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Knowledge and use of learning resource management system: Its relationship to teaching performance

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Abstract

This study aims to determine the level of knowledge and use of teachers on LRMS among elementary school teachers in the Division of Bago City, school year 2019-2020. The descriptive research design was used. The eighty-one (81) teachers of District IB were used as subjects of this study. The subjects composed of eleven (11) male and seventy (70) female.

The mean percentage score attained by the teachers the following verbal interpretations and descriptors were used. The rating scale is based on the Civil Service Commission Memorandum Circular No. 06, series of 2012 that sets the guidelines on the establishment and implementation of Strategic Performance Management System (SPMS) in all government agencies.

The data of this research was interpreted using mean, one-way ANOVA and Pearson Correlation as inferential statistics. A finding concerning the level of knowledge towards LRMS of the respondents when taken as a whole was found Extremely Knowledgeable. When the respondents are grouped into gender, age and school it was found out that the level of knowledge reflected Extremely Knowledgeable. The frequency of use of the respondents towards LR Portal when grouped according to sex, age and school registered Often. It was found out that the frequency of use of the respondents when taken as a whole reflected Often. It was registered that the MPS (Mean Percentage Score) of the teachers when grouped according sex, age and school was Very Satisfactory. The MPS (Mean Percentage Score) of the teachers when taken as a whole registered Very Satisfactory. Moreover, findings indicated that there is no significant difference on the level of knowledge towards LRMS when grouped according to sex and age. The level of knowledge towards LRMS when grouped according to school registered significant difference. There was no significant difference on frequency of use of the respondents towards LR Portal when grouped according to sex and age. The frequency of use of the respondents towards LR Portal when grouped according to school registered significant difference. When the respondents are grouped according to sex and age it was found out that the MPS (Mean Percentage Score) reflected no significant difference. The frequency of use of the respondents towards LR Portal when grouped according to school registered significant difference. Moreover, findings indicated that there was a weak relationship in the level of knowledge and frequency of use towards LRMS and their teaching performance.

Introduction

Learning resources are often considered as educational materials for instance long and tedious printed classroom textbooks with outdated information and content which can primarily covers the breadth of any particular subjects but it often fails to cover the depth of the subject. Learning resources are more than that and it can be summed up as various tools that provide the teachers with the opportunity of teaching effectively in order to offer an easier learning process to the students (Bušljeta, 2013) [5].

Availability of teaching and learning resources (TLR) enhances the effectiveness of schools as these are basic things that can bring about good academic performance in the students. (Atieno, 2014)

"We dream of Filipinos who passionately love their country and whose values and competencies enable them to realize their

full potential and contribute meaningfully to building the nation. As a learner - centered public institution, the Department of Education continuously improves itself to better serve its stakeholders," this is the vision of the Department of Education.

To carry out the vision, the Department of Education advocates the adoption and implementation of the LRMS. It is a web-based catalogue and online repository of learning, teaching, and professional development resources (*6_DO_s2011_76.Pdf*, n.d.) [1]

In 2017, DepEd reiterates the adoption and implementation of the Learning Resource Management System (LRMS) to provide emphasis on the LRMS roles and responsibilities. It is designed to support increased distribution and access to teaching and professional development. To reinforce these processes at various levels, the DepEd establishes the use of the Learning Resource (LR) Portal. It can be accessed by various users through the URL: http://lrmds.deped.gov.ph. Through this, registered users may view and download published materials. The LR Portal is the official source of all DepEd-developed and DepEd approved teaching and learning resources. There, they can access the learning resources and download the materials for free.

One of the most difficult problems of teachers is lack of textbooks. Teachers do lesson planning daily and need to have learning and teaching resources for the pupils to learn from day-to-day classroom activities. The most satisfying moment of a teacher is to ensure the maximum learning of pupils. Teachers spend most of their time searching for teaching materials to be used in delivering the lessons. They spend more resources to reproduce the materials. It is the aim of every teacher to have complete materials in teaching.

As DepEd Order no. 76, series 2011 advocates the use of LRMDS and it was reiterated on DepEd Order no. 82, series 2017, Thus, teachers are always encouraged to use the LR Portal. It is in this context that the researcher wants to undertake this study to investigate the level of knowledge and the use of LRMS and its relationship to teaching performance in the five schools of District I-B in the Division of Bago City. District I-B is composed of five public elementary schools which has a total of 81 teachers; V. Cauntoy Elementary School which composed of twenty-eight (27) teachers, Abuanan Elementary School with twenty-three (23) teachers, A.M. Espinos Elementary School with thirteen (13) teachers, I. Lucasan Elementary School with ten (10) teachers and Guanzon Balgos Elementary School with eight (8) teachers.

This study aimed to determine the level of knowledge and frequency of use towards LRMS among District IB elementary school teachers in the Division of Bago City. Which has a total of eighty-one (81) teachers. V. Cauntoy Elementary School is composed of twenty-seven (27) teachers, Abuanan Elementary School with twenty-three (23) teachers, A.M.Espinos Elementary School with thirteen (13) teachers, I. Lucasan Elementary School with ten (10) teachers and Guanzon Balgos Elementary School with eight (8) teachers. The participants composed of eleven (11) male and seventy (70) female.

Since the study would like to determine the relationship of the level of knowledge and frequency of use towards LRMS on teaching performance, the respondent submitted his/her Individual Performance and Commitment Review Form Rating for school year 2019-2020.

The study used a quantitative approach using a descriptive method. Data were gathered using a researcher's questionnaire.

Materials and Methods
This chapter describes the research design, research locale, the respondents of the study, the data gathering procedure and the statistical tools used in analyzing and interpreting data.

Design
This study on the level of knowledge and frequency of use towards LRMS and its relationship to teacher's performance in District IB utilized the descriptive research design. This method is most appropriate because it presents facts and conditions regarding teachers' utilization of LR Portal in instruction.

According to Gay, descriptive research involves collecting data in order to test hypotheses or to answer questions concerning the current status of the subject of the study. A descriptive study determines and reports the way things are. Descriptive research is scientific research that describes about event, phenomena or fact systematically dealing with certain area or population. (Source, 2019) [11]

Locale
This study was conducted among elementary schools in the Division of Bago City. These schools are the Abuanan Elementary School, A.M. Espinos Elementary School, I. Lucasan Elementary School, Guanzon-Balgos Elementary School and V. Cauntoy Elementary School.
Respondents
There were eighty-one (81) elementary school teachers distributed among elementary schools last school year 2019-2020. The researcher did not use any formula instead the total population was used as respondents. The size was computed at 95% confidence level or a margin of error at 0.05.

Instrument
The research was done by distributing the researcher-modified version of Papanastasiou & Angeli, (2008) [10] instrument. Out of eighty-one (81) questionnaires released to the respondents, eighty-one (81) questionnaires were retrieved successfully for data processing. The questionnaire was divided into 3 parts. The first part of the questionnaire solicited the profile of the respondents regarding the variables such as sex, school assignment, age and IPCRF Rating. The second part of the questionnaire captured the level of knowledge of teachers on LRMS of the respondents composed of ten (10) items. There were five (5) scales available for each item for the respondents to select. The following are the scales for the level of knowledge towards LRMS:

Number Code	Verbal Interpretation
5	Extremely Knowledgeable
4	Very Knowledgeable
3	Moderately Knowledgeable
2	Slightly Knowledgeable
1	Not at all Knowledgeable

The third part of the questionnaire focused on the frequency of use of teachers on LRMS of the respondents. There were

ten (10) items in this part. The following are the scale used as seen below:

Number Code	Verbal Interpretation
5	Always
4	Often
3	Sometimes
2	Rarely
1	Never

This study also used secondary data to correlate the relationship between the level of knowledge, frequency of use and teaching performance of the respondents.

The Individual Performance Commitment and Review Form, as a rating scale is based on the Civil Service Commission Memorandum Circular No. 06, series of 2012 that sets the guidelines on the establishment and implementation of the Strategic Performance Management System (SPMS) in all government agencies as seen below.

4.500-5.000	Outstanding
3.500-4.499	Very Satisfactory
2.500-3.499	Satisfactory
1.500-2.499	Unsatisfactory
Below 1.499	Poor

Validity and Reliability
Even though the instrument was adapted from the study of (Papanastasiou & Angeli, 2008) [10] some items were modified by the researcher to better suit and address the current needs of this research thus a validity and reliability tests were conducted.

The questionnaire was validated using Lawshe's Content Validity Ratio. Content validation refers to a process that aims to provide assurance that an instrument (checklist, questionnaire, or scale) measure the content area it is expected to measure. (Ayre & Scally, 2014) [2]

The content validity index of the questionnaire for the level of knowledge and frequency of use of teachers on LRMS were 0.990 and 0.930 which indicated very high content validity index.

Moreover, another stage of testing was steered into the instrument to further establish its dependability. Reliability test was conducted using Cronbach's Alpha.

Cronbach's alpha is a measure of internal consistency, that is, how closely related a set of items are as a group. It is considered to be a measure of scale reliability. A "high" value for alpha does not imply that the measure is unidimensional. (Tavakol & Dennick, 2011) [12]

The reliability test using Cronbach's alpha rated the instrument as "very reliable" with the score of 0.963 on the questionnaire. This process was conducted using the fifty (50) finite samples of the target population from the five (5) schools.

Data Gathering Procedure
The researcher strictly observed and carefully followed the necessary set of procedures and protocols before the actual data gathering took place. A letter was made for the Schools Division Superintendent seeking for approval to allow the researcher to conduct the study among elementary schools. This letter was noted by the school head and with the recommending approval of the Education Program Supervisor or the Learning Resource Management System.

After the division superintendent approved the request of the researcher, the same letter was requested to the District IB Public School District Supervisor.

When the approval was properly and rightfully obtained, the researcher prepared the schedule to conduct the study and administer the test questionnaires to the target schools.

The researcher personally administered the survey to answer the queries that might arise and to make sure a high retrieval rate from the respondents. The distribution, administration, and retrieval of the questionnaires from teachers were personally done by the researcher to ensure research protocol which had been precisely observed.

After the data gathering procedure took place, the results of the questionnaire were then processed and plotted.

Ethical Considerations
During the conduct of the study, the researcher considered ethical guidelines and policies, especially during the data gathering procedures. The respondent's voluntary participation, confidentiality, and anonymity were taken into account. This was made clear to them that the data would be for research purposes only and confidentiality would be of highest priority.

Statistical Treatment
Answers to each of the problems presented would be sought using the following statistical tools:

For problem number 1, to determine the level of knowledge towards LRMS of the respondents, mean would be used. To interpret the mean score attained, the following verbal interpretation and descriptors were used.

Mean Score Range	Verbal Interpretation	Level Descriptors/Indicators
4.20-5.00	Extremely Knowledgeable	A teacher has an advanced understanding on Learning Resource Management System. He/she is well adept to ALL updates and developments related to LRMS implementation in School, Division, and Regional Levels.
3.40-4.19	Very Knowledgeable	A teacher has a profound understanding on Learning Resource Management System. He/she is well adept to MANY updates and developments related to LRMS implementation in School, Division, and Regional Levels.
2.60-3.39	Moderately Knowledgeable	A teacher has a basic understanding on Learning Resource Management System. He/she is adept to SOME updates and developments related to LRMS implementation in School, Division, and Regional Levels.
1.80-2.59	Slightly Knowledgeable	A teacher has a very basic understanding on Learning Resource Management System. He/she is adept to FEW updates and developments related to LRMS implementation in School, Division, and Regional Levels.
1.00-1.79	Not at all Knowledgeable	A teacher has no understanding on Learning Resource Management System. He/she is NOT adept to any updates and developments related to LRMS implementation in School, Division, and Regional Levels.

For problem number 2, to determine the frequency of use of the respondents towards LR Portal mean was used. To interpret the mean score attained, the following verbal interpretation and descriptors were used.

Mean Score Range	Verbal Interpretation	Level Descriptors/Indicators
4.20-5.00	Always	A teacher habitually uses/integrates quality assured learning resources downloaded from DepEd LR Portal and as such the frequency of use of the LR portal is almost once a week.
3.40-4.19	Often	A teacher frequently uses/integrates quality assured learning resources downloaded from DepEd LR Portal and as such the frequency of use of the LR portal is almost twice a month.
2.60-3.39	Sometimes	A teacher occasionally uses/integrates quality assured learning resources downloaded from DepEd LR Portal and as such the frequency of use of the LR portal is almost once a month.
1.80-2.59	Rarely	A teacher seldomly uses/integrates quality assured learning resources downloaded from DepEd LR Portal and as such the frequency of use of the LR portal is almost once per grading quarter.
1.00-1.79	Never	A teacher not once uses/integrates quality assured learning resources downloaded from DepEd LR Portal and as such the frequency of use of the LR portal is very rare to almost never.

The mean percentage score attained by the teachers, the following verbal interpretations and descriptors were used. The rating scale was based on the Civil Service Commission Memorandum Circular No. 06, series of 2012 that sets the guidelines on the establishment and implementation of Strategic Performance Management System (SPMS) in all government agencies.

Mean Score Range	Verbal Interpretation	Level Descriptors/Indicators
4.500-5.000	Outstanding	Performance represents as extraordinary level of achievement and commitment in terms of quality and time, technical skills and knowledge, ingenuity, creativity and initiative. Employees at this performance level should have demonstrated exceptional job mastery in all areas of responsibility. Employee achievement and contributions to the organizations are of marked excellence.
3.500-4.499	Very Satisfactory	Performance exceeded expectations. All goals, objectives and target were achieved above the established standards.
2.500-3.499	Satisfactory	Performance met expectations in terms of quality of work, efficiency and timeliness. The most critical annual goals were met.
1.500-2.499	Unsatisfactory	Performance failed to meet expectations, and/or one or more of the most goals were not met.
1.499 and below	Poor	Performance was consistently below expectations, and/or reasonable progress towards critical goals was not made. Significant improvement is needed in one or more important areas.

For problem number 4 and 5, to determine the differences in the level of knowledge towards LRMS and the frequency of use of the respondents towards LR Portal when they were grouped according to sex, age, school and when group collectively, one-way ANOVA was used.

Lastly for problem number 6, to determine the relationship between the level of knowledge and frequency of use towards LRMS and teaching performance, Pearson's correlation coefficient was used.

Results and Discussion

This presents the data which were gathered in relation to the study being undertaken. The data in connection with the research problem were presented, analyzed, interpreted and discussed. The presentation was arranged according to the sequence of specific problems presented.

The findings of the study revealed the level of knowledge and use of Learning Resource Management System (LRMS) and their teaching performance among District IB elementary school teachers. Mean score, One-way ANOVA and Pearson Correlation were the descriptive statistics employed.

Table 1: The Teachers Level of Knowledge towards LRMS when grouped according to Sex

Gender	N	Mean	Interpretation
Male	11	4.35	Extremely knowledgeable
Female	70	4.26	Extremely knowledgeable

Table 1 showed that the teachers' level of knowledge towards LRMS when grouped according to sex reflected "Extremely Knowledgeable" (M=.4.35, F=4.26). It revealed that male was more knowledgeable towards LRMS than female with 0.09 difference in the mean between two genders.

From the age of sixteen onwards males developed an advantage that increases with age reaching approximately 4 IQ points among adults. Further data documenting this male advantage was given and in a meta-analysis of sex differences on the Progressive Matrices concluding that among adult males obtained a 5 points higher IQ than females. (Halpern & Wai, 2019) [8]

Studies had shown consistent sex differences with males rating themselves higher than females. In an article entitled "Gender and Gender Role Differences in Self- and Other-Estimates of Multiple Intelligences "There was a significant effect of gender role on hypothetical persons' intelligence evaluations, with masculine targets receiving significantly higher intelligence estimates compared to feminine targets. More intelligent hypothetical figures were judged as more masculine and less feminine than less intelligent ones. (Halpern & Wai, 2019) [8]

Table 2: The Teachers Level of Knowledge towards LRMS when grouped according to Age

Age	N	Mean	Interpretation
21 - 30	12	4.29	Extremely knowledgeable
31-40	36	4.33	Extremely knowledgeable
41-50	19	4.23	Extremely knowledgeable
51-60	14	4.16	Very knowledgeable

Table 2 showed that the teachers' level of knowledge towards LRMS when grouped according to age registered "Extremely Knowledgeable" (ages 21-30(M-4.29), 31-40 (M-4.33) and 41-50 (M-4.23)) while teachers belonged to the ages 51-60 registered "Very Knowledgeable". This indicated that the older the person, the lower its understanding or knowledge in a new learning resource.

Lack of knowledge of the capabilities of modern technology and how to utilize them is a major influence on older

people's apparent avoidance of technology. Without background knowledge of software conventions or general usage of computers, the elderly finds it more difficult to attain competence in such areas. Other substantial barriers to older people's acceptance and use of technology include confusion regarding usage procedures, fear of the unknown, lack of confidence lack of understanding of the value of products and services. (Broady *et al.*, 2010) [4] Comparisons between the young group and a cognitively comparable group of older adults allow us some speculation as to how personality–intelligence relationships may change with age in the context of maintaining cognitive vitality, as these older adults, on average, do not appear to have experienced the cognitive decline normally associated with aging. (Baker & Bichsel, 2006) [3]

Table 3: The Teachers Level of Knowledge towards LRMS when grouped according to School

School	N	Mean	Interpretation
A.M. Espinos Elementary School	13	4.32	Extremely Knowledgeable
Abuanan Elementary School	23	4.48	Extremely Knowledgeable
Guanzon-Balgos Elementary School	8	4.35	Extremely Knowledgeable
I. Lucasan Elementary School	10	4.02	Very Knowledgeable
V. Cauntoy Elementary School	27	4.13	Very Knowledgeable

Table 3 showed that the teachers' level of knowledge towards LRMS of Abuanan Elementary School Teachers was registered "Extremely Knowledgeable" (M-4.48). A.M. Espinos Elementary School teachers' level of knowledge towards LRMS registered "Extremely Knowledgeable". Guanzon Balgos Elementary School teachers' level of knowledge was also interpreted as "Extremely Knowledgeable" (M-4.35). It showed that the teachers of the three schools had an advanced understanding on the Learning Resource Management System. They were adept to all updates and developments related to LRMS implementation in school, division and regional level.

I.Lucasan Elementary School teacher's level of knowledge (M-4.02) and V. Cauntoy Elementary School teachers' level of knowledge (M-4.13) registered "Very Knowledgeable". It showed that the teachers of the two schools had a profound understanding in Learning Resource Management System. They were well adept to many updates and developments related to LRMS implementation in school, division and regional levels.

Table 4: The Teachers Level of Knowledge towards LRMS when taken as a Whole

Subjects	N	Mean	Interpretation
District IB Teachers	81	4.27	Extremely Knowledgeable

Tables showed that the teachers' level of knowledge towards LRMS when taken as a whole registered "Extremely Knowledgeable" (M-4.27). It revealed that the teachers had an advanced understanding on the Learning Management System. They were well adept to all updates and developments related to LRMS implementation in

school, division and regional levels.

Table 5: The Frequency of Use of the Respondents towards LR Portal when grouped according to Sex

Gender	N	Mean	Interpretation
Male	11	4.11	Often
Female	70	4.00	Often

Table 5 showed that male had 4.11 mean and female had 4.00. This indicated that male frequently use the LR Portal than female. Even if there was a difference of 0.11 on the mean, still the data showed that both teachers frequently used/integrated quality assured learning resources downloaded from DepEd LR Portal and as such the frequency of use of the LR Portal was almost twice a month.

Table 6: The Frequency of the Use of the Respondents towards LR Portal when grouped according to Age

Age	N	Mean	Interpretation
21-30	12	4.00	Often
31-40	36	4.07	Often
41-50	19	4.05	Often
51-60	14	3.38	Sometimes

Table 6 showed that the frequency of use of the respondents towards LR Portal when grouped according to age reflected that the ages 25-30 (M-4.00), 31-40 (M-4.07) and 41-50 (M-4.05) was registered "OFTEN". The frequency of use of ages 51-60 (M-3.38) was "SOMETIMES".

Table 7: The Frequency of Use of the Respondents towards LR Portal when grouped according to School

School	N	Mean	Interpretation
A.M. Espinos Elementary School	13	4.04	Often
Abuanan Elementary School	23	4.32	Always
Guanzon-Balgos Elementary School	8	4.05	Often
I. Lucasan Elementary School	10	3.62	Often
V. Cauntoy Elementary School	27	3.88	Often

Table 7 showed that Abuanan Elementary School (M-4.32) registered "Always" frequency of use while A.M. Espinos Elementary School (M-4.04), Guanzon-Balgos Elementary School (M-4.05), I. Lucasan Elementary School (M-3.62) and V. Cauntoy Elementary School (M-3.88) registered "Often" frequency of use.

Table 8: The Frequency of Use of the Respondents towards LR Portal when taken as a Whole

Subjects	N	Mean	Interpretation
District IB Teachers	81	4.01	Often

Table 8 showed that the frequency of use of the respondents toward LR Portal when taken as a whole (M-4.01) registered "Often". It indicated that the teachers frequently used/integrated quality assured learning resources downloaded from DepEd LR Portal and as such the frequency of use of the LR Portal is almost twice a month.

Table 9: The MPS (Mean Percentage Score) of the Teachers when grouped according to Sex

Gender	N	Mean	Interpretation
Male	11	4.35	Very Satisfactory
Female	70	4.32	Very Satisfactory

Table 9 revealed that the MPS of the teachers when grouped according to sex registered "Very Satisfactory" on both, Male (M-4.35) and Female (M-4.32).

Table 10: The MPS (Mean Percentage Score) of the Teachers when grouped according to Age

Age	N	Mean	Interpretation
21-30	12	4.31	Very Satisfactory
31-40	36	4.33	Very Satisfactory
41-50	19	4.33	Very Satisfactory
51-60	14	4.33	Very Satisfactory

Table 10 revealed that the MPS of the Teachers when grouped according to age registered "Very Satisfactory" on all ages, 21-30 (4.31), 31-40 (M-4.33), 41-50 (M-4.33) and 51-60 (M-4.33).

Table 11: The MPS (Mean Percentage Score) of the Teachers when grouped according to School

School	N	Mean	Interpretation
A.M. Espinos Elementary School	13	4.44	Very Satisfactory
Abuanan Elementary School	23	4.30	Very Satisfactory
Guanzon-Balgos Elementary School	8	4.13	Very Satisfactory
I.Lucasan Elementary School	10	4.37	Very Satisfactory
V. Cauntoy Elementary School	27	4.34	Very Satisfactory

Table 11 revealed that the MPS (Mean Percentage Score) of the teachers when grouped according to School was "Very Satisfactory" on A.M.Espinos Elementary School (M-4.44), Abuanan Elementary School (M-4.30), Guanzon-Balgos Elementary School (M-4.13), I.Lucasan Elementary School (M-4.37) and V. Cauntoy Elementary School (M-4.34)

Table 12: The MPS (Mean Percentage Score) of the Teachers when taken as a Whole

Subject	N	Mean	Interpretation
District IB Teachers	81	4.33	Very Satisfactory

Table 12 revealed that the MPS of the teachers when taken as a whole was Very Satisfactory (M-4.33, it indicated that the teachers' performance exceeded expectations. All goals, objectives and target were achieved above the established standards.

Table 13: Differences on the Level of Knowledge towards LRMS when Grouped According to Sex

Groups	N	Mean	Std. Dev.	Std. Error
Male	11	4.35	0.65	0.20
Female	70	4.26	0.54	0.06

ANOVA Summary						
Source	Degrees of Freedom DF	Sum of Squares SS	Mean Square MS	F-Stat	P-Value	Significance
Between Groups	1	0.08	0.08	0.25	0.91	Not Significant
Within Groups	79	24.56	0.31			
Total	80	24.64				

The processed one-way ANOVA revealed that the level of knowledge towards LRMS when grouped according to sex registered no significant difference t (80) = 0.25 < 0.91.

Table 14: Differences on the Level of Knowledge towards LRMS when Grouped According to Age

Groups	N	Mean	Std. Dev.	Std. Error
21-30	12	4.29	0.55	0.16
31-40	36	4.33	0.60	0.10
41-50	19	4.23	0.51	0.12
51-60	14	4.16	0.53	0.14

ANOVA Summary						
Source	Degrees of Freedom DF	Sum of Squares SS	Mean Square MS	F-Stat	P-Value	Significance
Between Groups	3	0.33	0.11	0.35	1.31	Not Significant
Within Groups	77	24.31	0.32			
Total	80	24.64				

The processed one-way ANOVA revealed that the level of knowledge towards LRMS when grouped according to age registered no significant difference t (80) = 0.35 < 1.31.

Table 14: Differences on the Level of Knowledge towards LRMS when Grouped According to School

Groups	N	Mean	Std. Dev.	Std. Error
A.M. Espinos Elementary School	13	4.32	0.40	0.11
Abuanan Elementary School	23	4.48	0.51	0.11
Guanzon-Balgos Elementary School	8	4.35	0.56	0.20
I.Lucasan Elementary School	10	4.02	0.66	0.21
V. Cauntoy Elementary School	27	4.13	0.58	0.11

ANOVA Summary						
Source	Degrees of Freedom DF	Sum of Squares SS	Mean Square MS	F-Stat	P-Value	Significance
Between Groups	4	2.24	0.56	1.90	0.12	Significant
Within Groups	76	22.40	0.29			
Total	80	24.64				

The processed one-way ANOVA revealed that the level of knowledge towards LRMS when grouped according to school registered significant difference t (80) = 1.90 > 0.12.

Table 15: Differences in the frequency of use of the respondents towards LR Portal when grouped according to Sex

Groups	N	Mean	Std. Dev.	Std. Error
Male	11	4.10	0.66	0.20
Female	70	4.00	0.60	0.07

ANOVA Summary						
Source	Degrees of Freedom DF	Sum of Squares SS	Mean Square MS	F-Stat	P-Value	Significance
Between Groups	1	0.11	0.11	0.33	0.89	Not Significant
Within Groups	79	27.47	0.35			
Total	80	27.59				

The processed one-way ANOVA revealed that the

frequency of use of the respondents towards LR Portal when grouped according to sex registered no significant difference t (80) = 0.33 < 0.89.

Table 16: Differences in the frequency of use of the respondents towards LR Portal when grouped according to Age

Groups	N	Mean	Std. Dev.	Std. Error
21-30	12	4.00	0.52	0.15
31-40	36	4.07	0.67	0.11
41-50	19	4.05	0.64	0.15
51-60	14	3.84	0.36	0.10

ANOVA Summary						
Source	Degrees of Freedom DF	Sum of Squares SS	Mean Square MS	F-Stat	P-Value	Significance
Between Groups	3	0.54	0.18	0.52	1.26	Not Significant
Within Groups	77	27.04	0.35			
Total	80	27.58				

The processed one-way ANOVA revealed that the frequency of use of the respondents towards LR Portal when grouped according to age registered no significant difference t (80) = 0.2 < 1.26.

Table 17: Differences in the frequency of use of the respondents towards LR Portal when grouped according to School

Groups	N	Mean	Std. Dev.	Std. Error
A.M. Espinos Elementary School	13	4.04	0.28	0.08
Abuanan Elementary School	23	4.32	0.51	0.11
Guanzon-Balgos Elementary School	8	4.05	0.82	0.29
I.Lucasan Elementary School	10	3.62	0.57	0.18
V. Cauntoy Elementary School	27	3.88	0.59	0.11

ANOVA Summary						
Source	Degrees of Freedom DF	Sum of Squares SS	Mean Square MS	F-Stat	P-Value	Significance
Between Groups	4	4.25	1.06	3.46	0.01	Significant
Within Groups	76	23.33	0.31			
Total	80	27.58				

The processed one-way ANOVA revealed that the frequency of use of the respondents towards LR Portal when grouped according to school registered significant difference t (80) = 3.46 > 0.01.

Table 18: Difference in the MPS (Mean Percentage Score) of the teachers when grouped according to sex

Groups	N	Mean	Std. Dev.	Std. Error
MALE	11	4.35	0.18	0.05
FEMALE	70	4.32	0.15	0.02

ANOVA Summary						
Source	Degrees of Freedom DF	Sum of Squares SS	Mean Square MS	F-Stat	P-Value	Significance
Between Groups	1	0.0071	0.0071	0.283	0.8891	Not Significant
Within Groups	79	1.9778	0.025			
Total	80	1.9849				

The processed one-way ANOVA revealed that the MPS (Mean Percentage Score) of the teachers when grouped according to sex registered not significant t (80) = 0.283 < 0.8891.

Table 19: Difference in the MPS (Mean Percentage Score) of the teachers when grouped according to Age

Groups	N	Mean	Std. Dev.	Std. Error
21-30	12	4.31	0.20	0.06
31-40	36	4.33	0.15	0.03
41-50	19	4.33	0.15	0.03
51-60	14	4.33	0.16	0.04

ANOVA Summary						
Source	Degrees of Freedom DF	Sum of Squares SS	Mean Square MS	F-Stat	P-Value	Significance
Between Groups	3	0.003	0.001	0.04	1.19	Not Significant
Within Groups	77	1.9821	0.0257			
Total	80	1.9852				

The processed one-way ANOVA revealed that the frequency of use of the respondents towards LR Portal when grouped according to age registered no significant difference t (80) = 0.4 < 1.19.

Table 20: Difference in the MPS (Mean Percentage Score) of the teachers when grouped according to School

Groups	N	Mean	Std. Dev.	Std. Error
A.M. Espinos Elementary School	13	4.44	0.08	0.02
Abuanan Elementary School	23	4.30	0.19	0.04
Guanzon-Balgos Elementary School	8	4.13	0.15	0.05
I. Lucasan Elementary School	10	4.37	0.15	0.05
V. Cauntoy Elementary School	27	4.34	0.10	0.02

ANOVA Summary						
Source	Degrees of Freedom DF	Sum of Squares SS	Mean Square MS	F-Stat	P-Value	Significance
Between Groups	4	0.51	0.13	6.59	0.0001	Significant
Within Groups	76	1.47	0.02			
Total	80	1.98				

The processed one-way ANOVA revealed that the frequency of use of the respondents towards LR Portal when grouped according to school registered significant t (80) = 6.59 < 0.0001.

Table 21: Relationship in the Level of Knowledge and Frequency of Use towards LRMS and Teaching Performance

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The value of R is -0.0076.

Although technically a negative correlation, the relationship between your variables is only weak (*nb.* the nearer the value is to zero, the weaker the relationship).

The process Pearson Correlation revealed that there is a weak relationship in the level of knowledge and frequency of use towards LRMS and their teaching performance R = -0.0076.

Conclusions
This study concluded that the District IB teachers in the schools' Division of Bago City had an advanced understanding on Learning Resource Management System. They were well adept to all updates and developments related to LRMS implementation in school, division and regional levels. It was also proven that the teachers frequently uses/integrates quality assured learning resources downloaded from DepEd LR Portal and as such the frequency of use of the LR portal was twice a month. The teaching performance of teachers exceeded expectations. All goals, objectives and target were achieved above the established standards.

This study resolved that there was a weak relationship in the level of knowledge and frequency of use towards LRMS and the teaching performance.

Recommendations
The following recommendations are suggested:
1. The researcher encourages the school administrators to maintain and sustain the level of knowledge and the frequency of use of teachers towards LRMS through continued professional development activities during In-Service Training for Teachers and LAC Sessions.
2. The researcher motivates the teachers to conduct and participate on learning action cell to enhance and sustain the level of knowledge and frequency of use of teachers on LRMS.
3. Lastly, schools may continue the existing programs and trainings on the knowledge and use of LR Portal especially to newly hired teachers in their schools. In this way the level of knowledge and use of teachers on LRMS will be sustained.

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