, 2014).

Academic performance among the students generally equates to the effort expended and is related to intellectual and environmental factors (Torres, Duarte, Gomez, Gutierrez, & Faggioni, 2016). Academic performance is multidimensional and shaped by numerous variables that are difficult to systematize within a specific model. Such variable may be personal, social and academic and political (Stanciua & Tinca, 2014).

## II. Review of Literature

The use of internet has made innumerable positive changes in the education industry. Students are using internet for various educational purposes. It provides free, easy, and immediate access to infinite resources. The features of internet such as affordability, usefulness, enjoyment and accessibility are motivating students to use internet in their

daily life (Torres, Duarte, Gomez, Gutierrez, & Faggioni, 2016). The effective use of internet may be influence many variables such as frequency used, location of internet, purpose of internet use etc.

The research shows the result on both pros and cons regarding the time span on internet by the student. The research on time spent for the internet during weekdays and weekend and found that 71.6% who used the internet for < 6 hours while 28.4% respondents spent at least ≥ 6 hours for the internet on weekdays. However, during weekends, the number of internet users for > 6 hours were increased. There were 45.5% users for < 6 hours compared to 54.5% for ≥ 6 hours (Siraj, Salam, & Tan, 2015). Similarly, in another study on use of internet frequency of student shows 5% answered that every day, they stay on-line instead of doing other activities, while 36% answered that it happens weekly and 15% monthly. Taking note of the average daily time of 3.72 on-line hours leads the study to make conclusion that a large percentage of the student's over-use the web, mainly for leisure activities (Stanciu & Tinca, 2014).

The location of internet is also a strong predictor for excessive use of internet. The internet can be accessed cybercafé, hotel, park, university, home and so on. The place and environment have great impact on student learning through internet. The study carried out on preference of internet location revealed that majority of participants 54% preferred location of the internet was their personal home. This is followed by 10% whose location was the school library. Also 21% location was the cybercafé and 15% gave different locations as their preferred place of internet use (Emeka & Nyeche, 2016).

Various types of internet use has been associated with positive and negative effects, although, the conclusions drawn from this study is that the use of the internet is one of the main factors which affects academic performance and social life of students (Puspita & Rohedi, 2016). On-line teaching tools are more beneficial for distance learners (Stanciu & Tinca, 2014). The research in this regard shows 45% of the respondents use the internet to obtain course related information, 22% use the internet for communication (E-mail), 8% use the internet for playing games and music, 15% use the internet for eBooks and journal downloading and 10% use the internet to obtain non-course related information (Emeka & Nyeche, 2016). Likewise, another study shows that internet used to obtain course related information by 84.1% respondents while 76.1% stated for entertainment purpose and 71.6% opined as to complete assignment (Siraj, Salam, & Tan, 2015).

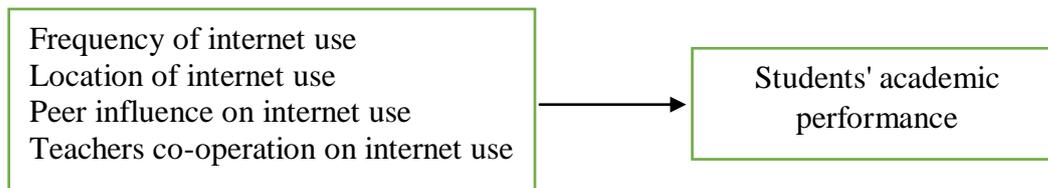
The influential power of peers is not only rooted in their mere presence through imitation of their behavior, but also comes from more structural aspects such as the social norms they provide or the social position they occupy. Social norms are defined as implicit rules for appropriate values, beliefs, attitudes and behavior. Different types of peers-friends, classmates seem to be important in explaining adolescents' attitudes and behavior, although their relevance seems to vary according to characteristics of the considered behavior. In this study peer influence found more on female than male student. In addition to this the research found that peer have a positive influence on use of internet and its effect on academic performance (Festl & Quandt, 2013).

One of the biggest targets of today's education system which aims at development and change to teach students how to reach information by way of research, instead of giving it to them directly. They are encouraged to do work on all aspects, they foster approaches to their lessons in a positive way, and they are active in the purpose of improving their skills and knowledge. The study on teachers support to student on learning environment through use of internet shows that most of the students think this method is effective for teaching, makes students enjoy, supplies cooperation between friends, keeps student active during the period, and removes the memorization element (Bayraktar, 2011).

Academic performance is important aspect of student's life and leads to successful future. It helps to determine the understanding of any subject matter. In this regard the research shows 30% of the respondent indicated that the internet makes academic activities much easier and 61% indicated that the internet improved their academic performance. This indicates majority of the respondents agreed that, the internet is an important factor for improving academic performance (Jibrin, Musa, & Shittu, 2017). Similarly, another study on the influence of internet on student performance, reveals that 58.3% of the respondents use the internet to aid research, 13% accepted that the internet provide access to current information sources, 21% reported that internet helps to prepare for examinations, tests and also assignment, and 7% reported that the internet aid communication between lecturers and students (Jibrin, Musa, & Shittu, 2017).

### **III. Conceptual framework**

The study has been designed to analyze the impact of internet use and its impact on student performance. Therefore, in this study the frequency of internet use, location of internet use, and different purpose of internet use and their contribution on student academic performance has been studied.



**Figure 1: Conceptual framework of the study**

### **IV. Objectives of the study**

The core objective of this study is to analyze the impact of different variable related to internet use and their contribution on achieving the student performance. The sub objectives of the study are as follows.

1. To analyze the impact of frequency of internet use on academic performance of student;
2. To analyze the impact of location of internet use on academic performance of student;
3. To analyze the impact of peer influence of internet use with regard on academic performance of student and
4. To analyze the impact of teacher cooperation of internet use on academic performance of student

### **V. Research hypothesis**

Ha1: There is significant impact of frequency of internet use on academic performance of student;

Ha2: There is significant impact of location of internet use on academic performance of student;

Ha3: There is significant impact of peer influence of internet use with regard on academic performance of student and

Ha4: There is significant impact of teacher cooperation of internet use on academic performance of student

### **VI. Research Methodology**

This study was based on primary as well as secondary data. The study has applied quantitative research method therefore this study is embedded on post positivism philosophy. The population of this study were the student reading in class 11 and 12 in the school. Using purposive sampling method, two schools were selected for the study. The researcher visited the school personally and distributed questionnaires to the student and immediately request to fill up the questionnaire in the classroom and returned. In this study, 120 students were involved randomly. Likert scale with five point 1 as very low and 5 very high was used. One sample t test was used to measure the relationship between internet use and student performance.

### **VII. Analysis and discussion**

This study focusses on the internet use and its impact on student performance of higher-level student. For the study the frequency of internet use, peers influence, cooperation of teachers and location of internet use has been selected. To analyze the data the percentage and one sample t test has been used. The result of the analysis has been given below.

**Table 1: Frequency of internet use and student performance**

Variable	Frequency	Valid Percent	Cumulative Percent
Strongly agree	34	28.3	28.3
Agree	59	49.2	77.5
Uncertain	16	13.3	90.8
Disagree	9	7.5	98.3
Strongly disagree	2	1.7	100.0
<b>Total</b>	<b>120</b>	<b>100.0</b>	

Source: Survey data 2019

The result presented in Table 1 shows that 28.3% were strongly agree, 49.2% were agree and 13.3 % were found uncertain on the use of internet frequency and student performance. The result shows that if the student spent time on internet for their studies and other purpose it would help to increase the student performance.

**Table 2: One sample t test of frequency of internet use and student performance**

Variable	Test Value = 3			
	t	df	Sig. (2-tailed)	Mean Difference
Frequency of internet use and student's performance	-11.148	119	.000	-.950

Source: Survey data 2019

Table 2 presents the test statistics t-value of two tail test, at 95% confidence level. The hypothesized test value was taken 3 (population mean). The significance value of two tail test is less than 0.05 in this case. Thus, the null hypothesis is rejected at 5% level of significant and support to alternative hypothesis. Therefore, the conclusion is made that the use of internet frequency has positive impact on student performance.

**Table 3: Location of internet use and student performance**

Variable	Frequency	Valid Percent	Cumulative Percent
Strongly agree	21	17.5	17.5
Agree	62	51.7	69.2
Uncertain	22	18.3	87.5
Disagree	12	10.0	97.5
Strongly disagree	3	2.5	100.0
<b>Total</b>	<b>120</b>	<b>100.0</b>	

Source: Survey data 2019

The result presented in Table 3 shows that 17.5 % were strongly agree, 51.7 % were agree and 18.3 % were found uncertain on the use of internet location and student performance. The result shows that if the student get the chance to use internet in proper place it would help to increase the student performance. The respondent replied most preferable place is home for internet use then university, café, library and park respectively.

**Table 4: One sample t test of location of internet use and student performance**

Variable	Test Value = 3			
	t	df	Sig. (2-tailed)	Mean Difference
Location of internet use and student performance	-8.227	119	.000	-.7167

Source: Survey data 2019

The result presented in Table 4 shows the test statistics t-value of two tail test, at 95% confidence level. The hypothesized test value was taken 3 (population mean). The significance value of two tail test is less than 0.05 in this case. Thus, the null hypothesis is rejected at 5% level of significant and support to alternative hypothesis. Therefore, the conclusion is made that if the student use internet at their preferable place it helps to increase student performance.

**Table 5: Peer influence on internet use and student performance**

Variable	Frequency	Valid Percent	Cumulative Percent
Strongly agree	33	27.5	27.5
Agree	53	44.2	71.7
Uncertain	16	13.3	85.0
Disagree	18	15.0	100.0
Strongly disagree	0	0.0	100.0
<b>Total</b>	<b>120</b>	<b>100.0</b>	

Source: Survey data 2019

The result presented in Table 5 shows that 27.5 % were strongly agree, 44.2 % were agree and 13.3 % were found uncertain on peer's influence to use internet and its impact on student performance. The study shows most influential peer were friends from their college and home town.

**Table 6: One sample t test of peer influence on internet use and student performance**

Variable	Test Value = 3			
	t	df	Sig. (2-tailed)	Mean Difference
Peer influence on internet use and student performance	-9.259	119	.000	-.84167

Source: Survey data 2019

The result presented in Table 6 shows the test statistics t-value of two tail test, at 95% confidence level. The hypothesized test value was taken 3 (population mean). The significance value of two tail test is less than 0.05 in this case. Thus, the null hypothesis is rejected at 5% level of significant and support to alternative hypothesis. Therefore, the conclusion is made that the peers who have positive attitude and support to use the internet for different purpose have positive impact on student performance.

**Table 7: Cooperation of teachers on internet use and student performance**

Variable	Frequency	Valid Percent	Cumulative Percent
Strongly agree	37	30.8	30.8
Agree	50	41.7	72.5
Uncertain	9	7.5	80.0
disagree	19	15.8	95.8
Strongly disagree	5	4.2	100.0
<b>Total</b>	<b>120</b>	<b>100.0</b>	

Source: Survey data 2019

The result presented in Table 7 shows that 30.8 % were strongly agree, 41.7 % were agree and 7.5 % were found uncertain on cooperation of teacher on use of internet and its impact on student performance. The study shows that the teacher who provides the student self-learning environment and self-study through internet those students have secured high performance in the college.

**Table 8: One sample t test of cooperation of teachers on internet use and student performance**

Variable	Test Value = 3			
	t	df	Sig. (2-tailed)	Mean Difference
Cooperation of teachers on internet use and student performance	-7.438	119	.000	-.792

Source: Survey data 2019

The result presented in Table 8 shows the test statistics t-value of two tail test, at 95% confidence level. The hypothesized test value was taken 3 (population mean). The significance value of two tail test is less than 0.05 in this case. Thus, the null hypothesis is rejected at 5% level of significant and support to alternative hypothesis. Therefore, the study shows that the teacher who provides the student self-learning environment and self-study through internet their academic performance has found significant high than others.

### VIII. Recommendation

The analysis shows that the person who have the facility of internet at home compared to university, café, cybercafe, park and library provided the more learning opportunity for the student. Therefore, it is to be recommended to the parents for the effective learning process through internet provide the internet facility at home.

Similarly, the teacher who provided the learning opportunity and self-learning environment through internet, such students' performance has found more than others. Therefore, it is recommended to the education institutions to provide such opportunity to the student for all round development.

### IX. Further research direction

Future research is required to determine if the perception about the use of internet and its impact remains same in various geographic regions of the country as well as other countries. Future research will also focus on studying the influence of internet use on the behavior of the student.

### X. Conclusion

The aim of this study was to analyze the impact of internet use of plus two level of student on academic performance. For this purpose, different variable such as frequency of internet use, location of internet use, cooperation and peer influence has been analyzed with student academic performance. The result shows that the student who use

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internet for the academic purpose, they have better performance those who have no internet excess. Therefore, the school should provide internet facility to the student for their better achievements.

### References

- 1) Bayraktar, G. (2011). The effect of cooperative learning on students' approach to general gymnastics course and academic achievements. *Educational Research and Reviews*, 67-71.
- 2) Emeka, U. J., & Nyeche, O. S. (2016). Impact of internet usage on the academic performance of undergraduates students: A case study of the university of Abuja, Nigeria. *International Journal of Scientific & Engineering Research*, 1018-1029.
- 3) Festl, R., & Quandt, T. (2013). Peer influence, internet use and cyberbullying: A comparison of different context effects among German adolescents. *Journal of Children and Media*, 447-462.
- 4) Jibrin, M. A., Musa, M. N., & Shittu, T. (2017). Effects of internet on the academic performance of tertiary institutions' students in Niger State , Nigeria. *International Journal of Education, Learning and Training*, 2(2), 57-69.
- 5) Ogedebe, P. M. (2012). *Internet usage and students' academic performance in Nigeria tertiary Institution: A case study of University of Maiduguri*. University of Maiduguri.
- 6) Puspita, R. H., & Rohedi, D. (2016). *The impact of internet use for students*. Bandung: Universitas Pendidikan Indonesia.
- 7) Sahin, Y. G., Balta, S., & Ercan, T. (2010). The use of internet resourcesby university students during their courses projects education: A case study . *Journal of Educational Technology*, 234-244.
- 8) Siraj, H. H., Salam, A., & Tan, H. J. (2015). Internet usage and academic performance: A study in a Malaysian public university. *International Medical Journal*, 22(2), 83-86.
- 9) Stanciu, V., & Tinca, A. (2014). A critical look on the student's Internet use - an empirical study. *Accounting and Management Information Systems*, 13(4), 739-754.
- 10) Tang, W. K., & Yang, C. Y. (2014). Internet applications use and personality . *Telematics and Informatics*, 27-38.
- 11) Torres, J. C., Duarte, J. M., Gomez, H. F., Gutierrez, I. M., & Faggioni, V. S. (2016). Internet use and academic success in university students. *Media Education Research Journal*, 61-70.