

Perception towards Online Education among the Secondary Level Students during COVID-19 Pandemic

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Abstract

Introduction: Online education is a type of educational instruction that is delivered through internet to students using their home computers. Since 2019 the effect of information technology on human life is immense and its role in education too cannot be subsided. The spread of COVID-19 led the closure of all educational institutions and has initiated online learning. We all are in the battlefield of COVID-19 Pandemic and our schools have been closed, despite of this crisis situation, we are trying to continue our academic journey and are involved in online education. This study aims to find out the perception of students towards online education.

Methods: Descriptive study design was adopted. St. Xaviers Godavari School was the study site and students studying in grade eight, nine and ten were the study population. Purposive total enumerative sampling technique was used. Data were collected through online by using structured questionnaire. Data were collected, entered and analyzed using SPSS version 16. Descriptive statistics was used to analyse the data.

Results: The study shows that the response rate was 57.08%, among them 59.30% had personal mobile, only 3.40% use desktop to attend the class and 7.6% use data pack for internet access. More than half (58.62%) encountered internet problem during online classes. Only 34.50% were enjoying virtual class where as 80.7% preferred physical class. Regarding perception 71.7% showed positive perception and 28.3% showed negative perception regarding online education among the secondary level students. Perception was scored in terms of the score of the respondents. The score more than or equal to 50% was considered as positive perception and less than 50% was taken as negative perception.

Conclusion: Most of the students have positive perception towards online education but very few are enjoying and almost all of them preferred physical classes for better learning.

Key Words: online education, perception, secondary level students.

Introduction: Education is the process of facilitating learning or the acquisition of knowledge, skills, values, beliefs and habits. Educational methods include storytelling, group discussion, project work, training etc. Training activities often takes place under the guidance of educators but students can also educate themselves. Education can take place in formal or informal context and any experience that has educational efficacy in the way one thinks, feels or acts can be considered education (Pasha & Gorya, 2019).

Online education is a type of educational instruction that is delivered through internet to students using their home computers. Since 2019 the effect of information technology on human life is immense and its role in education too cannot be subsided. In the current scenario of COVID-19 pandemic, the contribution of information technology has gained momentum due to closure of

educational institutions that raises challenges for students learning. During this period information technology is serving the solution for ongoing learning process through innovative and learning management systems. It has provided opportunity for educators to implement information technology and solutions for teaching as well as evaluation for the completion of academic course of the students. The efforts of stakeholders namely teachers, students and institutional administrators are on for the optimal use of the technology and efficient learning process. The ultimate goal is to minimize the learning gap that arouse due to lockdown. Educational institution and students across the world have accepted and appreciated the online platform of learning. The reasons of this acceptability are ease of using, learning flexibility and controllable environment. However despite its multiple advantages there are quite a few limitations of e- learning. Learning is basically a social activity and these person to person interactions are very important component of their education. Online education in Nepal has seen a rapid progress in recent times making it most discussed subject in the education domain. Students have now access to the best courses from all around the globe to be skilled in these domains. The spread of COVID-19 has led the closure of all educational institutions and has initiated online learning. We all are in the battlefield of COVID-19 Pandemic and our schools have been closed, despite of this crisis situation we are trying to continue our academic journey and are involved in online education.

An online class is a system where students can learn subjects, discuss issues with fellow students, clarify doubts with instructor and share material and check academic progress with help from internet-oriented technologies. A study conducted to analyse the perception of students and teacher about online classes found that the students are comfortable with online classes and are getting enough support from teachers but they donot believe that online classes will replace traditional physical classroom teaching (Babu & Reddy, 2015).

Today, online classes are becoming so popular that they are likely to be expected in any formal education curriculum. Moreover, increase in the COVID- 19 pandemic worldwide has also added to the importance of online classes. Some students who do not have reliable internet access or no proper access to technology struggle to participate in online education; this gap is seen across in our country. Almost 95% of students in Switzerland, Norway and Austria have a computer to use for their school work only 34% in Indonesia (Farooqui, Shah & Saboowala, 2021). In Nepal, people take internet service either from internet service providers or buy internet package from ntc/ncell. There are over 1 million internet users and they use internate through wireless, cable and fiber (Kharel, 2018). Perception regarding online education of students in our context is very little known, therefore this study aimed to identify the perception regarding online education of the students.

Methods

Descriptive cross sectional study design was adopted. The study site was selected purposively. St. Xaviers Godavari School was the study site and students studying in grade eight, nine and ten were the study population. There were altogether 285 students, 97 in grade eight, 90 in grade nine and 98 in grade ten in each standard. All students were included in the study. Due to the lockdown announced by the government, all students were studying from home through online. Permission was taken from the principal and the coordinators of each standard was contacted and explained about the study. The link was provided by the class teacher to all the students and the purpose and objective of the study was explained through online to the students. Self administered online questionnaire was used to collect the information regarding perception of online education among the students. Each student was requested to open the link and fill the form after getting permission from their parents. Written assent was taken online along with the consent of the parents. The students were also requested to

submit the form after filling it. Students those who gave assent and had online access were included in the study. The instrument consisted of three parts; part I included demographic information, part II consisted information regarding students engagement in online learning and part III consisted statements related to perception towards online instruction.

Questionnaires were prepared by using kobotool app and were distributed through online link. Participants were informed that all opinion provided by them will be kept confidential and the findings will be used only for the study purpose, anonymity was maintained and the participants were not forced to take part in the study and were given liberty to withdraw from the study if they were willing to. Data were collected online and were entered into SPSS version 16 and were analysed using descriptive statistics. The first part of the questionnaire contained Demographic information which was presented in tables. Perception regarding online education was measured through likert scale questionnaire. The second part contained statements related to the students engagement specific in online education and each statement was given marking in likert scale ranging from 0 for response not at all and 3 for always. Third part of questionnaire also included statements related to instructional specific; each statement in likert scale was given score of 1 for not at all response and 5 for extremely well. The level of perception was calculated on the basis of obtained score. Score above and equal to 50% was considered as positive perception and score below 50% score was considered as negative perception.

Results

Table 1 Demographic Information of the Respondents

n= 145

Characteristics	Frequency	%
Age		
13-15	130	89.7
16-18	15	10.3
Grade		
Grade 8	25	17.2
Grade 9	78	53.8
Grade 10	42	29
Gender		
Male	70	48.3
Female	75	51.7
Ethnicity		
Bhramin	36	24.8
Chhetri	53	36.6
Janajati	54	37.2
Madhesi	2	2.8
Residence		
Kathmandu	6	4.1
Lalitpur	137	94.2
Bhaktapur	2	1.4
Religion		
Hindu	135	93.1
Christian	3	2.1
Buddhist	5	3.4
Muslim	2	1.4
Type of family		
Joint	49	33.8
Nuclear	96	66.2
Education of mother		
Masters and above	19	13.1
Bachelor level	40	27.59
Higher secondary	47	32.41
Secondary level	28	19.31
Primary level	8	5.52
Illiterate	3	2.07
Occupation of mother		
Housemaker	81	55.86
Service	36	24.83
Business	13	8.97
Agriculture	14	9.66
Daily wages	1	0.69

Table 1 shows that among the respondents most of (89.7%) them belongs to the age group 13-15 and more than half (51.7%) were female. The highest number of respondent were from grade nine i.e.(53.8%). Regarding ethnicity among them the maximum number belongs to janajati. Almost all (94.2%) live in Lalitpur. Regarding religion almost all (93.1%) were Hindu. More than half (66.2%)

live in nuclear family. Regarding education of mother, less than half (32.41%) have education level of higher secondary level and more than half (55.86%) were house maker as occupation.

Table 2 Accessibility of Online Services of the Respondents

n=145

Variable	Frequency	%
Having personal mobile		
Yes	59	40.7
No	86	59.3
Attend online class through		
Desktop computers	5	3.4
Laptops	61	42.1
Mobile	73	50.3
I pad	6	4.1
Having online access through		
Internate Wifi	134	92.4
Data pack	11	7.6
Problem during online class*		
Electricity	105	72.41
Internet	85	58.62
Audio	28	18.31
Video	24	16.55
Others¥	12	8.28
Duration of online use		
4-6 hours	107	73.8
7-10hours	36	24.8
>10hours	2	1.4
Do you have parental supervision		
Yes	38	26.2
No	24	16.6
Sometimes	83	57.2
Which app you use most		
Facebook	11	7.6
Messenger	11	7.6
Google	19	13.1
Youtube	78	53.8
Instagram	11	7.6
Pubg	8	5.5
Others≠	7	4.8
Students want to learn through		
Classroom/offline	117	80.7
Online/virtual	8	5.5
Don't know	20	13.8
Are you enjoying online class	50	34.5
Yes	35	24.1
No	60	41.4
Don't know		

* multiple response

¥ others: Financial, Noise from students, Feeling laziness

≠ others: Tik tok, Anime sites, Discord

Table 2 shows that more than half (59.3%) of the respondents have their personal mobile and half of them (50.3%) use mobile to attend online classes, only 3.4% use desktop as device to attend online classes. Almost all of the respondents have internet access through WIFI and only 7.6% use data pack to attend the online classes. Among the respondent 58.62% experienced internet problem. More than half (69%) had heard about online classes previously. Most of them (73.8%) stay online for at least 4-6 hours, very few only 1.4% stay online for more than 10 hours a day. Regarding parental supervision during online class only 26.2% have parents with them during online classes. Besides attending online classes the most commonly used app to stay online by the students is the You tube channel followed by Google and the least one includes the Tiktok, Anima sites, and Discord web pages. Regarding the mode of instruction the preferred way of learning is physical classes, 80.7% of the students preferred physical classes over virtual classes. Very few only 34.5% of the students were enjoying the virtual classes.

Table 3: Instruction Specific Perception Regarding Online Classes

n=145

Statements	Not at all (1)	Not so well (2)	Somewh at well (3)	Very well (4)	Extremely well (5)	Mean	SD
Instructor prepared.	1(0.7)	6(4.1)	27(18.6)	74(51.0)	37(25.5)	2.97	.820
Used time effectively.	2(1.4)	9(6.2)	36(24.8)	59(40.7)	39(26.9)	2.86	.935
Organized sessions.	2(1.4)	6(4.1)	24(16.6)	67(46.2)	46(31.7)	3.03	.881
Communicated clearly.	2(1.4)	17(11.7)	38(26.2)	58(40.0)	30(20.7)	2.67	.979
Encourages students.	2(1.4)	5(3.4)	29(20.0)	46(31.7)	63(43.4)	3.12	.942
Presented course clearly.	9(6.2)	14(9.7)	18(12.4)	51(35.2)	53(36.6)	2.86	1.194
Enthusiastic & intrested.	4(2.8)	6(4.1)	35(24.1)	59(40.7)	41(28.3)	2.88	.964
Student stimulated.	9(2.6)	8(5.5)	49(33.8)	47(32.4)	32(22.1)	2.59	1.084
Syllables followed.	4(2.8)	8(5.5)	18(12.4)	62(42.8)	53(36.6)	3.05	0.981
Assignments reflective.	9(6.2)	14(9.7)	18(12.4)	51(35.2)	53(36.6)	2.86	1.194

Table 3 showed the perception regarding online classes among the respondents on various aspects of instruction, the responses ranged from not at all with a score of 1 to extremely well with a score of 5 as per based on the responses. It showed that maximum 51% of the respondent said that the insturctor came well prepared in the class and only 1% stated that the instructor came unprepared in the class.

Table 4: Personal Engagement Perception Regarding Online Learning **n=145**

Statements	Not at all	Sometimes	Most of	Always	mean	SD
	(0)	(1)	time (2)	(3)		
Attend classes regularly.	1(0.7)	54(37.2)	7(4.8)	83(57.2)	2.51	.625
Consistently prepared.	4(2.8)	59(40.7)	31(21.4)	51(35.2)	2.08	.821
Time duration adequate.	5(3.4)	73(50.3)	33(22.8)	34(23.4)	1.94	.775
Well prepared in class.	5(3.4)	64(44.1)	47(32.4)	29(20.0)	1.81	.793
Increased interest.	26(17.9)	43(29.7)	52(35.9)	24(16.6)	1.45	.971
Assignment knowledgeable.	8(5.5)	58(40)	27(18.6)	52(35.9)	2.06	.876
Fairly assessed learning.	8(5.5)	59(40.7)	43(29.7)	35(24.1)	1.83	.858
Develop intellectually.	18(12.4)	57(39.3)	34(23.4)	36(24.8)	1.77	.965
Indepth knowledge.	15(10.3)	61(42.1)	34(23.4)	35(24.1)	1.80	.925
Highly recommend.	21(14.5)	47(32.4)	42(29)	35(24.1)	1.66	1.002

Table 4 showed perception towards self engagement during online learning. The score ranged from not at all 0 to always 3. The highest 57.2% respondents attended class regularly and the least only 0.7% did not attend the class at all among the respondent.

Table 5 Perception Regarding Online Education among Respondents
n=145

Variables	Score		Mean score	SD
	Min.	Max.		
Engagement specific	0	30	18.9	6.18
Instructional specific	10	50	28.7	7.5

Table 5 showed the overall score of the respondents. The respondents obtained 18.9 mean score with SD 6.18 in engagement specific statements and scored 28.7 mean score with SD 7.5 in instructional specific statements.

Table 6 Perception level regarding Online Education among Respondents **n=145**

Level of perception	Number	Percentage
Positive perception (>=50% score)	104	71.7
Negative perception(<50%score)	41	28.3

Table 6 showed the level of perception regarding online education among the respondents, most of them (71.7%) showed positive perception and very few 28.3% showed negative perception regarding online education. The score obtained above or equal to 50% was considered as positive perception and score less than 50% was considered as negative perception

Discussion

In the present study the response rate was found to be 57.08% and only 34.5% were enjoying virtual classes and 28.3% showed negative perception toward online education and 58.62% experienced

internet problem in my study where as similar study done showed online response rate was 5% only, 42% enjoyed the independence and 29% liked the choice of reading, however 25% had negative attitude towards online learning and technical issues are major problems for the effectiveness of the online education.³Most of the students have agreed that using e-learning at school/college improves learning, the attitudes towards use of e-learning materials in health and population education at higher secondary school/ college in Kathmandu valley is significantly positive. Only a negligible number of students have negative perceptions, misconceptions, misunderstanding and illusions towards e-learning (G.C., 2018). A quantitative study conducted by Yang found positive attitudes of students towards online learning because of feasibility and new ways of learning (Yang & Yu, 2006). Personal contact with the teacher and peer in class was lacking which another negative factor is regarding online learning, isolation and loneliness were some of the feelings students had when they were required to face a computer screen (Pozurick et.al, 2000).

In my study it showed that 59.3% had their personal mobile and 50.3% use smart phone and 7.6% use data pack to attend the online class, similar study conducted in Nepal showed that mobile was most commonly (51.9%) used gadget for attending online class. One third of the students (35.3%) had no access to static internet and 4.5% of them did not have internet at their home. Nearly two third of the respondents (63.2%) were satisfied from the online classes. Overall 54.1% had negative perception toward online classes (Koirala et.al, 2020). Similar study conducted in Pune showed that majority of the respondents are using smart phone for attending online sessions. Similar study conducted by Manish showed among the devices which were used by participants to attend the class was laptop (86.5%) followed by smartphone (42.7%) (Thapa, 2021).

In this study 69% told that they had heard about online classes, 58.62% experienced internet problems, similar study conducted in Ghana revealed that majority of the students has heard of e learning, challenges in the use of online includes included irregular internet access, lack of technical skills and lack of feedback from peers and teachers.¹⁰Kharel 2018 found only 12.1% had computer facilities, those who do not have are dependent on either friends computer or cyber for computer based assignment, from familiarity to availability technology perspective almost two fifth (38.9%) participants showed their comfort on using currently available tools and technologies. Their satisfaction towards existing internet facilities was low (Kharel,2018).

Limitation

The study was limited to the secondary level students of only one school of Lalitpur district so results cannot be generalized. Online instruction was just initiated in our country for school level students so the results showed non acceptance of online education. As the data were collected online the response rate was very low. Due to lockdown period during data collection only permission from the school authority and consent from parents and assent from students was taken.

Conclusion

Based on the study findings it is concluded that most of the students enjoyed physical class rather than virtual class, almost half of the students take online class through smart phone and more than half of the students faced internet problem during online classes. Among the respondents two third of them have positive perception towards online education. Even though very few have negative perception and online learning have significant role to play, it cannot be a replacement to traditional face to face classroom learning in our context.

Conflict of interest: None

Acknowledgement: I would like to thank from the bottom of my heart to the school authority St Xaviers Godavari, concerned teachers and the respondents without whom this wouldn't have been possible.

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