Knowledge, Attitudes, Beliefs, and Student's Academic Performance on Dynamic learning Program

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Abstract: The study aims to assess the students' level of knowledge, attitudes, beliefs, and academic performance in a dynamic learning program (DLP). The Dynamic Learning Program (DLP), which is based on activity-based multi-domain learning, requires students to work independently in order to read the concept notes and complete the exercises before the lesson is discussed and explained. This way, students can independently discover and understand the lesson. Students learn more by acting than by merely listening, according to the theory. This study utilized descriptive statistics to determine the students' level of knowledge, attitudes, beliefs, and academic performance. The Pearson Product Moment Correlation Coefficient and multiple-linear regression were both used to determine which variable or variables, alone or in combination, best predict students' academic achievement in mathematics. This study was conducted at Pangantucan Community High School, Pangantucan, and Bukidnon. The respondents of this study were the 120 grade-11 students who were exposed to Dynamic Learning Program. The results of this study shown that the students are highly knowledgeable about DLP, and this teaching methodology was highly accepted and valued by the PCHS students. The academic performance of the students is above the average, it implies that the students who were exposed to dynamic learning programs have a good performance in their mathematics subject. However, the Pearson product-moment correlation showed that the student's knowledge, attitude, and beliefs on Dynamic learning Program was not significantly correlated to their academic performance. And also, in the multiple-linear regression results showed that students' knowledge, attitudes, and beliefs on dynamic learning couldn't predict the academic performance of the students in their mathematics subject during modular distance learning modality.

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Keywords: dynamic learning program, academic performance, knowledge, attitude, beliefs

1. Introduction

Due to COVID-19, the learning modality has changed. COVID-19 pandemic caused the learning modality shifted from face-to-face to distance learning.One of the learning modalities in the new normal is the modular distance learning. Where students are struggling in learning mathematics topic by merely reading it in the provided modules. This learning modality causes difficulties to the students in learn the concepts, because the teachers couldn't discuss the topics physically. Parents collaborate with teachers in the classroom since education is no longer confined to the school setting. As home facilitators, parents are extremely important. Their main responsibility in modular learning is to connect with and mentor their children (FlipScience, 2020).

Independent study is encouraged by the usage of modules. The development of improved self-study or learning skills among students is one advantage of employing modules for instruction. The principles covered in the curriculum are actively learned by the students. By completing the tasks outlined in the module, they gain a sense of responsibility. The students advance on their own with little to no help from others. They are becoming empowered and learning how to learn (Nardo, M.T.B, 2017). The situation and students' ways of thinking are fairly similar in today's learning modality and the Dynamic Learning Program.

The Dynamic Learning Program (DLP) is an activity-based curriculum that demands students work independently to read the concept notes and complete the exercises before the lesson is addressed and presented. This way, students can independently find and grasp the lesson. Exercises last for around forty minutes before the instructor begins to go over the lesson. Students are only encouraged to ask questions to deepen their understanding of the topic during this time. Students learn more by acting than by merely listening, according to the theory. The instructor facilitates and oversees all activities in the classroom, ensuring that all work is completed by the students themselves. On the other hand, parents receive extensive guidance on every aspect of the activities through the student portfolios. The process of the said program where the teachers talk less and let students work on their own allows the brains to massage the knowledge before sending them to the storing memories (Hussein, 2013). The teacher balances students' interests in the subject matter and evaluates their efforts based on their learning capacity. Dynamic Learning program was originated in Jagna, Bohol. This program was developed by Dr. Christopher Bernido and Dr. M. Victoria Carpio-Bernido at the Central Visayan Institute Foundation (CVIF) High School, in Jagna (Bohol), Philippines. The approach, which also includes parallel classrooms, portfolio-based notes, and a no-homework policy, has been adopted by numerous schools. In order for student performance to be significantly less dependent on teacher and peer personalities, as well as national and international policies, it primarily focuses on establishing the learner's biological and intellectual propensity for continuous engagement. It is crucial to strategize and implement the idea of a good school inside the classroom (Bernido, 2020).

Knowledge is a highly valued state in which a person is in cognitive contact with reality (Zagzebski, 2017).Knowledge refers to facts, information, and skills acquired by a person through experience or education, the theoretical or practical understanding of a subject. In the stuty of Basilio (2012) stressed that DLP reveals that there is a significant in the post-test scores between students with no exposure and those who were exposed to DLP for one year. The post-test score is higher for students who were exposed to DLP than for those with no exposure. This implies that DLP is an effective approach to teaching mathematics. The students who were exposed to DLP will eventually perform well in mathematics. In addition, the primary focuses of DLP is letting students do, think, and learn with the interaction of individuals in the classroom environment, it will help them to gain more knowledge of mathematics and develop their problem-solving skills independently.

According to Anghelache (2012), attitude refers to the personality trait exhibited in a person's behavior toward others and specific situations. It is positioned at the personal level, making mentalities a community feature. Several studies shown that the students' attitude will affect their performance in mathematics. According to Ebele (2017), skill development was more prominent in kids who had a positive attitude toward school because of its relationship with usual classroom objectives and drill routines. This tells us that if students' attitudes toward DLP build a positive attitude to mathematics, then it will affect their performance in mathematics.

There are various roots for beliefs. For instance, receiving information from a reputable or authoritative source or direct experience can both lead to the development of beliefs (Hughes and Sims, 1997; Langdon, 2013). The students' mathematical beliefs have long been a focus of research in mathematics education, because of their link to emotion and motivation (McLeod, 1992; Middleton, Jansen, & Goldin, 2017). In the study of Rincon et al. (2020), shown that there is a significant positive relationship between student's beliefs about mathematics and their academic performance. This implies that if students believe that DLP will assist them to change their mathematical beliefs, then it will help them to improve their academic performance in mathematics.

Academic performance refers to the knowledge acquired and measured by a teacher's marks as well as any educational objectives set by students and teachers and to be attained over a predetermined period of time (Narad and Abdullah, 2016).They added that these goals are measured by using continuous assessment or examination results.

Therefore, this study aims to determine if the knowledge, attitudes, and beliefs of the students about the Dynamic Learning Program are related to their academic performance, considering modular distance learning, where the students are learning through printed modules. Lastly, this study aims to assess if the dynamic learning program approach promotes independent learning, especially in mathematics subjects.

2. Materials and Methods

The study assessed the students' knowledge, attitude, beliefs, and academic performance on the implementation of dynamic learning program of Pangantucan Community High School for S.Y. 2021-2022. The study utilized descriptive survey research design to gather quantifiable information on the knowledge, attitudes, and beliefs on the Dynamic Learning Program of the senior high school students. The reseachers were used adapted survey questionnaires that were answered by the 120 respondents of the study.The researchers utilized survey questionnaires to measure the level of students' knowledge, attitudes, and beliefs on the Dynamic Learning Program with 14, 14, and 10 items, respectively.

The data collected were tabulated and analyzed using appropriate statistical tools using the software. One of these statistical tools that the researchers were used is the Descriptive statistics like mean, standard deviation, frequency, and percentage to answer the questions on the descriptive levels. Another statistical tools is the Pearson product-moment correlation coefficient was also used to assess if there is a significant difference between independent variables and the students' academic performance in a Dynamic Learning Program. Lastly, the multiple-linear regression was employed to determine which variable/s, single or in combinations, predicts students' academic performance in Mathematics.

3. Results and Discussions

The data gathered from the respondents, which are important for testing the study's hypotheses, are analyzed and interpreted in this section. The tables and other figures are also shown in this chapter to give a convenient for the data.The presentation is organized in accordance with the study's objectives.

3.1 Students' Level of Knowledge about the Dynamic Learning Program

Table 1 shows the students' knowledge on Dynamic Learning Program, which had an overall mean of 3.33 which can describe as "always", which means students are highly knowledgeable about the said program.

The highest items are "The role of a teacher in dynamic learning program is a facilitator, coach, and mentor" ($\overline{X} = 3.72$), "Classroom should be places where knowledge and ideas get generated"($\overline{X} = 3.62$), "learning dynamic learning program will enhance mastery" ($\overline{X} = 3.50$), "dynamic learning program should be more on hands-on activities" ($\overline{X} = 3.48$), and "the students are free to learn in alignment with his or her strengths and weaknesses" ($\overline{X} = 3.45$), interpreted as " always." Meanwhile, the lowest items are "students are more comfortable learning mathematics when it is taught using dynamic learning program" ($\overline{X} = 3.13$) and "dynamic learning program helps students learn mathematics easily" ($\overline{X} = 3.06$), both interpreted as "Often."

Conspicuously, all the items range from knowledgeable to highly knowledgeable, with no item to be evaluated as not knowledgeable. As a component, it scored a mean of 3.42, which is interpreted as "Highly knowledgeable." Therefore, students' knowledge about Dynamic Learning Program is evident. In light of the positive evaluations of the other items, it can be concluded that students at PCHS have sufficient knowledge of the learning process in a dynamic learning program. They are aware of both their own role as learners and the role of the teacher in the learning process under the implementation of a dynamic learning program (DLP).

Table 1. Students' Level of Knowledge about the Dynamic Learning Program

Indicators	$\overline{X}$	Descriptive Rating	Interpretation
I am aware that…			
the role of a teacher in a dynamic learning program is a facilitator, coach, and mentor	3.72	Always	HK
the classroom should be a place where knowledge and ideas get generated	3.62	Always	HK
learning dynamic learning program will enhance mastery	3.50	Always	HK
dynamic learning program should be more on hands-on activities	3.48	Always	HK
I am free to learn in alignment with my own strengths and weaknesses	3.45	Always	HK
dynamic learning program should put more emphasis on the practical	3.44	Always	HK

application of knowledge			
dynamic learning program should be characterized by an individualized learning	3.40	Always	HK
the use of the Dynamic Learning Program help students develop their higher-order thinking skills in mathematics	3.34	Always	HK
students improve their cognitive skills faster and better when mathematics is taught using dynamic learning program	3.32	Always	HK
the Dynamic learning program uses digital technologies to have access and interaction to unlimited sources of information	3.31	Always	HK
the students can pick and choose the modules, programs, space, and pace of learning	3.28	Always	HK
Students can learn mathematics faster and better when it is taught using dynamic learning program	3.25	Always	HK
students are more comfortable learning mathematics when it is taught using dynamiclearning program	3.13	Often	K
dynamic learning program helps students learn mathematics easily	3.06	Often	K
Overall mean interpretation	3.33	Always	HK

Legend:

Range	Descriptive Rating	Qualitative Interpretation
3.25 – 4.00	Always	Highly Knowledgeable (HK)
2.50 – 3.24	Often	Knowledgeable(K)
1.75 – 2.49	Sometimes	Less Knowledgeable (LK)
1.00 – 1.74	Never	Not Knowledgeable (NK)

The findings imply a high level of knowledge about the Dynamic Learning Program among the students of PCHS. The data indicate that the students are learning mathematics more independently. They rely on their own capacity for math learning. In contrast to listening to lectures or discussions, which frequently move along quickly, especially when teachers are under pressure to cover the prescribed scope of competencies, hand-copying slows down the learning pace and gives more time for deeper absorption and understanding of concepts and principles (Bernido and Bernido, 2020). Additionally, the Dynamic Learning Program was introduced as a new teaching strategy in all catholic schools covered by the Roman Catholic Bishop of Novaliches Educational System (RCBN-ES) in 2013. Despite difficulties in its execution, the curriculum has been shown to be highly beneficial over time, especially in terms of developing in students a passion of lifelong learning (Llego, 2014). Moreover, Bernido and Bernido (2020) emphasized that for most students, the daily practice eventually develops into a habit. Even if initially opposed, there is typically a turning point at which the students determine whether they enjoy it or not; whether they are aware of it or not; and many eventually find themselves enjoying learning as intellectual stimulation, especially since independent learning gives them more confidence. These made the students gain knowledge and insights as they experience the Dynamic Learning Program implemented in their school. This supports the results presented in Table 2 that the knowledge in DLP mentioned above is for the students who have an experience in learning mathematics using the Dynamic Learning Program teaching approach and they were described as "highly knowledgeable" with an average mean of 3.33 in which the students answered "Always" based on the survey.

3.2 Students' Level of Attitude towards dynamic learning program

The use of the Dynamic Learning Program in teaching mathematics improves students' attitudes towards it. It has contributed to developing students' positive attitudes towards the subject (Aloquina & Marpa, 2016). This supports the results shown in table 3 that the attitude of students mentioned above was qualitatively described as highly valued which contributed to developing students' positive attitude towards the Dynamic Learning Program with an average mean of 3.29 in which the students answered "Always" based on the survey. This coincides with Mensah et al., (2013), the teachers' teaching method has a major influence on students' attitudes.

Table 2. Students' Level of Attitude towards dynamic learning program

Indicators	$\bar{X}$	Descriptive Rating	Interpretation
I have…			
worked to understand the dynamic learning program	3.54	Always	HV
challenged myself to go beyond the limits of the classroom in experiencing the real world	3.47	Always	HV
improved my students' class attendance in the use of dynamic learning program	3.43	Always	HV
exposed myself to activities that boost me to become independent learner	3.42	Always	HV
helped myself express orally my responses to the questions related to the lesson in the use of dynamic learning program	3.39	Always	HV
given activities that increase my skills in analytical and critical thinking	3.39	Always	HV
improved my interest and participation in class activities and class discussion in the use of dynamic learning program	3.39	Always	HV
made myself an independent learner in dynamic learning program	3.38	Always	HV
the interest and willingness to deepen my knowledge on dynamic learning program	3.37	Always	HV
help others, especially those struggling in a dynamic learning program	3.35	Always	HV
enjoyed learning mathematics in a dynamic learning program	3.28	Always	HV
the activities in the learning activity sheets that motivate me to use other related references	3.28	Always	HV
loved learning mathematics in a dynamic learning program	3.25	Always	HV
authentic problems in the learning activity sheets that help me appreciate the usefulness of mathematics and its application to real-life problems	3.23	Often	V
Overall mean interpretation	3.47	.Always	HV

Legend:

Range	Descriptive Rating	Qualitative Interpretation
3.25 – 4.00	Always	Highly Valued (HV)
2.50 – 3.24	Often	Valued (V)
1.75 – 2.49	Sometimes	Less Valued (LV)
1.00 – 1.74	Never	Not Valued (NV)

Table 2 show students' attitude toward the Dynamic Learning Program. The attitudes of the students highlight how learners find and comprehend the lesson independently by reading the concept notes and by working through the activities prior to the subject being reviewed and explained. The items describe the positive attitude of the student respondents when beholding good mathematics performances by those within their setting, including teachers, peers, children, and even themselves. The findings determine this area of students' attitude to be "Highly valued" ($\bar{X}$ = 3.47), which indicates that students feel positive and valued in learning mathematics independently in the dynamic learning program setting. The highest item, "I have worked to understand the dynamic learning program" ($\bar{X}$ = 3.54), registers an interpretation of "Highly Valued", and the lowest item, "authentic problems in the learning activity sheets that help me appreciate the usefulness of mathematics and its application to real-life problems" ($\bar{X}$ = 3.23), is interpreted as "Valued."

The results imply that the positive attitude of the students of PCHS toward the subject can acquire positive experiences or events with mathematics. Furthermore, the data reveal that using the Dynamic Learning Program in math lessons has helped pupils acquire a positive attitude toward the subject. Therefore, PCHS students' attitudes are important in their maths learning in the dynamic learning program setting. These results align and are supported by older studies mentioned by Capuno et al. (2019) as they said that the attitudes and study habits of the respondents are significant factors that affect their performance in math. Moreover, these attitudes and study habits need to be improved to enhance the students' performance in mathematics. Besides, the student's participation in the school activities needs to be monitored and considered, since this could be another factor that would affect the respondents' performance in mathematics.

In the study of Aloquina and Marpa (2016), they claimed that high school students firmly believed they had acquired a favorable attitude toward mathematics and that their use of DLP in mathematics classrooms had helped them advance their cognitive abilities. Furthermore, according to Mensah et al (2013) students can acquire a good attitude towards Mathematics since he or she learns to correlate positive experiences or events with it.Positive reinforcement also paves the way for the development of a favorable attitude toward mathematics. Afari et al. (2013) also looked into the effect of using math games on college students' attitudes about learning math. Students' attitudes toward learning mathematics and their perceptions of the learning environment were evaluated using a pre-post design method. The correlation showed that the more positive the attitude, the higher the level of achievement in the student (Maria de laurdes Mata et al, 2012).

3.3 Students' Level of Beliefs in the Dynamic Learning Program

Academic self-concept refers to one's beliefs about one's own academic abilities or the cognitive representation of one's own academic abilities (Marsh et al. 2014). This supports the results shown in table 4 that the beliefs mentioned above were qualitatively described as highly accepted to be the students' academic self-concept towards the Dynamic Learning Program with an average mean of 3.47 in which the students answered "Always" based on the survey.

Table 3. Students' Level of Beliefs in the Dynamic Learning Program

Indicator	$\bar{X}$	Descriptive Rating	Interpretation
I believe that…			
learning should be focused on the learners	3.75	Always	HA
learning should be my responsibility	3.73	Always	HA
learning should be learner-centered	3.61	Always	HA
strategic rest is important for us, the learners	3.51	Always	HA
dynamic learning program empowers me to structure individual paths keeping in mind the final outcome	3.46	Always	HA
I should possess complex problem solving and critical thinking skills to prepare myself for real- life problems	3.38	Always	HA
learning should be demonstrated by the learner	3.38	Always	HA
I should be a creator of knowledge	3.33	Always	HA
I can utilize technologies at my own preferences for my personalized learning experiences	3.33	Always	HA
I construct my knowledge on my own, peers, and experts	3.18	Often	A
Overall mean interpretation	3.33	Always	HA

Legend:

Range	Descriptive Rating	Qualitative Interpretation
3.25 – 4.00	Always	Highly Accepted
2.50 – 3.24	Often	Accepted
1.75 – 2.49	Sometimes	Less Accepted
1.00 – 1.74	Never	Not Accepted

Table 3 shows the belief of high school students toward the Dynamic Learning Program. Students' beliefs are emphasized by personal judgment about their experiences in DLP during the pandemic. The findings determined this area of students' belief to be " Highly valued" ($\bar{X}$ = 3.33) which indicates that student's beliefs profound influence their academic performance in learning mathematics and accept Dynamic Learning Program as a program centered on activity-based multi-domain learning that requires students to work independently, to discover and understand the lesson. The highest item, "I believe learning should be focused on the learners" ($\bar{X}$ = 3.75), registers an interpretation of "Highly Valued" and the lowest item, "I believe I construct my knowledge on my own, peers and experts" ($\bar{X}$ = 3.18), is interpreted as "Accepted."

The findings implicitly agree with the study of G. A. Rincon et al (2020) on the existence of a relationship between students' beliefs about mathematics and their academic performance, indicating that the greater or better the perception of beliefs about mathematics, the better the academic performance and vice versa, academic achievement is also perceived as being at a lower level. It turns out that there is a strong correlation between students' academic achievement and their beliefs about mathematics.

These findings in high school students' views may influence their effort; tenacity, motivation, and goal were supported by studies (Schunk & DiBenedetto, 2014; Usher & Pajares 2008). Numerous studies have demonstrated a strong association between student mathematics achievement and their beliefs about mathematics (e.g., House, 2009; Lay, Ng, & Chong, 2015). Indeed, affective and noncognitive factors such as beliefs, emotions, values, and attitudes must be considered when teaching and learning mathematics (Cai et al., 2017; Clarkson, et al., 2010; Leder, 1993; Moyer, et al. 2018; Pepin & Roesken-Winter, 2015). Additionally, according to Polintan (2013), students can concentrate more on their academic work and participate more in individual and cooperative learning through The Dynamic Learning Program.

3.4 Students' Level of Performance in the Dynamic Learning Program

The academic performance of PCHS students in the second grading of S.Y. 2021 – 2022 during flexible learning is shown in Table 4. Table 4 reveals students' mathematics performance using score percentage, frequency, qualitative descriptions, and the overall mean.

Table 4. Frequency counts, percentage, and descriptive equivalence of students' performance in mathematics in the Dynamic Learning Program

Student Performance Range	Frequency	Percent	Descriptive Equivalence
90% – 100%	27	22.50	Exemplary
85% – 89%	48	40	Above Average
80% – 84%	34	28.33	Average
75% – 79%	11	9.17	Below Average
65% – 74%	0	0.00	Deficient
TOTAL	120	100	
$\bar{X}$ = 86.18			Above Average

Percent Equivalent	Description	Interpretation
90% – 100%	Very High Performance	Exemplary
85% – 89%	High Performance	Above Average
80% – 84%	Moderate Performance	Average
75% – 79%	Low Performance	Below Average
65% – 74%	Very Low Performance	Deficient

Only 11 out of the 120 respondents received grades below 79, while all 109 had grades of 80 or higher. The table indicates that forty-eight (48) students (40 percent) have above-average performance, while twenty-seven (27) students (22.50 percent) have excellent performance. Meanwhile, thirty-four (34) students (28.33%) showed an average performance, eleven (11) students (9.17%) got a reasonably below-average performance, and none students were deficient. The overall mean grade is 86.18, which can be interpreted as "above average."

The result implies that the Senior High Students in PCHS perform very satisfactory in Mathematics in the Dynamic Learning Program during Modular Distance Learning. The data also imply a relatively good academic performance among the students of PCHS. According to the study entitled " The Effects of Dynamic Learning Program on the Performance of the Students and Teachers of Colegio de San Bartolome de Novaliches," the DLP works with the students with more learning and focuses more on academic studies. The DLP was implemented in CSBN to help the students to become proud of themselves because they know that they learn a lot of things inside of the school. Based on the survey, about 88% of the respondents can cope and are in good condition in this new learning program (Polintan 2013; Abegonia 2016).

Correlation analysis of knowledge, attitudes, beliefs, and student's academic performance in the Dynamic Learning Program

This section discusses the degree to which the knowledge, attitudes, and beliefs of the independent variable have an impact on students' academic performance in the Dynamic Learning Program in Modular Distance Learning.

Table 5. Correlation analysis of knowledge, attitudes, beliefs, and student's academic performance in the Dynamic Learning Program

Indicators	Correlation Coefficient	Probability
Knowledge	0.110	.117ns
Attitudes	0.056	.272ns
Beliefs	.091	.161ns

**Correlation is significant at the 0.01 level (2-tailed).
*Correlation is significant at the 0.05 level (1-tailed).
ns not significant

As shown in Table 5, correlation results show that there is not enough evidence at the 0.05 level to conclude that there is a linear relationship between students' academic performance, knowledge, attitude, and belief in DLP. Students' knowledge of DLP (r=0.110) showed a negligible correlation relative to students' academic performance. At the same time, student's attitudes (r=0.056; negligible association) and beliefs (r=0.091; negligible association) in DLP are also seen to have a negligible correlation to academic performance.

The results imply that students' academic performance in mathematics is not correlated with the knowledge, attitude, and beliefs of the students in the Dynamic Learning Program. Due to the pandemic, the implementation of the Dynamic Learning Program is also affected, because it is only more effective on face-to-face learning modality. The impact of DLP on students' academic achievement in mathematics varies as they move from face-to-face to modular distance learning. In contrast to listening to lectures or discussions, which frequently move along quickly, especially when teachers are under pressure to cover the prescribed scope of competencies, Bernido and Bernido (2020) claim that manually copying slows down the learning pace and gives more time for deeper absorption and understanding of concepts and principles. Mueller and Oppenheimer (2014) argue that even when computers are only used to take notes, they may still be hindering learning since their use results in shallower processing. This argument is reinforced by recent researches that have examined the effect of writing by hand on learning. They discovered that students who took notes on laptops performed lower than those who took notes by hand on conceptual problems. It can be helpful to take more notes, but the tendency of laptop note-takers to copy lectures verbatim rather than analyzing the material and rephrasing it in their own words is harmful to learning. The move from face-to-face instruction to modular remote learning, where students read the concepts on the printed modules and complete the offered exercises, is what causes this study's results to differ from those of other studies. Hence, this study needs further investigations on face-to-face learning modality for the verification of the results.

The study, therefore, finds that student academic performance in mathematics is not linked to the students' knowledge, attitude, and beliefs about the Dynamic Learning Prog ram. Therefore, the study's hypothesis "There is a significant relationship between students' academic performance and knowledge, attitude, and beliefs on dynamic

learning program," which suspects the presence of relationships between knowledge, attitude, and beliefs on the Dynamic Learning Program and academic performance is accepted.

3.6 Regression analysis of knowledge, attitudes, beliefs, and student's academic performance in the Dynamic Learning Program

The extent of predictors as the independent variable of knowledge, attitudes, and beliefs on students' academic performance in the Dynamic Learning Program was discussed in this section.

Table 6 shows the stepwise multiple linear regression analysis in finding the best predictor of students' academic performance in the DLP. It shows the predictive power of students' academic performance by estimating the influence of a single dependent variable. Knowledge β=1.56,t(1.00) with a probability value of 0.321(p>0.05), Attitudes β=-0.62,t(-0.43) with a probability value of 0.667(p>0.05), and Beliefs β=0.83,t(.75) probability value of 0.458 (p>0.05) are predictive variables of academic performance in the flexible learning environment. More precisely, the predicted scores for particular values of the independent variables were indicated by the beta weights (β), which means that each additional unit accounted for by these two measure variables would positively influence student performance in the flexible learning environment.

Table 6. Regression analysis of knowledge, attitudes, beliefs, and student's academic performance in the Dynamic Learning Program

Indicators	Unstandardized Coefficient		Standardized Coefficient		
	B	Std. Error	Beta	t	Sig.
(Constant)	80.11	4.666		17.170	.000
Knowledge	1.56	1.57	0.125	1.001	.321
Attitudes	-0.62	1.43	-0.055	-0.437	.667
Beliefs	0.83	1.12	0.074	0.758	.458
$R = .132$	**$R^2 = .017$**	**$F = .681$**	Sig. **0.565**		

The R^2, the measure of the total variation of the dependent variable, consisted of 1.7%, which reflects the amount of the variance explained by knowledge, attitudes, and beliefs. In comparison, 98.3% of the variance can be credited to other factor variables apart from the regression model.

Further, the F – value revealed that the overall regression model did not fit the data. The table shows the level of the predictive power of the independent variables; knowledge, attitudes, and beliefs towards the dependent variable, academic performance: F = 0.681 with a probability of 0,565(p>0.05) thus this model is illustrated:

$$Y' = 80.11 + (1.56)X_1 + (-0.62)X_2 + (0.83)X_3$$

Where:

80.11 is constant

$\hat{Y}$ = students' academic performance in the Dynamic Learning Program

X_1 = Knowledge

X_2 = Attitudes

X_3 = Beliefs

The result of the regression analysis clarified that the independent variables: knowledge, attitude, and beliefs coefficients, could not predict academic performance, considering their mean scores of 3.33, 3.29, and 3.47, respectively. The findings indicate that the PCHS students' academic performance in their mathematics subject is not affected after exposure to the Dynamic Learning Program. In addition, the result implies that despite having high knowledge, attitudes, and a strong belief in DLP, it does not significantly contribute to the students' academic performance in mathematics. It further denotes that the student's academic performance in their mathematics subject when they were exposed to the Dynamic Learning Program was considered equal when they were not exposed to the said program. Therefore, the null hypothesis "no variable, singly or in combination, predicts students' academic performance towards learning mathematics in the Dynamic Learning Program" is accepted.

Due to the pandemic, the training, workshop, and seminars for the newly hired teachers on the implementation of the DLP were also affected. This situation results in the inappropriate execution of the DLP inside the class, and in the preparation for the instructional materials that are aligned on the said program's setting. The following is the related literature that contradicts the result of this study;

The DLP offers resources for learning that will improve the mathematics proficiency of high school students. It indicates that with the use of learning activities in DLP, achievement in mathematics of the high school students will improve (Aloquina and Marpa, 2016).

Another article that contradicts the result, Improved performance on the National Achievement Test (NAT) and a declining failure rate, among other behavioral indicators like the rise in love for learning and the circumstances kids find at school that keep them in school, thus improving retention, were reported by a Division of Bohol DepEd official during the annual CVIF-DLP workshops. Even though some students must walk miles to school and do not receive any additional support, dropouts and absenteeism have been reduced (Bernido and Bernido 2020). In addition, according to Basilio (2008), DLP reveals that there is a significant in the post-test scores between students with no exposure and those who were exposed to DLP for one year. Posttest score is higher for students who were exposed to DLP than those with no exposure. This implies that the program was already effective during the first year of implementation. The focus of DLP is on letting students do, think, and learn with the interaction of individuals in the classroom environment.

Moreover, Arendale (2014) the Dynamic Learning Program (DLP) places a high priority on the planning and management of the overall learning environment of the school, with each component of the framework being specifically created to promote sustained learning, even in circumstances where there are not enough experienced and qualified teachers. DLP adopts the perspective of progressively knowing "what students learn and how they really learn" over "what to teach and how to teach".

4. Conclusions and Recommendations

The following conclusions were reached in light of the study's findings: Students' levels of knowledge about the Dynamic Learning Program indicate that they are highly knowledgeable about it, which means that they are aware how DLP was implemented in their classes and how the DLP helps them in learning mathematics.

Students' levels of attitude towards the Dynamic Learning Program indicate that they highly accept it. They like learning mathematics in this program which helps them build a positive attitude towards DLP.

Students' levels of beliefs about the Dynamic Learning Program indicate that they highly valued it. The students believe that through DLP, they learn mathematics effectively.

Senior high school student's academic mathematics performance is within an above-average level. Moreover, students have scored higher than that the percentage passing rate.

Correlation between knowledge, attitude, beliefs, and students' academic performance in a Dynamic Learning Program, the three variables between knowledge, attitude, and beliefs show no significant relationship to students' academic performance with r=0.110, r=0.056, and r=0.09, respectively.

Regression analysis validated that no study variables can predict the students' academic performance in mathematics in the Dynamic Learning Program.
The study's conclusions led to some recommendations to improve teaching and learning process, which would lead to higher mathematics performance of students.

The results of this study show that the students have a thorough understanding of the Dynamic Learning Program (DLP), and they have also accepted and valued it as a method of instruction for their mathematics classes. It also indicates that DLP help the students to learn and perform well in mathematics. However, the Pearson product-moment correlation coefficients have shown that the student's knowledge, attitudes, and beliefs on DLP were not significantly correlated with their academic performance, which also contrasts with the result of other studies. Hence, it is highly recommended to deepen the investigation on the abovementioned variables to verify the results.

In addition, students' academic performance in mathematics in the Dynamic Learning Program during modular distance learning is an above-average level that was very significant. However, the results of this study had shown that the Dynamic Learning Program was not significantly contributed to the students' academic performance in mathematics. These results are contradicting the findings of other studies about the DLP. Hence, further investigations are suggested to study more profound the impact of the Dynamic Learning Program on the students' academic performance in mathematics.

Further studies will be reconducted to investigate students' knowledge, attitude, beliefs, and academics in the Dynamic Learning Program on a face-to-face learning modality with a high number of respondents for more validity and reliability yielding significant results. In expanding locale or population will also describe the application of the factors toward a more general scope that examines the "Filipino student," bridging unique traits that may set PCHS apart from other schools. Also, studying relationships between variables through a larger population will increase the accuracy and replicability of findings.

The academic shift was new to everyone and rendered everyone unprepared for the learning environment, from face-to-face classes to virtual, modular, and flexible learning. This topic will be more of an opportunity to explore more profound for advancing and enhancing teaching and learning.

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