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# Online Instruction in Relation to Student Satisfaction in Higher Education at Tribhuvan University, Nepal

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## Abstract

*During the pandemic of COVID-19 like in other educational institutions, Tribhuvan University also shifted its instructional mode from face-to-face to online mode. However, limited access and proficiency to technology, receiving timely feedback and communication, working familiarity, and distance among colleagues, teachers and faculties are the main challenging factors of effective online class participation. With this consideration, this paper aimed to identify the effectiveness of online instruction on class participation of Post-Graduate students at Tribhuvan University. In this study, the correlational research design was applied within the positivist philosophical background. From the 5948 population of this study, who participated in the online mode of instruction during the pandemic period, four hundred students were randomly assigned. Semi-structured questionnaires are administered through self-reporting method. The logistic regression was applied to identify the relationship between classroom effectiveness through online instruction. The result shows that students' learning facilities, technical skills, satisfaction, teachers' support, and feedback systems have a significantly better effect on online class participation. Unexpectedly students with little support from teachers, no clear direction for work, and a neutral perception than a good perception have applied better e-resources. technological skills, e-materials, and good perception have not acquired satisfactory results in online instruction. This study concludes that online instruction has not significantly notable effects on students' class participation. These findings could be considered while making the training package interventions indented to transform basic skills, supportive and related behaviour.*

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**Keywords:** Online instruction, Class participation, Satisfaction, Academic performance, Technology, Nepal

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## **Introduction**

Online pedagogy is a paradigm shift in the era of the pandemic situation. Many institutions have switched their physical class to online instruction such as Tribhuvan University, community schools, and private schools in Nepal during the pandemic period. Online instruction or e-learning is a means of instruction which provides opportunities for learning in low-income and middle countries (Qian et al., 2021). By facing many snags in online instruction, Tribhuvan University conducted online instruction during the COVID-19 pandemic. It is evident that, during this period, more than 3,35,543 students of Tribhuvan University benefitted from online instruction (University Grants Commission, 2020).

Students taking online courses emphasize flexibility, accessibility, the convenience of balancing personal, professional, and academic life and their desire to experience a new way of learning (Mather & Sarkans, 2018) as core factors that inform their decision. However, online instruction has no effective class instruction and a weak delivery system (Amro et al., 2015; Hodges et al., 2020; Khanal, 2020) compared to face-to-face classes due to a lack of technological familiarity and proficiency. On the other hand, a study (Sthapit & Shrestha, 2020) has shown that online and physical modes of instruction have been equally effective in the context of Nepali students. This finding contradicts the previous studies (Amro et al., 2015; Hodges et al., 2020; Khanal, 2020). This indicates that previous studies are not conclusive about whether the online or physical mode of instruction is effective in the context of Nepal.

Studies have shown that online learners face several problems. Among them, lack of access and skills to technology and receiving timely feedback and communication from faculty members are the main (Mather & Sarkans, 2018). Similarly, limited skilful manpower, resources, and access to technology are also barriers to better performance of the students (Hodges et al., 2020). Mather & Sarkans (2018) have also indicated that most of the online participants cannot receive feedback and other support from teachers, and get limited opportunities to interact with teachers. Studies have shown that Tribhuvan University also faced similar problems (Shrestha et al., 2022) during online instruction.

Despite several problems, the online mode of instruction can be effective if positive relationships and interaction between teachers and students are fostered (Gautam & Gautam, 2021) which is possible only for the limited participants in the online mode of instruction. For this, a pragmatic approach can be useful (Downing et al., 2007). However, a study by Rijal et al. (2015) has revealed that classes in an online mode in the Nepalese context were run by traditional methods, especially through a lecture that discourages

teacher-student interaction. It indicates that Nepalese online class participation is not ideal. In this context, this study aims to study the nature of the online class participation of Master's level students of Tribhuvan University.

## **Materials and Methods**

The correlational research design was adopted within the positivist philosophical paradigm. In order to determine the functional links between student satisfaction and the chosen correlates, the level of student satisfaction has been evaluated and statistical analyses have been conducted (Muijs, 2004).

Kathmandu and Bhaktapur in Kathmandu Valley, Lamjung, Jhapa, Siraha, and Ilam were selected purposively to make the study representative of diverse cultures and geographical diversity. Three constituent campuses were selected from Terai, Hill and Kathmandu situated districts. Data from Tribhuvan University (2021) revealed that a total of 5,948 Master's level students participated in the online classes during the pandemic situation. Based on the population size of 5,948, 5% margin of error, and 95% confidence level, a sample size of 374.8 was calculated by using the below stated statistical formula. After accounting for the 1.5 design effect (6 samples) and the 5% non response (19 samples), the final sample size for the study was determined to be 400. The following process was given for figuring out the sample size.

$$n = \frac{N}{1 + Ne^2}$$
$$\frac{5948}{1 + 5948(0.05)^2} = \frac{5948}{15.87} = 374.8, = 375$$

Where,

n= Sample size, N = Population size, and e = Margin of error

In order to collect data from 400 sample students, a set of structured questionnaires was developed. Before questionnaire construction, a list of measurement indicators was prepared and translated into the draft questionnaire. Then, questionnaires were evaluated by the five experts (faculty members) of Tribhuvan University. Experts' feedbacks were incorporated and then a pre-test was conducted for validation of tools. After addressing feedback from the pretest, the questionnaire was finalized.

Data were collected through a self-administered method from February to March 2022. For the data collection purpose, The Nepali version of the questionnaire was used. A self-administered questionnaire survey was conducted with the help of the subject teachers of the respective campuses and other faculty members. Before the distribution of the questionnaire to the participants, consent of the participants were received before administration of the survey. Participants were also debriefed about the privacy of information, voluntary participation and risk. During the debriefing session, instructions were also provided on the objectives of the study and the ways of filling out the questionnaire. After a debriefing session, the questionnaires were distributed to each sample participant and requested to fill out questionnaires without any bias.

The data were analyzed using both descriptive and inferential statistics. The purpose of descriptive statistics is to describe the nature of the class participation in the online mode of instruction. Inferential statistics were used to identify the causal relation between student satisfaction and its correlates. For inferential statistics, multivariate logistic regression was used, in which the level of student satisfaction from an online mode of instruction (coded "satisfied" with 1 and "not satisfied" with 0) was used for dichotomy variables. The correlates are grouped into three categories: online class instruction, socio-demographic variables and learning technology. Odds ratios were used to identify the causal relationship between the level of student satisfaction from the online mode of instruction and its correlates. The odd ratios were estimated with the help of Stata 14.

## **Results**

In this study, satisfaction with online class participation is presented and analyzed based on socio-demographic and online learning variables and logistic regression is applied for multivariate analysis.

### **Socio-Demographic Characteristics and Satisfaction**

Relationship of satisfaction with socio-demographic variables are presented descriptively in Table 1. The majority of students are not satisfied with online instruction during the pandemic. Comparatively, a higher percentage (28%) of boys are satisfied than girls (24%). Similarly, one-third (33%) of elder students (<25 years) have been more satisfied with the online instruction while two-fifths (20.68%) of younger (> 26 years) are satisfied. Unexpectedly, more elders express their satisfaction that might have occurred due to the limited time and support to time management for attaining study. Learning and doing were done simultaneously.

**Table -1: Association between background characteristics and satisfaction**

		Unsatisfied		Satisfied		Total	
		No.	Percent	No.	Percent	No.	Percent
Gender	Girls	207	75.27	68	24.73	275	100
	Boys	90	72	35	28	125	100
Age	>26	188	79.32	49	20.68	237	100
	<25	109	66.87	54	33.13	163	100
Living with	Friends	117	81.25	27	18.75	144	100
	Parents	107	71.81	42	28.19	149	100
	Single	73	68.22	34	31.78	107	100
Living status	Room	244	74.62	83	25.38	327	100
	Flat and house	53	72.6	20	27.4	73	100
Major subject	Language	163	81.5	37	18.5	200	100
	Science and Math	34	47.89	37	52.11	71	100
	Social	100	77.52	29	22.48	129	100
Instruments	Mobile	235	77.05	70	22.95	305	100
	Laptop	62	65.26	33	34.74	95	100
Net service	Mobile data	111	84.73	20	15.27	131	100
	Wi-Fi	186	69.14	83	30.86	269	100
Skill in technology	Weak	31	54.39	26	45.61	57	100
	Normal	144	82.76	30	17.24	174	100
	Good	122	72.19	47	27.81	169	100
Training acquired	No	244	74.39	84	25.61	328	100
	Yes	53	73.61	19	26.39	72	100
	Total	297	74.25	103	25.75	400	100

Sours: Field Serve, 201

On the other hand, science and mathematics which are highly related to psychology have a higher satisfaction level. more than fifty percent (52%) of the students who study mathematics and science subjects expressed satisfaction with online instruction. Approximately, one-fifth of the students in online instruction with social (22%) and language (18%) subjects are satisfied. Similarly, living with friends during the pandemic has acquired the lowest (18.75%) proportion of students with satisfaction while students who live single have a higher amount (31.78%) of pleasure with online instruction. Similarly, one-third (28.19%) of the students who live with their parents are satisfied. Furthermore, room use (25%) and flat and house use (27%) have a minimal difference. It was not observed as significant although flat and house users have slightly heavier weightage.

Table 1 shows that laptop holders are much more (34.74%) satisfied than mobile holders (22.95%). By taking support from the laptop, they are more engaged in learning and actively participate with comfort. Similarly, nearly one-third (30.74%) of the students who used Wi-Fi during the instruction are satisfied while fewer students (15%) who managed mobile data for learning have poor satisfaction. The daily cost of mobile data is more responsible for less satisfaction due to cost analysis and discomfort for learning.

Participation in training which is conducted by universities or other institutions to enhance proficiency in technology acquired significant results of satisfaction from online instruction. A nearly equal proportion of the students who participated (26%) or not (25.61%) are satisfied. However, students who experienced poor skills in technology have a higher proportion (45.61%) of pleasure while good skill holders (27%) and normal skill holders (17%) are satisfied. Better skills holders might have more expectations from online instruction and limited opportunities to interact and have two-way communication.

### **Nature of Students' Participation in Online Instruction**

Table 2 presents the descriptive data on the various indicators of online class participation of the students. Table 2 shows that only one-third (34%) of the students with less time invested succeeded at the summing on time, which was provided by instructors. Two-thirds of the students with more time invested have a higher level experiences of satisfaction with assignment completion on time regularly. Online tools and techniques took more time for the assignment submission. They might take more time than the deadline due to a lack of proficient skill in technology, information resources, and digitalised documents. Similarly, a significant two-fifth (37.53%) proportion of them focused on question-answer type assignments and had a higher level of satisfaction and thirty percent of participants

with satisfaction were more interested in the test or self-reflection-based assignments. A higher proportion of students with satisfaction are involved in traditional types of assignments, which are more familiar with their previous assignment practices and comfortable completing at their home.

**Table-2: Distribution of online participants based on descriptive analysis**

<b>Variables</b>	<b>Indicators</b>	<b>Number</b>	<b>Percent</b>
Time investment	More	264	66.00
	Less	136	34.00
Nature of assignment	Question Answer	150	37.53
	Written with self-reflection	121	30.25
	Unit test	129	32.25
Direction of assignment	Poor	81	20.25
	Normal	157	39.25
	Good	162	40.5
Learning support	No support	66	16.5
	Partial support	239	59.75
	Regular support	95	23.75
Feedback	No	153	38.25
	Partial	185	46.25
	Regular	62	15.5
Nature of	No	97	24.25
Support	Individual	91	22.75
	Group	212	53
Teacher response	Rarely	129	32.25
	Partial	171	42.75
	Regular	100	25
Online effect	Not good	302	75.5
	Good	98	24.5
Content clarification	Poor	65	16.33
	Normal	204	51.26
	Good	129	32.41

<b>Variables</b>	<b>Indicators</b>	<b>Number</b>	<b>Percent</b>
Interaction with teacher	Rarely	120	30
	Low access	129	32.25
	Easy access	151	37.75
Class participation	Unsatisfied	297	74.25
	Satisfied	103	25.75
<b>Total</b>		<b>400</b>	<b>100</b>

*Sours: Field Serve, 201*

Only two-fifths (40.5%) of online class participants, who experienced felt good direction to complete assignments, were satisfied with online instruction. Poor direction holder students have the lowest proportion (20%) of online class satisfaction. The direction of online class instructions has a direct linkage with students’ instructional satisfaction. Surprisingly, a majority of students (59.75%) who acquired partial support from the teacher during the instructional period have a higher level of satisfaction in comparison to regular support holder students. Learning interests may play a crucial role in their satisfaction and learning. However, some students who acquire poor learning support have a lower level of satisfaction because of low levels of guidance, inconsistency of network and lack of information resources.

Acquiring feedback on time has no significant role in students’ satisfaction development. In this study, regular feedback holder students have limited satisfaction (15.5%) while students who have no opportunities for feedback during the online class instruction have a higher level of satisfaction (38%). However, 45% of partial feedback holder students were satisfied with the online model of instruction.

More than fifty percent (53%) of the students who received teachers’ support in the group were satisfied. One-fourth of the online participants who received teachers’ support individually experienced satisfaction. However, one-fifth of students who did not experience teachers’ support, have realized satisfaction from online instruction. Similarly, only one-third (32.41%) of the online class participants who had a good understanding of learning content during the instruction period, were experienced more satisfaction in comparison to those who had a poor understanding of learning content and had a lower level of satisfaction(16%). The majority of students (51%) who experienced the normal level of proficiency in learning content, highly realized satisfaction. Partial support has a greater role in enhancing the level of satisfaction.



Similarly, less than one-third of students who realized good efforts of online instruction were satisfied with the online mode of instruction. More than two-thirds of online class participants with satisfaction have realized that the effect of online instruction was not so good. It may have occurred due to a lack of face-to-face interaction, a lack of information resources and a stressful environment at home during the pandemic. Fewer than two-fifths of the online class participants have access to interact with teachers regularly. However, 30% and 32% of the students have rare and low access respectively to communicate with teachers during online instruction. The majority of the online class participants have had no opportunities to interact with teachers properly due to physical distance, lack of technological proficiency and fear of good health during the pandemic.

It shows that three-fourths (74.25%) of the students were not satisfied with their online class participation. Only one-fourth of online participants were satisfied with their online class participation. The online classes were not done satisfactorily. The majority of the students have no opportunities for interaction, access to informational resources and skill or technological proficiency during the pandemic.

## **Multivariate Analysis**

In multivariate analysis, three models are fitted to identify the effect of online instruction on students' instructional satisfaction. There are seven factors as class instruction which lead to work success and better class participation, as added in Model I. Then by adding socio-demographic factors in Model I, Model II is constructed. Besides these factors, students' online learning facilities-related factors are added to Model III. Socio-demographics and online learning facilities remain as control variables.

Multivariate analyses are presented in Table 3. It shows that fewer-time investors are 4.48 times more likely to be satisfied with online class participation in comparison to more-time investors. Socio-demographic variables have an increased level of (OR=5.17) satisfaction in Model II. However, it is minimized (OR=4.82) in model III. Approximately, five times more opportunities for better class participation as satisfaction is shown by fewer time investors to do regular tasks in online instruction. Students with less time investment have more opportunities to be satisfied with better class participation. The time investment in completing online assignments has a strong positive relationship with online class participation. Similarly, about one-fourth (OR=0.63) and less than fifty percent (OR=0.52) of written self-reflection and test respectively holders have fewer opportunities to be better satisfied with their online class participation in comparison to question-answer type assignments. Significantly, about 30% less likely proportions are held in Model II

and Model III. Written with self-reflection and test types of assignments have one-third of fewer opportunities to have pleasure. Most of the students want traditional types of assignments in the online instructional period due to being comfortable and habitual to perform.

**Table-3: Adjusted odd ratio(OR) for students’ satisfying behaviour in online class participation**

		<b>Model I</b>	<b>Model II</b>	<b>Model III</b>
		<b>OR</b>	<b>OR</b>	<b>OR</b>
Time investment	More	1	1	1
	Less	4.85***	5.17***	4.82***
Nature of assignment	Question Answer	1	1	1
	Written with self-reflection	0.63	0.69	0.75
	Test	0.52*	0.39**	0.29**
Direction of assignment	Poor	1	1	1
	Normal	0.97	0.95	0.97
	Good	1.95	2.30*	2.43*
Learning support	No support	1	1	1
	Partial support	0.34**	0.29***	.28***
	Regular support	0.34**	0.36*	.36**
Feedback	Very low	1	1	1
	Partial	2.34**	3.27***	3.50***
	Regular	4.35***	4.50**	4.81**
Nature of support	No	1	1	1
	Individual	0.89	0.76	0.81
	Group	1.36	1.36	1.31
Teacher response	No	1	1	1
	late response	0.48*	0.46*	0.56
	Enough response	0.52	0.49	0.59
Assignment correction	No correction	1	1	1
	Partial correction	1.07	0.58	0.53
	Regular correction	1.36	0.83	0.66

		<b>Model I</b>	<b>Model II</b>	<b>Model III</b>
		<b>OR</b>	<b>OR</b>	<b>OR</b>
Major subject	Language		1	1
	Science and math		6.30***	7.54***
	Social		1.2	1.28
Gender	Girls		1	1
	Boys		0.64	0.56
Age	>26		1	
	<25		1.82*	1.68
Living with	Friends		1	1
	Parent		2.22*	2.05
	Single		2.39*	2.28*
Instrument	Mobile			1
Net service	Computer			0.89
	Mobile data			1
	WiFi			2.25*
Source of materials	Book			1
	E-materials			1.52
	curriculum reference materials			1.86
Skill for technology	Poor			1
	Normal			0.51
	Good			0.58
Training opportunity	No			1
	Yes			0.86
	cons	.27**	.13***	.09**
	Pseudo R2	0.17	0.26	0.28
<p>Note OR= odd ratio, ****=<math>p &gt; 0.001</math>, ***=<math>p &gt; 0.01</math>, **=<math>p &gt; 0.05</math></p>				

Sours: Field Serve, 201

Good direction for the assignment has a significant role in better involvement with the satisfactory. Roughly 2.5 times significantly better opportunities for online class satisfaction are acquired by the good direction holders, which remained at 1.95 in Model I

and 2.30 in Model II. It shows that significantly better satisfaction as class participation is increased by the good guidance of teachers. Unexpectedly, about 65 percent with partial and regular learning support holders are less likely to be satisfied with their online class participation in comparison to those who have no support for online class instruction. Surprisingly, the majority of the students (OR=0.28 OR =0.36 in partial and regular support respectively) have a heavier weightage of dissatisfaction with their online class engagement in Model I and II. It indicates that self-gratitude or self-effort has a greater contribution to better class participation. Dependency is not observed as favourable for better involvement in class participation. Learning support has a strong association with online class participation.

Teachers' role in the feedback-giving process is statistically significant in developing better class participation. Roughly, 2.34 and 4.35 times better opportunities are created by partial and regular feedback in Model I, which is gradually increased in Models II and III. Similarly, approximately 3.5 and 4.5 times more opportunities are gained by partial and regular feedback respectively. Better feedback has a significantly better effect on online class satisfaction in comparison to partial and no feedback. Online class satisfaction is dependent on a feedback system of instruction.

Subjects such as mathematics and science have shown better opportunities (OR=6.3 and 7.54 in Model II and III respectively) for online class participation in comparison to language-holder students. In comparison to language, social subjects have about 1.25 times more opportunities to be satisfied with online class instruction. However, it does not show a significant effect. The nature of the subject has a significant effect on students' experience of satisfaction. In this study, mature students are more satisfied with their class participation. Significantly more than 25 years holders' students have about 1.82 times in Model II and 1.7 times (OR=1.68 in Model III) more opportunities have been satisfied to compare the younger students (under age 26 years). It might be comfortable for them to study in their home and with family.

Living with friends is not been fruitful in the online mode of instruction. Students who live single or with parents have approximately 2.3 times more opportunities for satisfaction in online class instruction compared to those who live with friends. Students who live single in the room have better opportunities to be satisfied in their online class participation during the pandemic. Furthermore, approximately 2.25 times more opportunities are acquired by Wi-Fi net service holders students in comparison to mobile data users. Learning facilities have played a better role in satisfying class participation in Master's degrees at Tribhuvan University in Nepal.

## **Discussions**

This study shows that the majority of students were not satisfied with online class participation with online assignment practice. A smaller proportion of students have experienced satisfaction with online class participation. Among them, written with self-reflection and test types of assignments have two-thirds of fewer opportunities to be satisfied in better participation due to more time and difficulty in writing. Most of the students want traditional types of assignments in the instructional period due to comfortable work, exam-oriented activities, and their habit of performing.

The majority of the students who experienced satisfaction have taken more time to complete assignments, which is determined as a time-bound assignment submission. As asserted by Lu et al.(2021), online assignment completion takes more time and it would be stressful to complete on time. However, students with less time investment have more opportunities to be satisfied with in-class participation. The economy of time investment in completing online assignments has a strong positive relationship with class participation.

The majority of the students who realized online class satisfaction were not supported by teachers due to their unfamiliarity with the technology, limited proficiency, and fear of the pandemic situation. Consistency results were obtained by C. Lu & Cutumisu. (2022) which is conducted in Nepal, India, and Bangladesh. The study explored that the information from assessment has not been properly used to support better academic performance. As a result, teachers' support is not meaningful and encouraging for better online class participation. Unexpectedly, the support-holding students have fewer opportunities to be satisfied and better class participation than no support. Teachers' support has not been done effectively for online class participation. Similarly, teachers' response has a significant relation with online class participation. Teachers' responses to correction assignments or the relationship-building process have not been observed as meaningful in the online class participation process due to the role of their formality.

Net service is a significant predictor of online class participation. Students with Wi-Fi have created more opportunities for satisfactory class participation. In comparison to mobile data, significantly higher opportunities for satisfaction were acquired by the Wi-Fi users due to confidence, self-consciousness, and economy for e-resources in learning for satisfactory class performance. Prolong study is comfortable for WiFi user students and more engagement is possible for deep study.

The majority of the students do have not a good perception of online class participation. A contradictory result was found by Almahasees et al.(2021). They asserted that faculties and students have positive perceptions toward online instruction during the pandemic COVID-19. However, it has been less effective in comparison to face-to-face instruction. It indicates that only good perception is not enough for better class performance or participation. On the other hand, good perceptions have created more opportunities for better class participation because of their positive thinking and self-consciousness about their work and responsibility.

The majority of students who have a good understanding of learning content are more satisfied with the online mode of instruction. Significantly higher opportunities are acquired through clear concept formation. Understanding the level of learning content has determined the opportunity level of satisfaction. Better understanding holder students have more opportunities of satisfaction with the online mode of instruction. Al-Amin et al.(2021), explored the consistency result that understanding content or lesson, consistency of the internet, and electricity are the main constraints of online class participation.

Participants have fewer opportunities to communicate with the teacher, which does not support active participation. Seynhaeve et al.,(2022) found that most of all, there are limited opportunities for learner-centred interaction during the online mode of instruction. However, Choi et al.,(2021) assert that interaction opportunities for teachers and students are key factors of academic success. Ong & Quek (2023) observed that interaction has a significant role in enhancing satisfactory class participation. In comparison to the face-to-face mode of instruction, online instruction has limited opportunities to share learning experiences and identify learning solutions collaboratively. However, the study stated that easy access to interaction or communication has acquired more opportunities for better online class participation (Ong & Quek, 2023). Involvement in the interactive process creates good perception, better relations, belongingness to the institution and instruction due to sharing experiences. It may support understanding of context, clarify concept formation, and realize closeness with each other (Thapa, 2022).

Students' online instruction has no positive effect on students' satisfaction with online class participation. Online teachers' support, and their response to students' performance, the nature of assignment correction or feedback and the direction of assignments are not been fruitful for enhancing satisfactory class participation. Most of the students were not satisfied with their online class participation. However, partial support, guidance and work direction are more successful in increasing opportunities for satisfaction of class

participation. The online instructional practice has not been as effective as we expected due to the lack of positive perception among the parents, teachers and students, limited resources and technological skills, and the speed of net service (Bączek et al., 2021 during the pandemic period. Similarly, Bączek et al.(2021) explored that online instruction is not as effective as face-to-face teaching. It is a complementary part of the face to face instruction but is not an opposite part of instruction

Subjects like mathematics and science offer better satisfactory online class participation opportunities compared to other subjects while social. The nature of the subject significantly impacts satisfaction. Based on technology has a highly significant relation with science and math subjects. These subjects have a positive role in enhancing technological skills. As Lo & Hew (2021) asserted, subjects like science and math can improve students' satisfactory class participation and performance in classroom instruction. They clarified that scientists employ technology and mathematics as tools to help them understand the world. Basic knowledge and skills which are supported by science and math are fruitful in online-based learning and assist in developing satisfaction with active online class participation. Similarly, in comparison to younger students, research indicates that mature students are happier when it comes to their involvement in class, have greater opportunities, and feel more at ease when studying at home or with their families. Significantly mature participants have more opportunities for satisfaction with online modes of instruction during the pandemic.

## **Conclusion**

Online class instruction has no positive effect on students' satisfactory online class participation. Online teachers' support, and their response to students' performance, the nature of assignment correction, and the direction or guidance of assignments are not been fruitful for satisfying online modes of instruction. Most of the students have poor satisfaction levels of class participation due to more time investment, lack of information resources, teachers' proper support, lack of communication and lack of proper guidance for their daily work. However, learning support has an inverse relation with satisfaction such as regular support has not increased students' satisfactory class participation. Fruitful guidance is necessary. Similarly, students who acquired partial support in terms of learning support, work guidance and feedback have a higher level of online class satisfaction due to their interest, self-consciousness, and learning facilities. Modern subjects such as math and science have better experience of satisfaction due to participants' awareness, and supportive knowledge of technology and the modern world. Although the online mode of instruction does not have a better effect on online class participation.

## Limitations and Strengths of the Study

This study focuses on identifying the online instruction in relation to student satisfaction in class participation during the pandemic at Tribhuvan University in Nepal. It is a cross sectional survey research based on the positivist philosophy. By applying a semi-structured questionnaire, data are collected once a time and analyzed quantitatively. To carry out a deep understanding of class engagement, a more qualitative study is necessary to cover the causing factors of effects. In this study, better class participation (satisfaction with class engagement) is studied by taking the perspective of students toward teachers' behaviour.

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