

# Students' Perception of Satisfaction and Anxiety in Flexible Teaching and Learning Modality

Randy P. Acoba

*Isabela State University Echague Campus  
San Fabian, Echague Isabela*

**Abstract:** *This study aimed at determining how students' satisfaction and anxiety in Flexible Teaching and Learning Modality (FTLM) affect their academic performance. Further, the study delved into the best predictors of academic performance in terms of the Level of Students' Satisfaction and Anxiety in FTLM. The study revealed that the students are satisfied in the delivery of instruction under FTLM; however, it revealed that they are moderately anxious in the same platform of instruction. There is a significant difference in the level of satisfaction of the students in FTLM when they are grouped according to program while no significant difference was observed in terms of the level of anxiety in FTLM. Majority of the subscales of student satisfaction are significantly and negatively correlated with the level of anxiety in FTLM. Generally, student satisfaction and anxiety do not relate with the academic performance of the students. Finally, Instruction and Internet appeared to be the significant predictors of academic performance in terms of Student Satisfaction and Anxiety in FTLM.*

**Keywords** — *Flexible Teaching and Learning Modality, Student Satisfaction, Student Anxiety*

## I. INTRODUCTION

The unprecedented shifting of teaching and learning modalities during the Coronavirus pandemic has brought challenges to both the teachers and the learners. While the national government is currently rolling out vaccination program, the academic institutions have geared to remodel their teaching strategies and platforms to fit in the needs of the learners in the present situations and to ensure that learning continues amid the pandemic.

To respond to this situation, Higher Education Institutions (HEIs) have given academic freedom in consideration with teaching and learning modalities such as distance learning, e-learning, and other alternative modes of delivery to students (CHED, 2020). With this, several State Universities and Colleges (SUCs) have sent their teaching forces to different online trainings to equip them with the necessary skills crucial to distance learning and to sustain the delivery of quality instruction. However, the implementation of online learning posed different risks, problems, and challenges to both the teachers and the learners (Bao, 2020).

On the other side, student satisfaction can be characterized as a short-term attitude arising from an assessment of the educational experience, services, and facilities provided to students (Fernando & Weerasinghe, 2017). Students' satisfaction has an effect on not just how much they love their learning experience, but also on their performance.

Students' satisfaction is an important issue and should be considered in the evaluation of course and program effectiveness being one of the factors of quality in online education, together with learning effectiveness, access, faculty satisfaction, and institutional cost effectiveness (Sloan Consortium, 2002).

Dhaqane and Afrah (2016) evaluated the impact of student satisfaction on academic achievement and discovered that there is a strong link between the two. Satisfaction is also linked to academic success and student retention, according to the research. These findings suggested that students should be content with their academic institution's learning experience because it has a significant impact on their academic success.

Stressing the importance of students' satisfaction provides a comfortable and nurturing environment to students; not only does it improve academic performance, but it also promotes students' mental health, stability, and social inclusion.

While student happiness is critical for successful and high-quality instruction, student anxiety, which is visible in flexible teaching and learning methods, must also be addressed in order to achieve high-quality instruction. Students with anxiety disorders may find it difficult to concentrate in class or complete assignments; they may also feel self-conscious and avoid certain settings (Hasan, 2019). These circumstances may obstruct the effective teaching and learning process, affecting academic performance.

Anxiety is most common among college students, according to Alkandari (2020). When students believe they will not be able to meet their academic goals, they experience anxiety. Anxiety was discovered to

be a key predictor of academic performance in a study conducted by Vitasari et al. (2010). Anxiety is both positively and adversely associated to academic performance, according to their findings. This means that anxious students are less likely to concentrate on their schoolwork. As a result, their academic performance has suffered as a result of this.

Anxiety is a concern in the flexible teaching and learning modality when online classes are provided. According to Macher et al. (2012), students who are anxious in online courses had lower overall academic accomplishment. This anxiety-induced decrease in cognitive efficiency includes self-evaluation and overall anxiety. On the other hand, Saade et al. (2017) researched anxiety and online learning and discovered that 30% of students appear to have some level of anxiety when taking online courses, with female students being more nervous than male students.

In line with this, the researcher believes that there is still a need to study and verify the results of the above-cited studies as regard the relationship between these two factors and the academic performance of the students.

### Objectives of the Study

This study aimed to determine the students' satisfaction and anxiety in Flexible Teaching and Learning Modality and the academic performance of the Education students. Specifically, this study sought to:

1. Determine the program where the students are enrolled;
2. Find out how satisfied are the students in terms of the learning they get in Flexible Teaching and Learning Modality;
3. Determine the level of anxiety do the students experience in Flexible Teaching and Learning Modality;
4. Find out the overall academic performance of the students during the 2<sup>nd</sup> Semester of S.Y. 2020-2021;
5. Find out the difference on the level of satisfaction of the students when they are grouped according to program;
6. Determine the difference on the level of anxiety of the students when they are grouped according to program;
7. Determine the relationship between the level of satisfaction and the level of anxiety of the students in Flexible Teaching and Learning Modality;
8. Determine the relationship between the level of satisfaction and the academic performance of the students; and
9. Find out the relationship between the level of anxiety and the academic performance of the students.
10. Find the predictors of academic performance of the students in terms of the level of satisfaction and the level of anxiety.

## II. LITERATURE REVIEW

As online learning becomes widespread in higher education, researchers have become more interested in studying the factors that influence students' learning, satisfaction, and anxiety in online courses.

Ghaderizefreh and Hoover (2018) delved into the relationship between online learning characteristics and students' emotions and satisfaction with their online learning experience. They discovered that students' reports of excellent course comprehension and illustration were associated with enhanced enjoyment and decreased anxiety, which resulted in an improvement in students' happiness with their online learning experience.

Ghaderizefreh and Hoover hypothesized that students' experience of negative emotions such as anxiety, anger, and boredom may be influenced by technical difficulties, a sense of isolation, and a lack of social support. Additionally, Ghaderizefreh and Hoover indicated that students experience less anxiety when a) the online courses' vocabularies are more understandable, b) the online modules employ more illustrations to explain the materials, c) the online modules' expectations of students are not unreasonable, d) the online materials are not excessively difficult, e) the pace of the course is not excessive, and f) the online instructors are accessible.

On the other hand, Kuo et al. (2013) found that interactions between students and instructors, students and content, and internet self-efficacy were all significant predictors of student satisfaction, but interactions between students and self-regulated learning were not. In line with the findings of Kuo et al., Battalio (2007) revealed that the most often necessary interaction in various online experiments was learner-instructor interaction. However, Battalio's findings contradict those of Chejlyk (2006) and Keeler (2006), who found that

the quantity of engagement learners has with the content is the most important factor affecting student satisfaction in online learning.

According to Sahin and Shelley (2008), there are several aspects that contribute to student satisfaction in distant education, including flexibility, computer proficiency, and usefulness. Apart from these, Liaw (2008) asserted that student perceptions of task value and self-efficacy, social ability, instructional design issues, as well as the quality of the delivery system and multimedia instructions, all contribute to students' happiness.

Other researchers found out that the most important dimensions of students' satisfaction were responsiveness of the teacher to students' needs (Herbert, 2006), learner interface, and self-efficacy (Liaw, 2008).

Bolliger and Halupa (2012) investigated the students' perception of technological anxiety in an online learning platform. This includes computer anxiety, internet anxiety, and online course anxiety.

In terms of online course anxiety, research has revealed that students encounter a variety of forms of difficulty while taking an online course, including worry, frustration, and bewilderment (Hara and Kling, 2001). Tsai (2012), on the other hand, found that traditional classes had a higher anxiety level than online classes.

While there are studies that focused on students' satisfaction and anxiety, this present study tries to investigate the role of these two underlying factors in the academic performance of Secondary Education students of Isabela State University-Echague Main Campus.

### III. DESIGN AND METHODOLOGY

This study used the descriptive-correlational design in which data gathered was recorded, described, interpreted, analyzed, and compared to provide adequate information on how students' satisfaction and anxiety in FTLM affect their academic performance.

#### Respondents

The respondents of the study were the First-Year students of the College of Education, Isabela State University-Echague Main Campus during the First Semester of S.Y. 2021-2022. The students came from the four (4) programs of the college: Bachelor of Secondary Education (BSE); Bachelor of Elementary Education (BEED); Bachelor of Technology and Livelihood Education (BTLED); and Bachelor of Physical Education (BPED). The total number of respondents was determined using the Cochran's Formula with a 95% level of confidence and 5% as the desired margin of error.

Table 1: Distribution of Respondents by Program

Programs	N	n
BSE	105	65
BEED	51	31
BTLED	44	27
BPED	50	31
Total:	250	154

#### Data Collection and Instrumentation

A semi-structured questionnaire was administered online through the google form. The instrument which was adopted from Bolliger and Halupa (2012) consists of three parts: the profile of the students; Students' Perception; and Student Anxiety in FTLM. The test-retest method was used to establish the reliability of the instrument while a coefficient alpha reliability was estimated to be 0.78. The instrument uses a 5-point liker scale with 1 being the lowest while 5 as the highest.

Table 2: Numerical and descriptive equivalents used in the instrument.

Numerical Scale	Descriptive Scale
1	Strongly disagree
2	Disagree
3	Neutral
4	Agree
5	Strongly agree

#### Statistical Treatment of the Data

Descriptive statistics such as frequency, percentage, and means were used to describe the data. Parametric tests were employed in the analysis of the data with the assumption that the data gathered is normally distributed. One-way ANOVA was employed to determine the difference in the levels of satisfaction and

anxiety of the students in FTLM when they are grouped according to program. Pearson's  $r$  correlation was applied to find out the linear relationship between the level of satisfaction and the level of anxiety of the students in FTLM. Likewise, Pearson's  $r$  correlation was used to determine the linear relationship between the levels of satisfaction and anxiety of the students in FTLM and their academic performance. Multiple Linear Regression was employed to determine which among the subscales of student satisfaction and student anxiety can greatly affect the academic performance of the students.

### Scope and Delimitation of the Study

This study focused on determining the levels of satisfaction and anxiety on FTLM among First-Year Education students of Isabela State University-Echague Main Campus during the First Semester of S.Y. 2021-2022. Additionally, the academic performance of the students was generated from their General Weighted Average of all the courses they enrolled in for the First Semester of S.Y. 2021-2022.

## IV. RESULTS AND DISCUSSION

### Level of Satisfaction on Flexible Teaching and Learning Modality

Table 3: Level of Satisfaction of Students in FTLM

Instruction	Mean	Description
1. Class assignments were clearly communicated to me.	3.88	S
2. Feedback and evaluation of papers, tests, and other instruments was given in a timely manner.	3.86	S
3. The instructor makes me feel that I am part of the class and belong.	4.27	S
4. I am satisfied with the accessibility and availability of the instructor.	3.24	N
<b>Weighted Mean</b>	<b>4.0</b>	<b>Satisfied</b>
<b>Technology</b>		
5. I am satisfied with the use of "threaded" online discussion and/or forums.	3.64	S
6. I am satisfied with the use of email.	4.01	S
7. I am satisfied with how I am able to navigate within the online learning platforms such as Edmodo.	3.65	S
8. I am satisfied with download times of resources in online learning platform	2.86	N
<b>Weighted Mean</b>	<b>3.77</b>	<b>Satisfied</b>
<b>Setup</b>		
9. I am satisfied with the frequency I have to attend online class	3.71	S
10. I am satisfied with the flexibility of this online course in terms of time	3.53	S
11. I am satisfied with the level of self-directedness I am given	2.97	N
12. I am satisfied with how much I enjoy working on projects and activities by myself.	3.69	S
<b>Weighted Mean</b>	<b>3.64</b>	<b>Satisfied</b>
<b>Interaction</b>		
13. I am satisfied with the quality of online interaction between the teacher and the students	3.61	S
14. I am satisfied with the process of collaborative activities during the online course	2.90	N
15. I am satisfied with how much I could relate to the other students online	3.67	S
16. I am satisfied with how comfortable with participating I became	3.64	S
<b>Weighted Mean</b>	<b>3.64</b>	<b>Satisfied</b>
<b>Outcomes</b>		
17. I am satisfied with the level of effort this online course required	3.71	S
18. I am satisfied with my performance in this online course	2.82	N

19. I will be satisfied with my final grade in this online course	3.64	S
20. I am satisfied with how I am able to apply what I have learned in this online course	3.66	S
<b>Weighted Mean</b>	<b>3.67</b>	<b>Satisfied</b>
<b>Overall Satisfaction</b>		
21. I am satisfied enough with this online course to recommend it to others	3.39	N
22. Compared to other course setting, I am satisfied with this online learning experience	2.60	N
23. My level of satisfaction in this online course would encourage me to enroll again in the next semester	3.58	S
24. Overall, I am satisfied with the learning I get from this online course	3.64	S
<b>Weighted Mean</b>	<b>3.54</b>	<b>Satisfied</b>
<b>Grand Mean</b>	<b>3.71</b>	<b>Satisfied</b>

Legend: VS=Very Satisfied, S=Satisfied, N=Neutral, D=Dissatisfied, VD=Very Dissatisfied

Table 3 shows the level of satisfaction of the students in FTLM in terms of the six (6) subscales of satisfaction. It can be gleaned from the table that several students were satisfied on all the subscales of satisfaction.

In terms of Instruction, the students are satisfied with how class assignments were communicated to them, how the feedback and evaluation of tests and papers were given in a timely manner, and how the instructor makes them feel they are part of the class. However, students are neither satisfied nor dissatisfied as to the accessibility and availability of the instructors.

Under the subscale Technology, students are also satisfied specifically with the use of threaded online discussions, email, and how they can able to navigate within the online platforms such as the Edmodo. It can be gleaned from Table 4 that students are neutral in terms of their satisfaction with download times of resources on the online learning platform.

The setup of the online learning platform was also important to the students. Particularly, students are satisfied with the frequency they have to attend online class, the flexibility of time of the online class, and how they enjoy working on projects and activities by themselves. In terms of the satisfaction with the level of self-directedness of the online class, the students are neither satisfied nor dissatisfied.

The quality of online interaction between the teacher and the students brought satisfaction to the students. Likewise, the students are satisfied with how much they could relate to other students online, and how comfortable they are with participating in the class. Students, on the other hand, are neutral in terms of satisfaction on the collaborative activities during the online courses.

In terms of outcomes, students are satisfied with the effort the online class required as well as how they can be able to apply what they have learned with the online course. The students are also satisfied with the final grade they will get from the online class. However, the students are neither satisfied nor dissatisfied with their performance in the online class.

Overall, the students are satisfied with the learning they get from the online class which results in encouraging them to enroll again in the next semester. However, as gleaned from the table, students are neutral in terms of recommending the said platform to others and in comparing it with other learning platforms.

### Level of Anxiety on Flexible Teaching and Learning Modality

Table 4: Level of Anxiety of the Students in FTLM

<b>Computer</b>	<b>Mean</b>	<b>Description</b>
1. I am insecure about my computer skills.	3.17	MA
2. I am anxious when I work on computers.	3.19	MA
3. I am quite relaxed when I work with computers.	2.73	MA
4. I am apprehensive about working on computers.	2.87	MA
5. I avoid working on computers.	2.66	MA
6. I am less intimidated by computers than most other people I know.	3.19	MA
<b>Weighted Mean</b>	<b>2.97</b>	<b>Moderately Anxious</b>

<b>Internet</b>		
7. I feel confident about navigating the internet.	3.45	MA
8. I get anxious when I am required to use internet resources.	3.04	MA
9. I get nervous about getting lost in cyberspace.	3.49	MA
10. I get anxious about using the internet.	3.51	VA
11. I am afraid of browsing the internet.	3.76	VA
12. I get confused when working with the internet.	3.24	MA
<b>Weighted Mean</b>	<b>3.41</b>	<b>Moderately Anxious</b>
<b>Online Courses</b>		
13. I am confident about working in the online environment.	3.23	MA
14. I get anxious when I think about logging into my online course.	3.34	MA
15. I get nervous when I am required to participate in online discussions.	3.56	VA
16. I am apprehensive about enrolling in online course.	3.19	MA
17. I am scared that someone will misinterpret my text-based messages in the online environment.	3.86	VA
18. I feel empowered in my online course.	2.55	MA
<b>Weighted Mean</b>	<b>3.29</b>	<b>Moderately Anxious</b>
<b>Grand Mean</b>	<b>3.22</b>	<b>Moderately Anxious</b>

Legend: NA = not at all anxious, LA = a little anxious, MA = moderately anxious, VA = very anxious, EA = extremely anxious

As gleaned from Table 4, the level of anxiety of the students in FTLM is moderate as revealed by its grand mean of 3.22.

In terms of computer usage, the data revealed that the students are moderately anxious as reflected by the weighted mean of 2.97. All the items under the computer subscale are likewise perceived to be moderate. However, in terms of internet usage, it revealed that the majority of the students are very anxious in terms of using and browsing the internet.

Finally, the students are moderately anxious in online courses as revealed by its weighted mean of 3.29. It can be observed that the students are very anxious when they are required to participate in the online discussions. Likewise, the students are very anxious as to the possibility of misinterpretation of their text-based messages during an online class.

The result of the study supported the claim of Alkandari (2020) who affirmed that anxiety is prominent among college students.

#### Academic Performance of the Respondents

The Isabela State University adopted a numerical grading system from 1.00 to 5.00 in which 1.00 was described as "Excellent" and 5.00 was described as "Failed".

Table 5: Academic Performance of the Students in 2<sup>nd</sup> Semester of S.Y. 2020-2021

General Weighted Average		Mean	Standard Deviation
Lowest	Highest		
2.41	1.25	1.74	0.21

Table 5 shows the academic performance of the students during the First Semester of S.Y. 2021-2022. It is interesting to note that the lowest General Weighted Average (GWA) of the students is 2.41 while the highest GWA is 1.25. These figures gave a mean academic performance of 1.74 with a standard deviation of 0.21. The result implies that the students perform above 'fairly satisfactory'.

#### Difference in the Level of Satisfaction in FTLM of Students When Grouped According to Program

Table 6: Difference in the level of satisfaction in FTLM of students when grouped according to Program

Satisfaction Categories	Means				F	p-value
	BSE	BEE	BTLED	BPED		
Instruction	4.01 <sup>bc</sup>	3.55 <sup>a</sup>	3.60 <sup>a</sup>	3.76	4.97	0.003*
Technology	3.72 <sup>bc</sup>	3.35 <sup>a</sup>	3.31 <sup>a</sup>	3.47	4.17	0.007*



Setup	3.64 <sup>b</sup>	3.18 <sup>a</sup>	3.34	3.48	4.51	0.005*
Interaction	3.58	3.27	3.36	3.42	1.38	0.252
Outcomes	3.57	3.34	3.14	3.50	2.19	0.092
Overall Satisfaction	3.44	3.23	3.03	3.24	1.93	0.127

Legend: a=BSE; b=BEE; c=BTLED; d=BPED

Letters in superscript indicate which group has a significant difference

Table 6 provides the difference in the level of satisfaction on FTLM of the students when they are grouped according to Program. It can be gleaned from the table that the categories of instruction, technology, and setup have been perceived to be significantly different among the students in terms of Program.

Specifically, BSE, BEE, and BTLED students have a significant difference in their perception of Instruction; that is, BSE students are satisfied with instructions under FTLM, whereas BEE and BTLED students showed a Neutral perception on the said category. This claim is supported by the p-value of 0.003.

In terms of Technology, the result revealed that BSE students have significantly different perceptions compared to the other programs, specifically the BEE and BTLED. Furthermore, BSE students are more satisfied in terms of technology than the BEE and the BTLED students who showed a neutral perception on the said category.

Finally, BSE and BEE students showed a significant difference in their perception of the setup of FTLM as shown in the p-value of 0.005. Particularly, BSE students are satisfied with the setup whereas the BEE students perceived the said category as neutral.

### Difference in the Level of Anxiety in FTLM of Students When Grouped According to Program

Table 7: Difference in the level of anxiety in FTLM of students when grouped according to Program

Anxiety Categories	Means				F	p-value
	BSE	BEE	BTLED	BPED		
Computer	2.95	2.99	2.87	3.05	0.80	0.50
Internet	3.42	3.37	3.31	3.51	0.68	0.57
Online Course	3.31	3.30	3.27	3.23	0.22	0.88

Legend: a=BSE; b=BEE; c=BTLED; d=BPED

Letters in superscript indicate which group has a significant difference

Table 7 shows the difference in the level of anxiety on FTLM of the students when they are grouped according to Program. It can be gleaned from the table that there is no significant difference in the anxiety level of the students when they are categorized according to their programs. In consideration of the means of the anxiety level, all students perceived the three anxiety categories as Moderately Anxious, except for the BPED students who perceived the Internet as Very Anxious; however, this difference is not significant and may be due to chance factor only.

### Relationship Between Student Satisfaction and Student Anxiety in FTLM

Table 8: Relationship between Student Satisfaction and Student Anxiety in FTLM

		Instruction	Technology	Setup	Interaction	Outcomes	Overall Satisfaction
Computer	r-value	-0.19	-0.21	-0.21	-0.21	-0.23	-0.30
	p-value	0.02	0.01	0.01	0.01	0.01	0.01
Internet	r-value	0.28	0.28	0.34	0.37	0.38	0.36
	p-value	0.01	0.01	0.01	0.01	0.01	0.01
Online Course	r-value	-0.14	-0.20	-0.15	-0.20	-0.23	-0.25
	p-value	0.10	0.01	0.07	0.01	0.01	0.01

Table 8 shows the relationship between the level of satisfaction and the level of anxiety of the students in FTLM. It can be observed that Computer is significantly and negatively correlated with all the subscales of student satisfaction with p-values less than 0.05. This implies that as the students' anxiety level in computer usage increases, their level of satisfaction in FTLM decreases.

On the other hand, the Internet is observed to be significantly and positively associated with the students' level of satisfaction in FTLM. As gleaned from the table, however, the variables are moderately correlated. Ironically, this suggests that as the anxiety level in internet usage increases, the level of satisfaction in FTLM moderately increases.

Lastly, online course is seen to be significantly and negatively correlated with Technology, Interaction, Outcomes, and Overall satisfaction. This implies that as the anxiety level in online courses increases, the level of satisfaction on these subscales is negatively affected.

This result is in consonance with the study of Bolliger and Halupa (2012) who suggested that there is a significant negative correlation between students' satisfaction and anxiety towards online learning. The same result of the present study supported the study of Ghaderizefreh and Hoover (2018) who claimed that there is a significant and negative correlation between satisfaction and anxiety.

### Relationship Between Student Satisfaction in FTLM and Academic Performance

Table 9: Relationship between Student Satisfaction and Academic Performance

Subscales of Student Satisfaction	r-value	p-value
Instruction	0.03	0.96
Technology	-0.74	0.47
Setup	0.17	0.03
Interaction	0.12	0.14
Outcomes	0.02	0.81
Overall Satisfaction	0.06	0.49

Table 9 shows the relationship between the level of satisfaction and the academic performance of the students. It can be observed from the table that among the six (6) subscales of student satisfaction, there is only one (1) subscale that is significantly related to academic performance. This is the Setup with an r-value of 0.17 and a p-value of 0.03. The result suggests that there is a significant and positive relationship between the setup of FTLM and the academic performance of the students. That is, as the students get satisfied with the setup of the FTLM, their academic performance improves.

While the present study shows only one (1) subscale of student satisfaction to be significantly correlated with academic performance, Dhaqane and Afrah (2016) corroborated that these two variables are strongly correlated with each other.

### Relationship Between Student Anxiety in FTLM and Academic Performance

Table 10: Relationship between Student Satisfaction and Academic Performance

Subscales of Student Anxiety	r-value	p-value
Computer	-0.06	0.45
Internet	-0.11	0.17
Online Course	-0.08	0.35

Table 10 shows the relationship between the level of anxiety in FTLM and the academic performance of the students. It is interesting to note that the r-values of the variables being tested are negative which implies that student anxiety in FTLM is negatively correlated with the academic performance of the students. However, the p-values greater than 0.05 suggest that the relationship is not significant.

The result of the present study negates the claim of Macher et.al (2012) and Vitasari et.al (2010) who reported that student anxiety in online courses is significantly and negatively associated with academic performance.

### Predictors of Academic Performance

Table 11: Model Summary

Model	R	R <sup>2</sup>	Adjusted R <sup>2</sup>	Standard Error of the Estimate
1	0.18 <sup>a</sup>	0.03	0.03	0.21
2	0.24 <sup>b</sup>	0.06	0.05	0.21

a=Predictor: Instruction

b=Predictors: Instruction, Internet

Table 11 provides the model summary which can be used to determine how well the regression model fits the data. The multiple correlation coefficient of 0.18 for the first model and 0.24 for the second model indicate a low level of prediction. As gleaned from the table, Model 2, with two (2) predictors, namely:



Instruction and Internet, records the higher multiple correlation coefficient. The  $R^2$  values of 0.03 and 0.05 show the proportion of variance in the Academic Performance that can be explained by the predictors.

Table 12: Statistical Significance of the Model

	Model	Sum of Squares	df	Mean Square	F	Sig.
1	Regression	0.22	1	0.22	4.88	0.03
	Residual	6.76	152	0.05		
	Total	6.98	153			
2	Regression	0.41	2	0.21	4.75	0.01
	Residual	6.57	151	0.04		
	Total	6.98	153			

Table 12 shows that both models are statistically significant in predicting the academic performance of the students. Model 1 has a p-value of 0.03 while Model 2 has a p-value of 0.01; thus, Model 2 was selected with predictors, namely: Instruction and Internet.

Table 13: Estimated Model Coefficients

Model	Unstandardized Coefficients		Standardized Coefficients Beta	t	Sig.
Constant	4.22	0.13		32.53	0.01
Instruction	0.07	0.03	0.23	2.75	0.01
Internet	-0.07	0.03	-0.18	-2.12	0.04

Finally, Table 13 shows the best predictors of academic performance in terms of the Levels of Satisfaction and Anxiety in FTLM. These include the Instruction under the Level of Satisfaction and the Internet usage under the Level of Anxiety, both with p-values less than 0.05. It is noteworthy that an increase in the satisfaction of the respondents in instruction under FTLM is associated with a 0.07 increase in their academic performance. It can be noted, too, that an increase in the level of anxiety of the students in internet usage is associated with a decrease of 0.07 in their academic performance.

Although only one predictor in each of the two (2) variables appeared, Vitasari et.al (2010) concluded that anxiety was a major predictor of academic performance.

## V. CONCLUSIONS

Based on the findings of the study, the following conclusions were derived:

The students are satisfied on all the six (6) subscales of Student Satisfaction in FTLM. It was also recorded that the students are moderately anxious during the conduct of FTLM. There is a significant difference in the level of satisfaction, specifically in Instruction, Technology, and Setup, when the students are grouped according to program. However, no significant difference was observed in the level of anxiety of the students when they are grouped according to program. The majority of the subscales of student satisfaction are significantly and negatively correlated with the level of anxiety in FTLM. Generally, student satisfaction and anxiety do not relate to the academic performance of the students. Finally, Instruction and the Internet appeared to be the best predictors of academic performance in terms of Student Satisfaction and Anxiety in FTLM.

## VI. RECOMMENDATIONS

Guided by the result of the study, the following are hereby recommended:

1. The instructor may consider a virtual learning setup in which flexibility of time is observed without compromising the quality of instruction.
2. As students face problems in terms of internet connectivity, the University may consider modular approach of teaching and learning with proper and consistent monitoring.
3. Similar studies may be conducted to explore other factors that may contribute to the satisfaction and anxiety of the students in FTLM.

## VII. ACKNOWLEDGEMENTS

The research would like to express his gratitude to the Isabela State University for supporting this research endeavor.

### VIII. REFERENCES

- [1] Alkandari N. (2020). Student Anxiety Experiences in Higher Education Institutions. <https://www.intechopen.com/chapters/71699>
- [2] Bao, W. (2020). COVID-19 and Online Teaching in Higher Education: A case study of Peking University. *Human Behavior and Emerging Technologies*. <https://doi.org/10.1002/hbe2.191>
- [3] Battalio J. (2007). Interaction Online: A Reevaluation. [https://www.researchgate.net/publication/234761312\\_Interaction\\_Online\\_A\\_Reevaluation](https://www.researchgate.net/publication/234761312_Interaction_Online_A_Reevaluation)
- [4] Bolliger D. & Halupa C. (2012). Student Perceptions of Satisfaction and Anxiety in an Online Doctoral Program.
- [5] CHED (2020). CHED COVID-19 Advisory No. 3. Retrieved from <https://ched.gov.ph/wp-content/uploads/CHED-COVID-2019-Advisory-No.-3.pdf>
- [6] Chejlyk S. (2006). The effects of online course format and three components of student perceived interactions on overall course satisfaction. *Dissertation Abstracts International*.
- [7] Dhaqane M. & Afrah N. (2016). Satisfaction of Students and Academic Performance in Benadir University. *Journal of Education and Practice*.
- [8] Fernando R. & Weerasinghe I. (2017). Students' Satisfaction in Higher Education. *American Journal of Educational Research*, Vol. 5, No. 5. [https://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=2976013](https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2976013)
- [9] Ghaderizefreh S. & Hoover M. (2018). Student Satisfaction with Online Learning in a Blended Learning Course.
- [10] Hara N. & Kling R. (2001). Student Distress in Web-based Distance Education. *Indiana University Bloomington*.
- [11] Hasan S. (2019) Anxiety Disorder Factsheet for Schools. <https://kidshealth.org/en/parents/anxiety-factsheet.html>
- [12] Herbert M. (2006). Staying the course: A study in online student satisfaction and retention. *Online Journal of Distance Learning Administration*.
- [13] Keeler L. (2006). Student satisfaction and types of interaction in distance education courses. *Dissertation Abstracts International*.
- [14] Kuo Y. et.al. (2013). A Predictive Study of Student Satisfaction in Online Education Programs. *International Review of Research in Open and Distance Learning*.
- [15] Liaw S. (2008). Investigating students' perceived satisfaction, behavioral intention, and effectiveness of e-learning: A case study of the Blackboard system.
- [16] Macher D. et.al (2012). Statistics Anxiety, Trait Anxiety, Learning Behavior, and Academic Performance. *European Journal of Psychology of Education*
- [17] Saade R. et.al. (2017). Anxiety and Performance in Online Learning. *Information Science Intitute*
- [18] Sahin I. & Shelley M. (2008). Considering Students' Perceptions: The Distance Education Student Satisfaction Model. *Educational Technology & Society*, 11(3), 216-223.
- [19] SLOAN Consortium (2002). Five Pillars of Quality Online Education. <https://www.immagic.com/eLibrary/ARCHIVES/GENERAL/SLOANCUS/S021106L.pdf>
- [20] Tsai M. (2012). A Study of University Students' Anxiety Differences Between Traditional and Online Writing Classes. *Focus on Colleges, Universities, and Schools*.
- [21] Vitasari P. et.al (2010). The Relationship between Study Anxiety and Academic Performance among Engineering Students. *Procedia – Social and Behavioral Sciences*