International Journal of Learning and Teaching

Volume 13, Issue 4, (2021) 260–274 www.ij-lt.eu

Expectation versus reality: A sentiment analysis of students' experience on distance learning.

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Suggested Citation:
Magayon, V. C., Saccuan, R. & Carbonell, A. (2021). Expectation versus reality: A sentiment analysis of students' experience on distance learning. *International Journal of Learning and Teaching*. *13*(4), 260–274. https://doi.org/10.18844/ijlt.v13i4.5979

Received June 8, 2021; revised August 27, 2021; accepted October 12, 2021.
Selection and peer review under responsibility of Prof. Dr. Hafize Keser, Ankara University, Ankara, Turkey.

Abstract
The landscape of education is changing amidst the coronavirus pandemic, especially in public schools of which students are not used to remote learning. According to the goal theory, there is a relationship between goal difficulty, level of performance and effort. For this reason, this study surfaced the level of expectation, performance and stance of action of students amidst the pandemic. Data were gathered through a survey questionnaire via online using Google Forms. The survey questionnaire composed of the profile of the respondents, rating scale on the level of expectation and perceived performance of the students. The findings reflected the expectation, performance and action plan of the students of which these data can be used as baseline data for planning of programme and activities to help students not feel the difficulty of learning in distance learning.

Keywords: Expectation, performance, distance learning, senior high school, sentiments.

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1. Introduction

The situation in general education across the country has been in chaos due to the case of the coronavirus 2019 (COVID-19) pandemic (Basilaia & Kvavadze, 2020). As a result, educational leaders exert more effort in finding strategies and modalities so that education can still continue. Among others, one option that has been considered is technology integration (Avgerinou & Moros, 2020). According to Berenson, Boyles and Weaver (2008), some students say that online learning is beneficial, and for this reason, educators are trying to explore online courses. However, there are studies on online learning environments that prove that there are self-reported learning gains, improved social skills and greater engagement in the learning process (Gray & DiLoreto, 2016). On the side of teachers, according to Gray and DiLoreto (2016), teachers are expected to be experts in developing a class structure that stimulates social interaction and affirms rigorous academic standards, while fostering independent learning skills (Muirhead, 2004, cited by Gray & DiLoreto, 2016). They relate that if the teachers lack the technological skills to develop engaging courses, then course designers may be considered to provide additional training, support and guidance (Vargas, 2014, cited by Gray & DiLoreto, 2016).

In terms of the viability of the online classes, according to Reese (2015), controversy will rest as to whether this educational option is viable for both instructors and students. She further suggested that in online classes learners need collaboration, freedom to create knowledge and an authentic audience in order to increase engagement, participation and activity (Rheingold, 2010, cited by Reese, 2015), suggesting that instructors in online environments should provide students with an experience which promotes both autonomy and community.

In the Philippines, especially in public schools, online classes are not usually practiced. This modality has been viewed as an alternative due to the COVID-19 pandemic, wherein the face-to-face setup is not possible due to the quarantine status of the area. In this premise, this study stands specifically in terms of expectation of students in distance learning and its relation to their academic performance.

2. Literature review

With the emergence of the knowledge economy and the ubiquity of the 'Internet of Things' in today's techno-centric world, digital competencies and literacies have become indispensable tools for the aspirations of people globally (Castells, 2009, cited by Sharma, Fantin, Prabhu, Guan & Dattakumar, 2016). According to Vonderwell and Turner (2005), the convergence of developments in technology instruction and pedagogy has stimulated a new paradigm for teaching and learning. A plethora of research related to online learning has dated back to the beginning of the 1980s and continues today. Powers and Rossman (1985) found that graduate students' satisfaction is related to both faculty–student interaction, peer interaction and a feeling of intellectual stimulation. Reigeluth (1999), cited by Fedynich, Bradley and Bradley (2015) reported that with the advent of online learning the role of teacher and students can interchange. The instructor becomes the facilitator rather than what has been traditionally called the 'sage on the stage!' The student and instructor have to share control of the learning.

Learning is as much a function of a person's emotional response to a learning environment as it is to the instructional method or classroom (Flood, 2003, cited by Berenson et al., 2008). The success of online students, however, has been primarily investigated in terms of student ease with computer technology or satisfaction with the programme rather than intrinsic characteristics such as self-directedness, self-motivation, emotional self-regulation or persistence (Gallagher, 2002, cited by Berenson et al., 2008). Moreover, emotional characteristics that have been linked to online success include persistent effort, internal locus of control and self-efficacy.

Considerations of educational resilience are often linked to successful student participation, retention and outcomes in higher education, despite the challenges, the 'invisible fences' (O'Rourke, 2008) or environmental risks (Jeurissen, 2015; Masten & Obradovic, 2006) experienced. The inverse may also be erroneously assumed in cases of attrition in distance education: a student has somehow lacked the resilient qualities or characteristics necessary for the successful completion of distance learning. Framing resilience in terms of either a personal attribute or deficit without considering the context and communities within which that distance learner is embedded is flawed, as an individual's responses cannot be dissociated from the context within which they are located. This paper builds on the notion that educational resilience in distance higher education is the quadripartite responsibility of the key stakeholders. This involves not only the student, but also their educators, the institution and the student's broader social community (Willems, 2010). The considerations of educational resilience are often linked to successful student participation, retention and outcomes in higher education despite the challenges (Masten & Obradovic, 2006, cited by Jeurissen, 2015). While there have been many studies about student engagement in online learning environments, studies described student self-reported learning gains, improved social skills and greater engagement in the learning process. Chen, Lambert and Guidy (2010), cited by Gray and DiLoreto (2016) further explored the effects of student engagement based upon the items on the National Survey of Student Engagement (NSSE) instrument (2008). As students are expected to work more collaboratively with classmates, students' perception of their engagement in their learning and participation in courses increased (Duderstadt, Atkins & Hoeweling, 2002; Thurmond & Wambach, 2004).

Online learning has evolved from web-based, distance learning programmes and has come to represent the leading edge in rethinking course design and personalised instruction using digital content and innovative tools for instructional delivery. This is evidenced today by expanded access to courses, content and innovative instructional practices. Online learning harnesses technology to transform what is possible in teaching and learning. These new learning models are designed to enable richer student–teacher communication and interaction, either synchronous or asynchronous, and optimise each student's learning experiences through robust personalised learning. Still, today, for many students across the country where courses are unavailable in their schools, online learning represents the only viable means of providing high-quality course options within their district or schools (Powell et al., 2015). Online learner satisfaction primarily relates to their ability to learn from online content, interact and communicate from others, and understand needs for success (Palmer & Holt, 2009). This finding features the structure component of the TD theory and reveals the relationship between the structure and the satisfaction (Horzum, 2007, cited by Horzum, 2017).

Controversy rests in whether this educational option is viable for both instructors and students. Research that supports the growth of online learning, suggesting that today's learners need collaboration, freedom to create knowledge and an authentic audience to increase engagement,

participation and activity (Rheingold, 2010, cited by Reese, 2015). This suggests that instructors in online environments should provide students with an experience that promotes both autonomy and community. According to the goal theory, subjective purposes and achievement goals differentially influence school achievement (Covington, 2000) and since distance learning is new to all public schools, this study surfaced the expectation, performance status and sentimentality of the students during SCLP through the research questions below.

3. Research questions

3.1. Quantitative

1. What is the profile of the respondents?

2. What is the self-expectation level of students during SLCP?

3. What is the perceived performance status of students during SLCP?

4. Is there a significant difference between the self-expectation level of students on their performance and their perceived performance status of students during SLCP?

Is there a significant relationship between self-expectation level and the perceived performance status of students in terms of their performance during SLCP?

Ho1: There is no significant difference between the self-expectation level of students on their performance during and their self-assessment of students on their learning performance status during SLCP.

Ho2: There is no significant relationship between self-expectation level and self-assessment of students in terms of their performance; and their profile of students during SLCP.

3.2. Qualitative

1. What are the experiences and expectations of students in the implementation of the School Learning Continuity Plan?

    1.1. What are the expectations of students on SLCP? (Q3)

    1.2. What are the students' comments about their expectations? (Q4)

    1.3. What are the plans of action of students after the SLCP? (Q5)

4. Scope and delimitation

The purpose of this research is for school planning and guidance programme; hence, this is a school-based research project of which the sampling is based on the availability of the respondents

due to pandemic situation. Also, the analysis focuses only on the expectation and performance status and sentiments of the students during the SLCP.

5. Research methods and materials

Qualitatively, a descriptive research method was utilised to describe the characteristics of the population or the phenomenon (Rajan, Cherupushpam, Saleem & Jithu, 2016). Sentiment analysis was used to analyse the sentiments of the students in remote learning. Sentiment analysis allows us to categorise, structure data, identify patterns and discover recurring topics and concerns (Bakshi, Kaur, Kaur & Kaur, 2016). According to Pang and Lee (2008), sentiment analysis is more on classifications that encompasses regression and ranking. Specifically, the following procedures are as follows: (1) survey the documents and carry out the textual unit analysis by reviewing how positive and negative are the collection of text in a document (sentiment analysis classifier); (2) mark or code words that imply sentiments; (3) group words that have similar meanings; (3) categorise the collected words that imply sentiments according to the level of sentiments (how positive and how negative it is?); and (4) rank the sentiments per category to see the extent of the sentiments.

5.1. Sampling

The respondents are from and within the institution of Taytay Senior High School, and the sampling procedure will be based on theoretical sampling, data saturation and comparative analysis (Kenny & Fourie, 2015). A total of 177 respondents from Grade 11 and Grade 12 students participated in this study.

5.2. Data collection

5.2.1. Survey questionnaire/open-ended question

Data were gathered through a survey questionnaire online using Google Forms. The survey questionnaire composed of the profile of the respondents, rating scale on the level of expectation, perceived performance of the students during SLCP and open-ended questions for students to reflect on whether they are not happy with their expectations and performances, and what would it be?

5.3. Ethical issues

The researcher will observe confidentiality of information and anonymity of the respondents are strictly observed.

5.4. Plan for data analysis

Data were analysed quantitatively for the survey questionnaire using XLStat utilising central tendency and analysis of variance (ANOVA); and qualitatively for the open-ended questions through unit analysis and online sentiment analysis classifier (https://monkeylearn.com/blog/sentiment-analysis-applications/).

6. Results

Quantitatively and qualitatively data are presented as per the research questions:

6.1. Quantitative

1. What is the profile of the respondents?

Table 1. Profile of the respondents

	f	%
Gender		
Male	73	58
Female	104	42
Grade level		
G11	140	79.1
G12	37	20.9
Academic performance		
91 above	35	19.8
86–90	44	24.9
81–85	45	25.4
75–80	45	25.4
75 and below	8	4.5

Table 1 describes the profile of the respondents specifically in terms of gender, grade level and academic performance of the students.

2. What is the expectation level of students during SLCP?

Table 2. Expectation level of students and distribution according to group

Groups	Count	Average	Variance
Male	73	2	0.585556
Female	104	1.990385	0.495829
(Grade 91–95)	35	1.708571	0.421983
(Grade 86–90)	44	1.845455	0.425793
(Grade 81–85)	45	2.093333	0.515636
(Grade 75–80)	53	2.222642	0.593324
G11	141	1.995745	0.535696
G12	36	1.988889	0.521016
ABM	20	1.91	0.654632
GAS	6	1.933333	0.714667
HUMSS	75	1.978667	0.476295
STEM	9	1.822222	0.394444
SPORTS	13	2.092308	0.930769
TVL	54	2.059259	0.506611
Always attended online classes	32	1.4125	0.208871
Most of the time attended online classes	33	1.866667	0.291667
Sometimes attended online classes	101	2.180198	0.560404

Never attended online classes	11	2.363636	0.502545
	Mean	1.97	

Interpretation: 1–2, Low expectation; 2.1–3, Moderate expectation; and 3.1–4, High expectation.

Table 2 shows a summary of the expectation levels of students and how their expectations differ within the group. The average expectation level of students according to Table 2 is 1.97 which is interpreted as a low expectation. It is also shown in the table that the group who 'Never attended online classes' had the higher expectation level (2.36).

3. What is the perceived performance level of students during SLCP?

Table 3. Perceived status of students and distribution according to group

Groups	Count	Average	Variance
Male	73	2.495641	0.602167
Female	104	2.537587	0.674334
(Grade 91–95)	35	2.257143	0.654101
(Grade 86–90)	44	2.438017	0.702392
(Grade 81–85)	45	2.440404	0.513883
(Grade 75–80)	53	2.830189	0.571849
G11	141	2.509349	0.591839
G12	36	2.364745	0.108309
ABM	20	2.577273	0.91194
GAS	6	2.787879	0.431956
HUMSS	75	2.527273	0.645522
STEM	9	2.525253	1.34045
SPORTS	13	2.524476	0.636576
TVL	54	2.457912	0.501158
Always attended online classes	32	1.911932	0.676345
Most of the time attended online	33	2.752066	0.451071
Sometimes attended online classes	101	2.593159	0.568032
Never attended online classes	11	2.92562	0.472427
	Mean	2.52	

Interpretation: 1–2, Less ok; 2.1–3, Somewhat ok; 3.1–4 ok; and 4.1–5, confidently doing ok.

According to Phan, McNeil and Robin (2016), it is critical to the student's success with their expectation especially in self-regulation in learning. This posits the true expectation level of the students of which students in Taytay Senior School have a low expectation, which is manifested in the performance status of the students, with an average of 2.52 out of 5 points, which is interpreted as 'Somewhat ok'.

4. Is there a significant difference between the self-expectation level of students on their performance and their perceived performance status of students during SLCP?

Table 4. ANOVA of the expectation and performance status of the respondents

ANOVA Source of variation	SS	df	MS	*F*	*p*-value	Verbal interpretation
Between groups	25.67	17	1.51	2.55	0.0005	Reject the null hypotheses

*Significant level of 0.05.

A *p*-value of 0.0005 showed that there is a significant difference within groups in relation to students' expectation level and performance status during SLCP.

5. Is there a significant relationship between self-expectation level and the perceived performance of students in terms of their performance during SLCP?

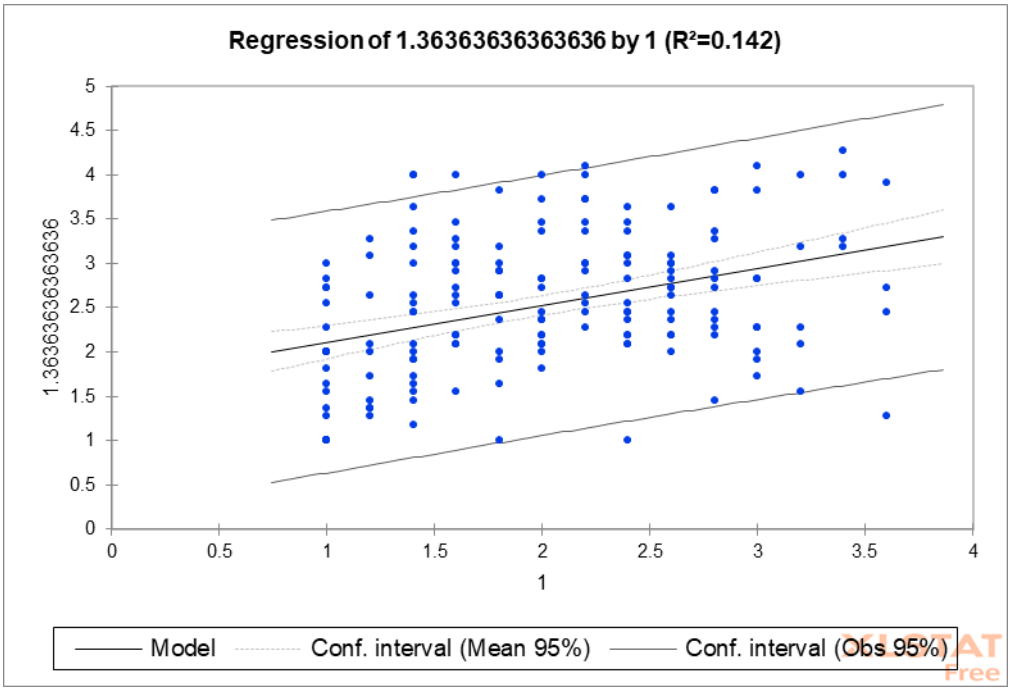

Figure 1. Regression chart of students' expectation and performance

Figure 1 shows the regression chart of the expectation and performance status of students during SLCP; it shows that it is a less dense scattered plot meaning that the correlation is not significant. This is validated by the *r*-value of 0.372, which is interpreted as low positive correlation.

6.2. Qualitative

1. What are the experiences and expectations of students in the implementation of the School Learning Continuity Plan?

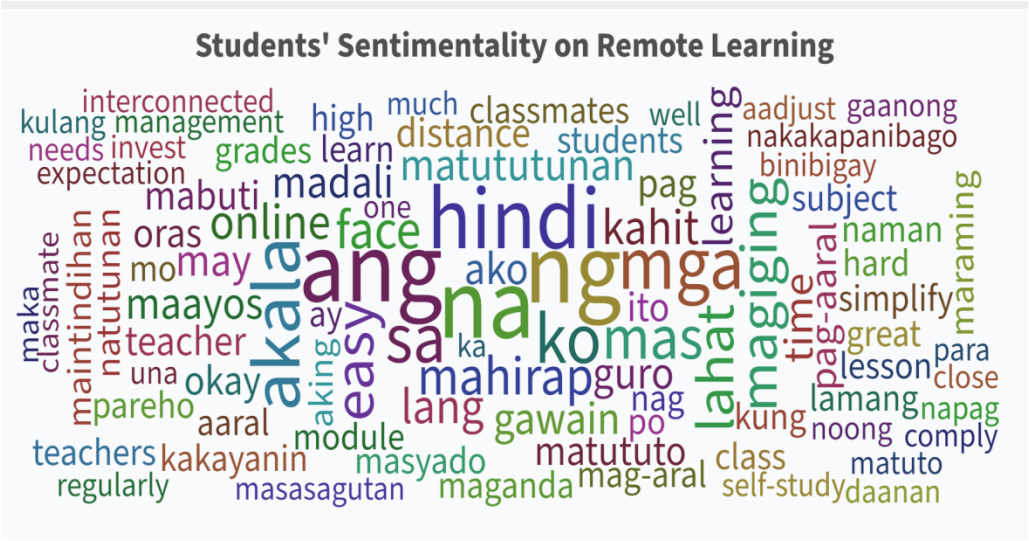

Figure 2. Unsorted sentiments of the students on remote learning

Figure 2 shows word cloud of the sentiments of the students regarding remote learning. The font size corresponds to occurrence or how many times it is mentioned by the respondents. In the word cloud, the 'mahirap-hard', 'easy', 'akala-wish' and 'gawain-task' are the most mentioned sentiments of the students.

1.1. What are the expectations of students on the SLCP?

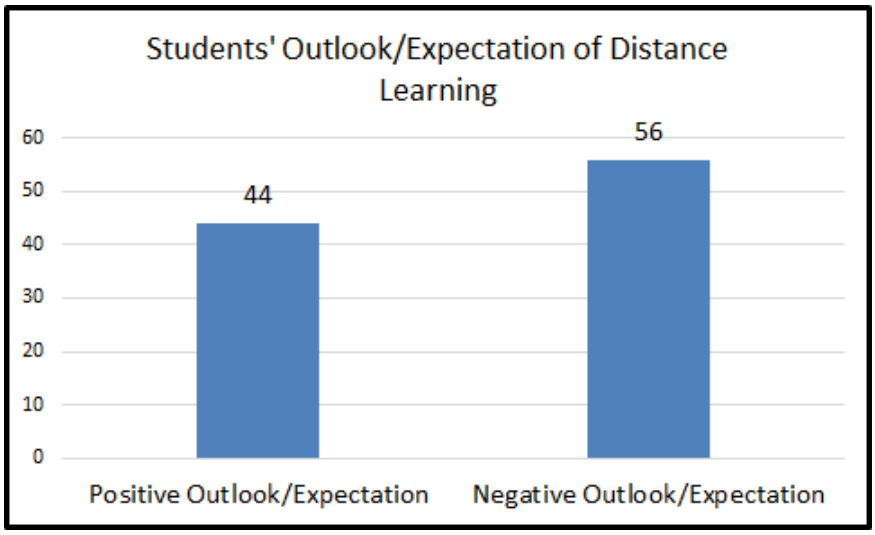

Figure 3. Distribution of positive and negative sentimentality of students in percentage

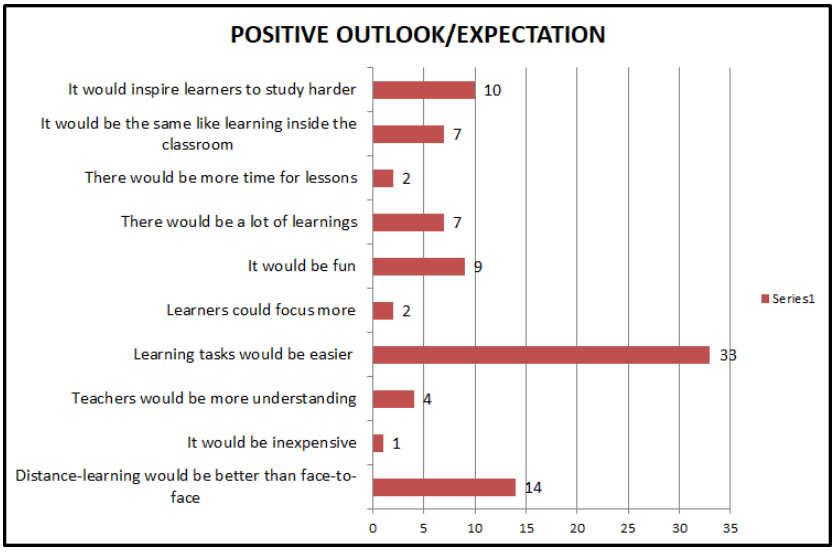

Figure 4. Distribution of positive sentiments of students in frequency

Figures 3 and 4 show graphs of the positive outlook of the respondents towards the school's blended distance learning. A total of 14 respondents viewed this modality better than face-to-face classes; 1 said it would be inexpensive as they will just work from home; 4 said their teachers would be more understanding; 33 expected learning would be easier than the usual; 2 said they could focus

more; 9 expected it to be more fun; 7 believed that there would be more learning; 2 said there would more time for lessons; 7 expected it to be just the same like learning inside the classroom; and 10 expected it to be challenging but inspiring.

6.2.1. Positive outlook

The following excerpts were taken from the online survey responses of the respondents:

… Mas maintindihan o maaral ng mabuti ang bawat lesson (Each lesson is better understood or studied).

… lahat ng mga guro sa distance learning na ito ay may mahabang pag unawa sa mga estudyante (all teachers in this distance learning are more understanding/considerate to students).

… mas onti lang yung gawain at hindi masyadong makain sa oras (it's just less work and not too time-consuming).

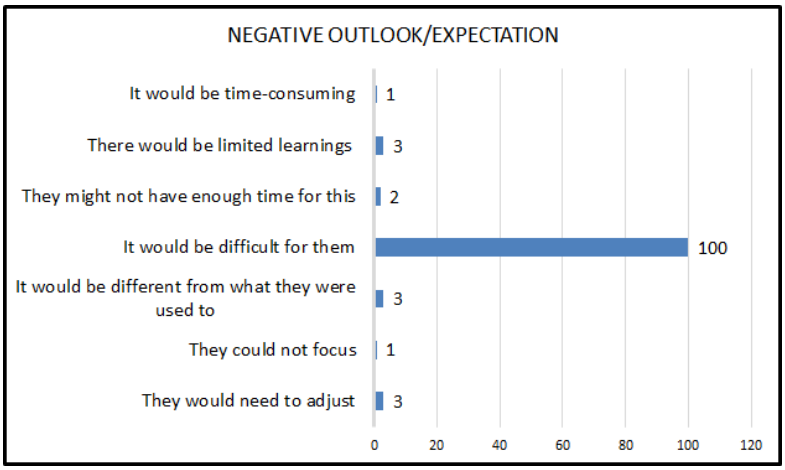

Figure 5. Distribution of negative sentiments of students in frequency

Figure 5 shows a graph of the negative outlook/expectation of the respondents on distance learning. The highest total of 100 respondents said they expected it to be difficult because they would work from home; 3 said they would need to adjust to adopt to the new system; 1 expected that he/she could not focus more; 2 expected that they would not have enough time for this; 3 were afraid that they would not learn more; and 1 expected it to be time-consuming.

6.2.2. Negative outlook

The following excerpts were taken from the online survey responses of the respondents:

… *hindi masyado nakapagfocus* (can't focus very well).

… *hindi gaano maintindihan* (can't hardly understand the discussion).

… *kulang sa oras* (time is not enough).

The notable finding of this study about online learning as a difficult one is also highlighted in the study of Simamora (2020), which shows that there are tasks in which online learning is sort of difficult; it requires efforts that involve recording, such as reading, memorising and accessing online-based learning media.

1.2. What are the students' comments about their expectations?

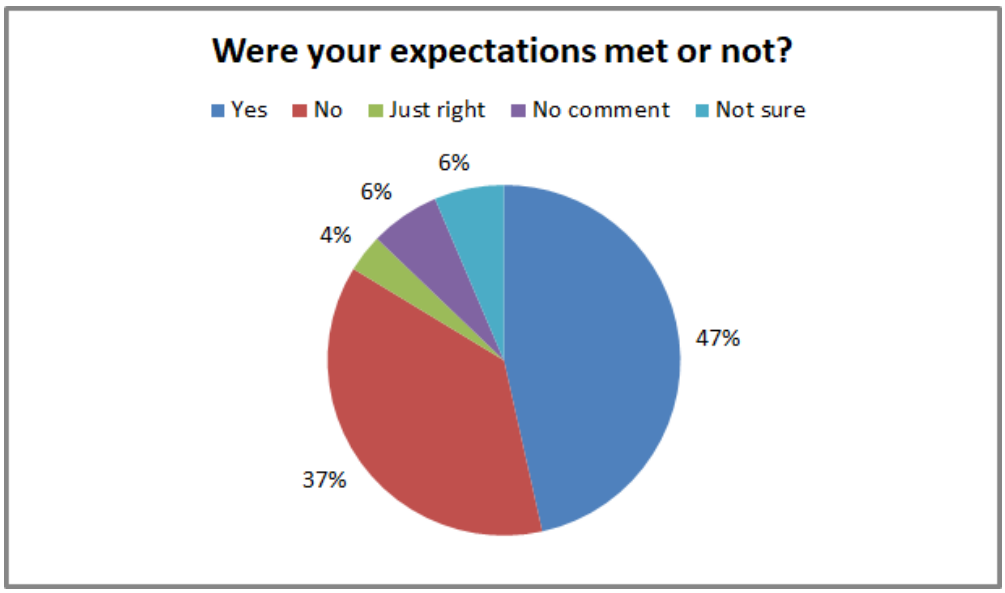

Figure 6. Distribution of perceived expectation outcome of students in percentage

The pie graph shows the respondents' answers whether their expectations before implementation of distance learning were met or not (Figure 6). A total of 80 (47%) respondents claimed that their expectations were met, while 64 (37%) of them said their expectations were not met. A total of 6 (4%) respondents said their expectations were met just right, 11 (6%) left no comment and 11 (6%) were not sure if their expectations were met or not.

1.3. What are the plans of action of students after the SLCP?

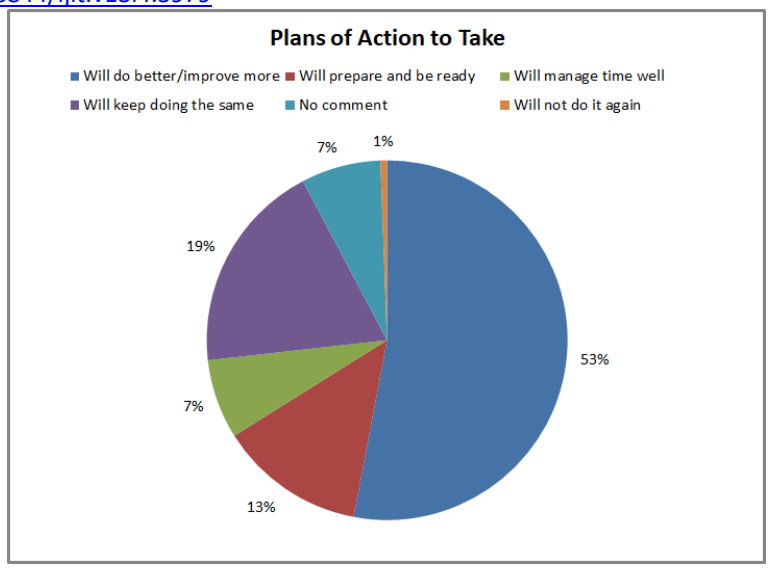

Figure 7. Distribution of the plan of action of students in percentage

The pie graph shows the respondents' actions to take should they be in the same situation for their class (Figure 7). A total of 89 (53%) respondents said that they would do better to improve their performance; 22 (13%) said they would prepare and be ready for their lesson; 12 (7%) said they would manage their time well; 32 (19%) said they would just do the same just like how they did in their previous distance learning; and 12 (7%) left no comment. Sadly, 1 (1%) answered that he/she would not do it anymore.

The following excerpts were taken from the online survey responses of the respondents:

… *magiging determined sa lahat ng bagay* (will be determined in all things).

… *Mas magiging handa* (be more prepared).

… *Tuloy lang sa pag-aaral* (just keep learning).

7. Discussion of the results and recommendations

In the study of Abdous (2019), demographics, such as gender, year level and online students, predicted online students' sentiments. While student expectations regarding the time and space of online learning, self-motivation and the role of others, including fellow students and the teacher, are related to the study of Landrum, Bannister, Garza and Rhame (2021). In a study, Yeh (2019) posits that supportive online learning behaviours and eventually predicted students' performance expectations are also a factor (Yeh et al., 2019). In addition, Yeh (2019) found out that students with higher goals were less likely to adopt adequate learning strategies and supportive online behaviours and had lower grade expectations in the online learning environment (Yeh et al., 2019). These findings are similar

and interrelated to the findings of this study. Simamora (2020) posited that student's perceptions regarding their motivation, self-expectations and online learning are related to the fulfilment or failure in their online learning.

Hence, as per other research studies, goal orientation (Yeh et al., 2019) and other principles related to improving engagement and academic performance of students in a remote learning environment should be organised and planned and programmes such as orientations and capacity building or seminars on online learning and other aspects, such as career guidance, should be conducted.

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