IMPLEMENTATION AND UTILIZATION OF LEARNING RESOURCES MANAGEMENT AND DEVELOPMENT SYSTEM IN DEPED BILIRAN DIVISION

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APPROVAL SHEET

In partial fulfilment of the requirements for the degree, DOCTOR OF PHILOSOPHY, the dissertation entitled **"IMPLEMENTATION AND UTILIZATION OF LEANING RESSOURCES MANAGEMNET SYSTEM IN DEPED BILIRAN DIVISION"** has been approved and submitted by **CRISTA JOY A. TORBILA**, who having passed the comprehensive examination and pre-oral defense is hereby recommended for final oral examination.

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The Researcher

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The researcher humbly bestows this scholarly piece of work to the teachers in the Division of Biliran and other Divisions whose unrelenting passion and strong will to render, without reservations, quality education to their primary stakeholders, the Filipino learners, has kept the educational engine moving towards the achievement of its mission and vision, with or without, the colossal challenge of the pandemic.

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The Researcher

ABSTRACT

This study looked into the implementation and the utilization of the Learning Resource Management and Development System (LRMDS) of the Department of Education in the Division of Biliran. A descriptive correlational research design was adopted involving 34 LRMDS coordinators and 1030 teacher-respondents who were sampled using simple random sampling technique. As regards the relationship between the extent of the implementation and the utilization of the LRMDS and the LRMDS coordinators-related variates, findings showed significant correlation between the implementation and the utilization of the LRMDS and the profile in terms of sex and educational qualification. In like manner, the LRMDS implementation and utilization was found to be significantly related to the age, sex, and educational qualification of the teacher-respondents. From these findings, it can be deduced that the LRMDS coordinators were on their old age; the teachers were mature and responsible managers of the learning resources; both almost belonged the same age group; family-oriented teachers; gained professional growth through the master's degree program; acquired enough experience and skills as LRMDS coordinators and as classroom teachers, and attended relevant trainings. Further, it can be opined that the LRMDS coordinators and the classroom teachers evaluated the implementation and the utilization of the LRMDS as similar. Equally important to note was that the younger the respondents, the greater was their tendency to use the LRMDS portal. Findings also indicated that as the

respondents attended graduate studies, the more likely they would engage in the implementation and utilization of LRMDS learning materials.

TABLE OF CONTENTS

CHAPTER I

THE PROBLEM AND ITS SETTING

Introduction

Accessibility, sufficiency, and relevance of teaching and learning resources in the classroom influence quality learning and teaching process which has a very significant impact on the learning and the academic performance of the students. All learners from formal, non-formal, indigenous group and students with special needs deserve access to worthwhile, rigorous and meaningful educational experiences. And all teachers deserve the support to help them create a classroom environment where students develop their full potentials. High-quality instructional materials allow teachers to better help learners master the skills, knowledge, and experiences that will support them in school and put them in gainful endeavors in the future.

However, the Baseline Research of the STRIVE II (DepEd, 2008) in 2008 showed that student ratio did not exist in most schools surveyed; most teachers had no teacher manuals; teachers had to use their own money to augment the instructional resources in the schools; the schools which lost their textbook collection because of calamities did not get replacements, and that few supplementary materials were available in the schools.

These perennial problems exhibit the immense importance of having instructional materials at the disposal of the teachers and the students. The

teachers use instructional materials to make teaching and learning process motivating (Dahar & Faize, 2011) and develop higher learning abilities to the learners through self-teaching or guided learning (Gagne, 2005). But the dawn of the 20th century saw the fast surge of digital learning resources available in the World Wide Web. Technologies and online resources help students overcome their learning difficulties (Abbot, 2007) and subsequently, improved their achievements and faculty performance (Jones et al. 2011). Student engagement with online resources and their overall academic result have been found to be positively correlated (Wong, 2013; Adeogun, 2001; Ahmed & Khanam,2014). With this growing trend, various educational systems worldwide adopted learning resources management systems for smooth dissemination and wider utilization of teaching and learning materials.

Learning resources management strategies are key to achieving long-term learning. But for successful implementation, Kangpheng et al. (2018) suggested that learning management systems must have internal, external people, and supporting budget. Its process evaluation, they added, includes defining, creating, capturing, sharing, and using. Meanwhile, Ahmed and Khanam (2014) pointed out that LRM strategies can involve efficient management of learning time, study environment, effort, peer learning, and seeking assistance from the experts. On the other hand, Navidad (2019) found out that master teachers and the school heads have similar appraisal on the status of learning resource materials' utilization. Domingo (2018) discovered

that the master teachers and the school heads believed that the Department of Education can achieve its aim for quality education through consistent and appropriate utilization of the learning resources from its LRM system. In the study of Sipahi (2020), results indicated that the teachers' practices in resourcing learning materials and their perception towards the DepEd Learning Resource Portal are correlated. Additionally, she found out that the students' academic performance is impacted by the teachers' ability to retrieve learning materials from the said LRM portal.

For its part, the Department of Education (DepEd) advocates the adoption, the and the utilization of the Learning Resource Management and Development System (LRMDS) pursuant to the implementing rules and regulations of Republic Act No. 9155 also known as Governance of Basic Education Act of 2001 and to support the organization of Key Reform Thrust (KRT) 3 of the Basic Education Sector Reform Agenda (BESRA) (DepEd Order No. 76, s. 2011). The LRMDS has been developed in response to the findings of baseline research conducted during STRIVE Phases I and II during 2007 and 2008 in Regions 6, 7 and 8 to identify the levels of access to quality learning teaching resources by Divisions and schools. The Baseline Studies identified highly variable distribution of resources across all levels and in most subject areas such as English, Mathematics, Science, Alternative Learning System and Technology and Livelihood Education. The lack of resources was also highly variable across divisions sampled (Baseline Research STRIVE II, 2008).

The LRMDS is designed to support increased distribution and access to learning, teaching and professional development resources at the region, division and school levels of the DepEd. A major objective of the system is to provide a technical basis for assessing, acquiring, adapting, developing, producing and distributing quality learning and teaching resource materials for the students and instructional support materials for the teachers. It is also a quality assurance system providing support to the DepEd regions, divisions and schools in the selection and acquisition of quality digital and non-digital resources in response to identified local educational needs.

In terms of LRMDS portal registration in Region VIII, Southern Leyte, Tacloban, Maasin, and Baybay City Divisions, almost got 100% participation rate (Learning Resource Portal/Dashboard, Admin Panel, RO8 S. 2018). However, the problem lies in the poor usability of learning researches from the LRMDS. This is due to the "absence of a clearer format as to the guidelines in producing learning resources; the time constraint when accessing the portal; the lack of instructions and trainings; the lack of motivation for the teachers to produce a LR; the lack of monitoring, system glitch like not being able to access to the downloadable files; the location of the school where internet access might be difficult, and the no internet connection" (Susara, 2016).

Seriously confront with these deficiencies and how they would impact on the teaching and learning process, the researcher felt the need to assess the implementation and the utilization of the Learning Resources Management and Development System (LRMDS), particularly in DepEd Biliran Division.

Specifically, she looked into the relationship between the profile of the LRMDS coordinators and the teachers as end-users and the level of implementation and the utilization of the LRMDS along the adequacy of personnel; adequacy of facilities and equipment; sufficiency of budget allocation; goals and objectives; the learning resource planning, the school learning resource center restructuring, and the portal utilization.

Primarily, this study was anchored on theories such as Affordance and Consistency under Design and Usability Principles (Norman, 2013), Technology and Acceptance Model (Venkatesh & Davis, 2000), Theory of Reasoned Action (TRA) (Fishbein, 1967), Unified Theory of Acceptance and Use of Technology (UTAUT) (Venkatesh et al., 2003), Bingimlas' Theory on the Integration of Information Technology to Education and that of Vygotsky's Sociocultural Theory of Development. The researcher was in agreement with the idea of using technology as the platform in storing and disseminating learning resources grounded on the sociocultural foundation of its end-users.

The researcher also expected that the findings of this study would guide decision-makers in revisiting the policies if need to be, relative to the LRM system and adopting these for the coordinators and the teachers in developing learner-centered and interactive learning resources.

Statement of the Problem

This study investigated the implementation and the utilization of the Learning Resources Management and Development System (LRMDS)in the Division of Biliran during the School Year 2018-2019.

Specifically, it responded to the following questions:

1. What is the profile of the Learning Resources and Development System (LRMDS) Coordinators in terms of the following characteristics?

1.1 age and sex;

1.2 civil status;

1.3 educational qualification;

1.4 number of years as LRMDS Coordinators, and

1.5 number of relevant in-service trainings?

2. What is the profile of the teacher-respondents with respect to:

2.1 age and sex;

2.2 civil status;

2.3 educational qualification;

2.4 teaching experience, and

2.6 number of relevant in service trainings

3. What is the extent of the implementation and the utilization of LRMDS in terms of the following:

3.1 adequacy of personnel;

3.2 adequacy of facilities and equipment;

3.3 sufficiency in budget allocation;

3.4 goals and objectives;

3.5 learning resource planning;

3.6 school learning resource center restructuring, and

3.7 portal utilization?

5. Is there a significant difference between the perceptions of the two groups of respondents on the extent of the implementation and the utilization of LRMDS along the aforementioned areas?

6. Is there a significant relationship between the extent of implementation and utilization of the LRMDS along the identified field areas and the following:

6.1 LRMDS Coordinators-related variates; and

6.2 teacher-related variates?

Hypotheses

Based on the foregoing questions, the following hypotheses were tested in the study:

1. There is no significant difference between the perceptions of the two groups of respondents on the extent of the implementation and the utilization of LRMDS along the aforementioned areas.

2. There is no significant relationship between the extent of the implementation and the utilization of the LRMDS along the identified field areas and the following:

2.1. LRMDS Coordinators – related variates and

2.2. Teacher – related variates.

Theoretical Framework

This study was anchored on Design and Usability Principles particularly Affordance and Consistency. Norman (2013) described affordance as the relationship between a physical object and a person. The researcher looked into the utilization of the LRMDS by the teachers. She perceived that the usability of the learning resources depends largely on the ability of the teachers to use the portal and the availability, as well as accessibility, of those materials.

The researcher also hinged this study on Technology and Acceptance Model (Venkatesh & Davis, 2000). The theory posits that a person's intent to use (acceptance of technology) and the usage behavior (actual use) of a technology is predicated by the person's perceptions of the specific technology's usefulness (benefit from using the technology) and ease of use. Simply, the teachers and the coordinators are more likely to use the LRMDS if it is usable, useful, desirable, and credible.

Further, the Theory of Reasoned Action (TRA) (Fishbein, 1967) guided this study as it explored the relationship between the attitudes and the behaviors within human action. This indicates that the teacher's decision to contribute and/or download materials from the portal is driven by the quality of the learning resources they can get from it.

The Unified Theory of Acceptance and Use of Technology (UTAUT) Venkatesh, et al, (2003) holds that there are four key constructs that define

user intentions to use an information system, to wit: performance expectancy, effort expectancy, social influence, and the facilitating conditions. This theory steered the current study in that, the teacher's profile are one of the facilitating conditions that could influence their usage of the LRMDS. Aside from this, they expected that using the portal was easy and that they could retrieve highly usable learning materials.

This study was also grounded in the Technology-Organization-Environment (TOE) theory by Tornatzky and Fleischer (1990). According to the TOE theory, the adoption and the implementation of technological innovations consist of three aspects: technological context, organizational context, and environmental context. The technological context refers to the characteristics of the technological innovation; the organizational context describes the characteristics of the organizations, while the environmental context implies the characteristics of the environment in which the adopting organizations operate. The theory guided the researcher in determining the level of the utilization of the LRMDS portal by the coordinators and the teachers. Understanding the volume of the LRMDS activities can very well improve the enhancement of the system for greater utilization.

This study was affixed on a number of theories and principles, especially Bingimlas' Theory of Integration of Information Technology to Education, Miller's Theory on Information Processing of Leaning, and the Vygotsky's Sociocultural Theory of Development.

According to Bingimas' theory of Integration of Information Technology to Education, while teachers tend to have a solid desire to integrate technology into education, the foremost barriers were lack of time, confidence, competence, and access to resources. Consequently, one of his suggestions is that reliable, usable and accessible ICT resources, effective implementation processes for teachers to successfully embed the use of digital curriculum resources into their teaching practice and the need to be aligned and integrated. Professional development, sufficient time, and technical support need to be provided to the teachers. Further argumentation is that no one component in itself is sufficient to provide good teaching. However, the presence of all components increases the possibility of integration of ICT in learning and teaching **(Bingimlas: 235)**

In this model, an "image" is an accumulated organized knowledge the learner has about himself and the world. A "plan" is any hierarchical process in the organism that can control the order in which a sequence of operations would be performed, like a computer software program. "Strategies" and "Tactics" are units in the organization of behavior. The theories mentioned herein undeniably suggest that technology has played, and continues to play an important role in the development and the expansion of education, most specifically on the kinds of resources used in classroom teaching and learning processes.

Conceptual Framework

The researcher forwarded the idea that the profile of the LRMDS coordinators and the teachers and their perceptions on the level of the implementation and the utilization of LRMDS are related. She also conceptualized that there is a similarity in the appraisal of the implementation and the utilization of the LRMDS between the LRMDS coordinators and the teachers. Further, a number of aspects of the LRMDS were looked into to ensure a holistic approach of the assessment of its implementation and its utilization in the public schools in Biliran Division. Moreover, she conceptualized that an Enhanced Teaching and Learning through Innovative Technology towards an Empowered LRMDS Implementation of DepEd Biliran (Project E-TELETECH) can be developed based on the findings of this study.

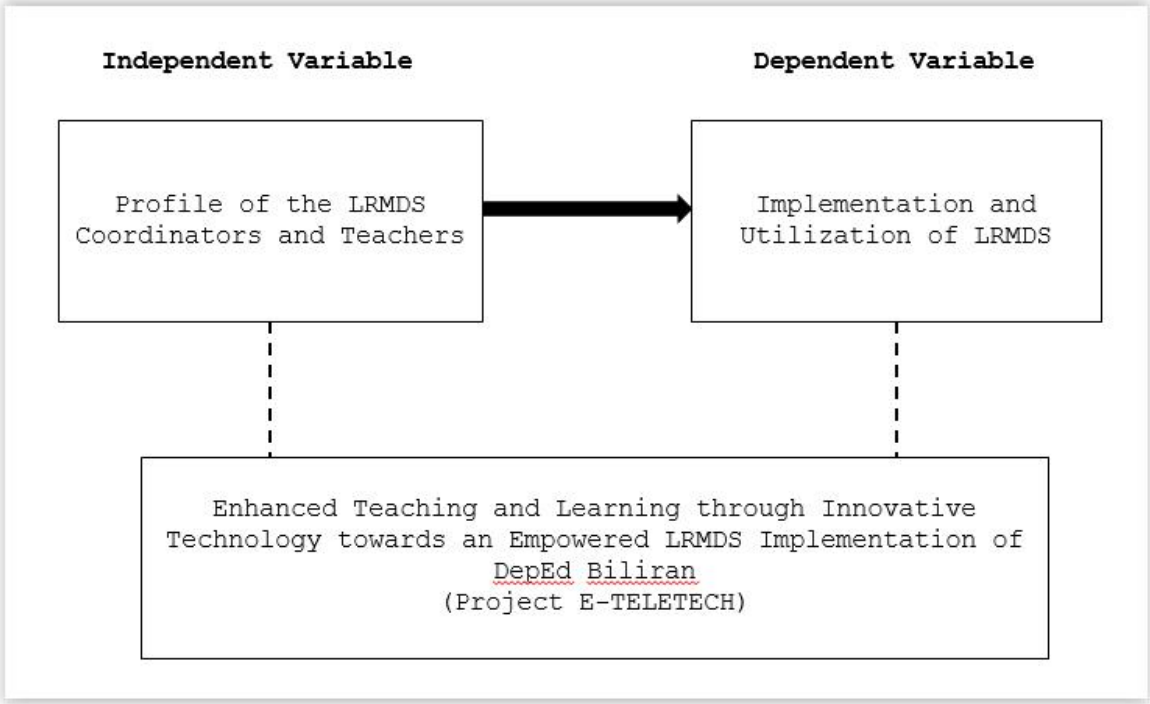

Figure 1. The Conceptual Framework of the Study

Significance of the Study

Primarily, the implementation of the Learning Resource Management and Development System (LRMDS) shall benefit the following groups of individuals: DepEd National and Regional Officials, DepEd Division Officials, public elementary and secondary school administrators, LRMDS coordinators, elementary and secondary school teachers, parents, community, and future researchers.

Teachers. The findings of this study are beneficial to the teachers because they are given sufficient knowledge on the what's and the how's of the LRMDS. A chance to revisit their knowledge and pedagogy in education that relates to LRMDS may be enhanced that would lead to be informed that improving their skills in using technology could pay dividends in their pursuit towards developing and sharing teacher-made learning resources through the LRMDS portal.

Further, through the findings of this study, the teacher gets improvement and possess both pedagogical and technical competence in creating an environment conducive to quality learning and address the diversity of learners. More importantly, they would have an opportunity to reflect on their newly learned competencies from the perspective of their school administrators which will ultimately lead them to initiate personal efforts to mitigate the impact of impoverished education that we are generally characterized with.

LRMDS Coordinators. The outcomes of this study can provide the LRMDS Coordinators with rich information as regards the importance of their role in facilitating the uploading and the downloading of learning materials thereby assisting those teachers who lack the skills in using the portal.

The DepEd Officials and School Administrators. Through the findings of the study, the DepEd Division officials are given sufficient information to make informed decisions on the implementation of LRMDS in the Division of Biliran.

Also, through the findings of the study, the primary and secondary school administrators shall be enlightened as to the inadequacy on their managerial competence they direly need in order to perform efficiently and effectively their job as school administrators. With these bits of information that this study have provided, the school administrators have already the bases on designing specific strategies to address the identified extent of the implementation and the utilization of LRMDS along adequacy of personnel; adequacy of facilities and equipment; sufficiency of budget allocation; goals and objectives; learning resource planning; learning resource structuring, and the portal utilization in order to come up with possible solutions on the most common problem besetting the LRMDS implementation.

DepEd National and Regional Officials. Through the findings of the study, the Department of Education (DepEd) officials from the national and regional offices are provided with evidence-based and localized data on the LRMDS implementation in the Division of Biliran. Similarly, the findings and

recommendations of this study are influential to the DepEd national and regional officials in the formulation of policies to improve the LRMDS implementation, utilization and institutionalization all throughout the country.

Students. As direct beneficiaries of the LRMDS, the findings of this study shall benefit directly from their teachers who will now able to provide quality learning resources for them to fully comprehend the subject matter. The study and its findings shall enable to address with the shortage of LMs/textbook in the classroom.

Parents. Networking with the parents is one of the competencies that teachers should have in order to promote and realize the vision, mission, and goals of the DepEd through the schools they are assigned to. Through the findings of this study, the parents, as influential stakeholders in the total development of school, are given the idea on how to assist their children on acquiring learning resources online and provide assistance in the development and production of learning resource materials. The engagement the school has with the parents shall bring the necessity of LRMDS to bring about quality learning of their children to better prepare for life.

Community. It is said that every student in school is a scholar of the community. Through the findings of this study, the people in the community are given the idea on how to assist the teachers in the implementation of LRMDS through the Parents – Teachers – Community Association (PTCA) or the School Governing Board.

Future Researchers. The findings of this study shall provide the future researchers with baseline inputs along the other aspects of school management other than the learning resource materials development and production.

Scope and Delimitation

This study focused on the implementation and the utilization of the Learning Resource Management and Development System (LRMDS) in public elementary and secondary schools in the Division of Biliran. The perceived managerial competence of the LRMDS – Coordinator – respondents were correlated with the following profile variates: age and sex, civil status, average monthly family income, educational qualification, number of years as LRMDS coordinator, number of relevant in – service trainings, attitude towards LRMDS implementation.

Similarly, the study determined the degree of relationship between the perceived managerial competence of the LRMDS coordinators and the teachers along the following concerns: the Learning Resource Center (LRC) and the Learning Resource Plan (LR Plan).

All the 34 public elementary and secondary School LRMDS Coordinators and 1030 public elementary and secondary school teachers from the 145 elementary and secondary schools in the Division of Biliran were involved as respondents in this study.

This study was conducted during the School Year 2018 – 2019.

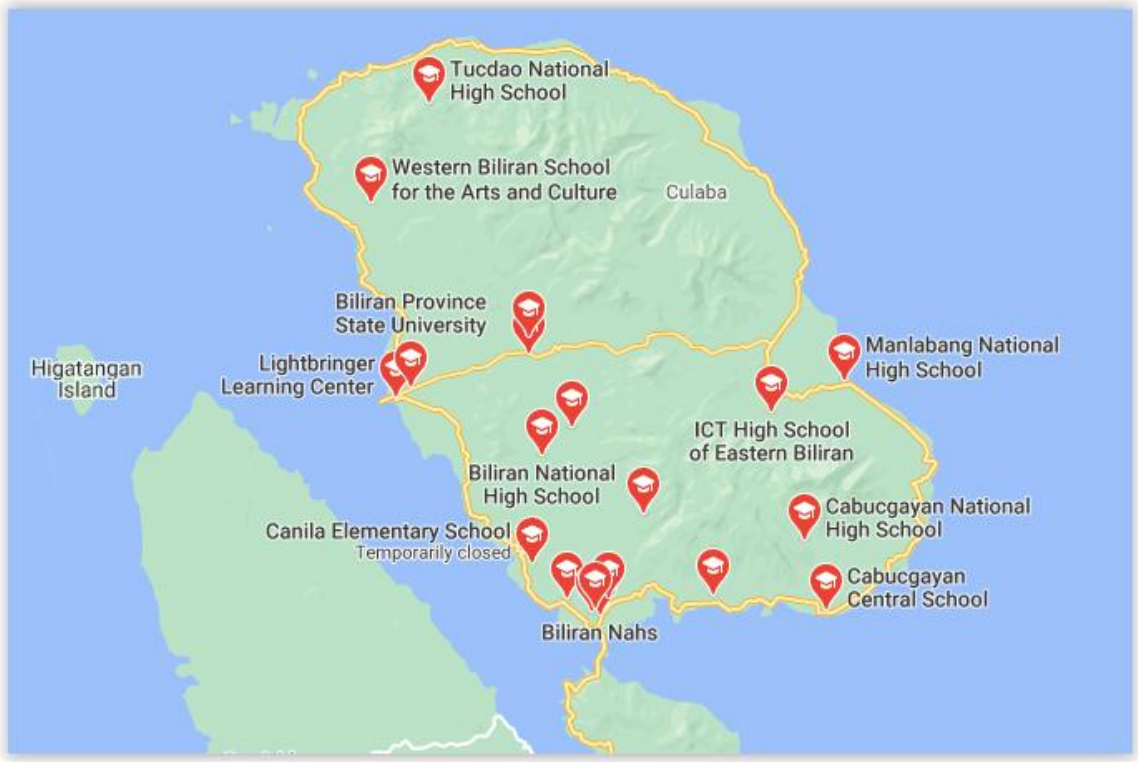

Figure 2.The Map of the Secondary Schools in Biliran Division

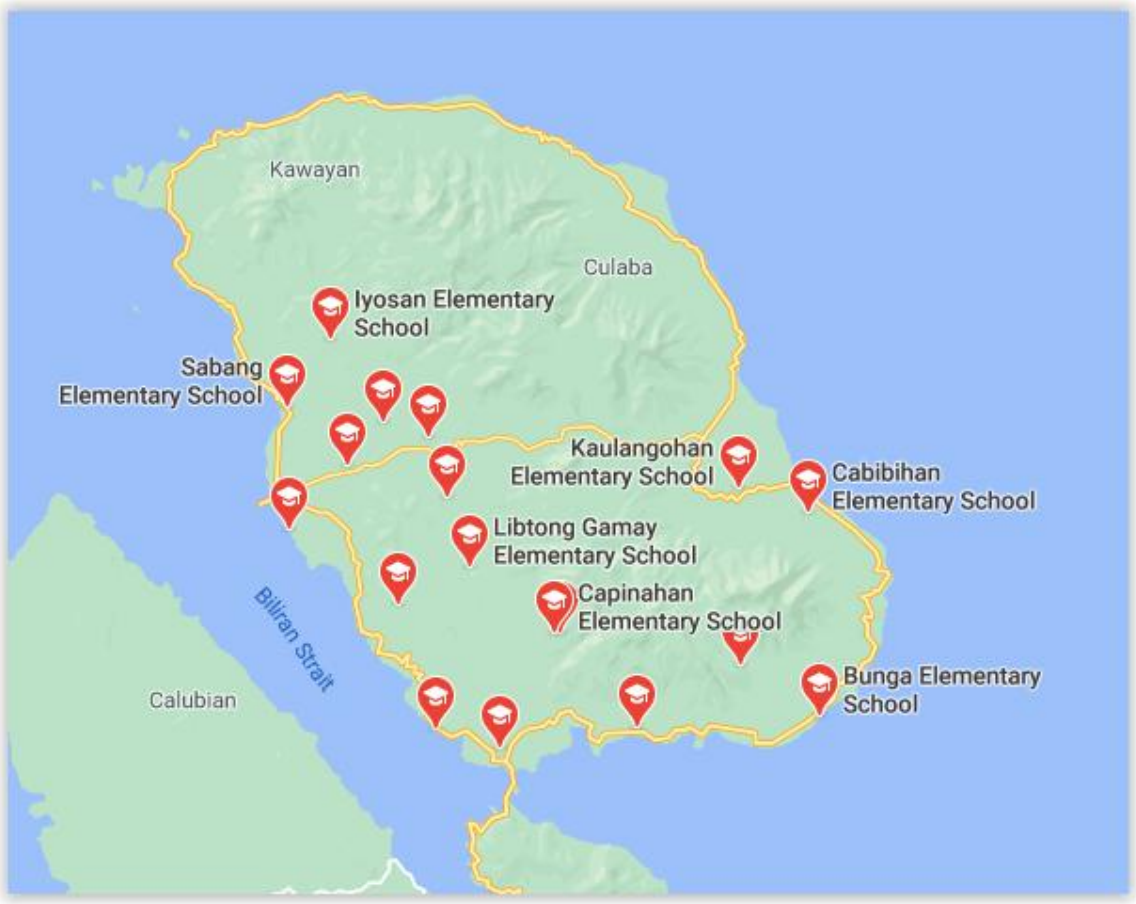

Figure 3. The Map of the Elementary Schools in Biliran Division

Definition of Terms

In order for the readers to have a better understanding of this study, the following terms are herein defined conceptually and operationally.

Competence. It is defined conceptually as the concept, skills and attitudes essential to an occupation (Webster, 1986:463). Operationally, the term refers to the skills, concepts, attitudes and practices as manifested by the elementary

and secondary school administrators from the public elementary and secondary schools in the Biliran Division.

LRMDS. This stands for Learning Resources Management and Development System. In this study, it refers to an online library containing downloadable and free teaching and learning materials. These learning materials are tied in with the curriculum to ensure relevance and appropriateness (LRMDS Frameworks, June, 2010)

LRMDS Coordinator. This refers to the person appointed by the principal to take charge in the implementation of the LRMDS and performs the specific functions such as: Manages the implementation of policies, guidelines, standards and specifications in the procurement, development, production and utilization of teaching and learning resources; evaluates quality assured and approved localized teaching and learning resources for the use of the school; develop materials for various delivery systems through the use of ICT – enabled solutions, and oversees the utilization of the processes to support access to teaching and learning resources (LRMDS Frameworks, Kune 2010)

School Administrator. Conceptually refers to a DepEd official who sets, the mission, vision, goals and objectives of the school, creates an environment conducive to teaching-learning process, implements, monitors and assesses the school curriculum and is accountable for higher learning outcomes (Department of Education, 2016).

Web portal. Conceptually, this refers to as a specially designed website that often serves as the single point of access for information. It can also be

considered a library of personalized and categorized content. A web portal helps in search navigation, personalization, notification and information integration, and often provides features like task management, collaboration, and business intelligence and application integration. **(**https://www.techopedia.com/definition/17352/web-portal**)**. In this study, it is the established LRMDS to make available to educators both digital and non-digital learning and teaching materials such as training modules, activity sheets, assessment resources, books, teaching guides, model lesson plans, and etc.

CHAPTER II

REVIEW OF RELATED LITERATURE AND STUDIES

This section provides an in-depth review of vast literature and studies on the learning resource as they relate to quality teaching and learning providing the concepts from the context of local and international concerns characterizing the Enhanced Implementation of Learning Resources Management and Development System.

Related Literature

Learning Resources Management and Development System

The Learning Resources Management and Development System (LRMDS) is a web-based catalogue and repository of learning, teaching and professional development resources. It functions as a clearinghouse. It is the system which provides information about the location of resources (hardcopy and softcopy) and allows users of the system to access directly any digitized versions of resources that are published and stored within the LRMDS repository. It is also a quality assurance system providing support to DepEd regions, divisions, districts, and schools in the selection and acquisition of quality digital and non-digital learning resources in response to identified educational needs. The framework for Learning Resources Management and Development System (LRMDS) describes the processes and guidelines of the systems designed and developed to support the implementation by DepEd Central Office, Regions, Divisions, and Schools in the country.

Its major objective is to provide technical basis for assessing, acquiring, adapting, developing, producing and distributing quality learning and teaching resource materials for students and instructional support materials to teachers (LRMDS, 2020). It even allows uploading of learning resource materials through LRMDS (DO 35, s.2010).

To achieve the objective of enhanced provisions of quality instructional and learning materials, the procurement, production and redevelopment of learning resources (LR), teaching resources (TR), and professional development materials (PDM) are informed by the principles for 21st Century Education F or All and in support of the Millennium Development Goal and Basic Education Reform Agenda. These principles are the following: (a) inclusivity – this principle requires the selection of resources for cataloguing, redevelopment and reproduction targets resources that are comprehensive and support basic education, its major priority that is to provide for differentiated learning and access needs of all target users; (b) learner-centered – this principle requires that student learning resources are activity-based rather than lecture-based promoting the learners' engagement in cooperative learning as well as individual learning; (c) access - the principle of access requires that all learning resources, teaching resources, and professional development materials catalogued and/or accessed via LRMDS; (d) engagement in learning – this requires that redeveloped resources are not merely digitized textbooks, but the design of the learning activity is at the appropriate level (age and academic) for the users, and (e) successful learning

– this principle requires that the learning objective and required learning outcomes are made explicit whose activities must include assessment to assist the learner and the teacher to evaluate the level and depth of understanding, earning progress and learning needs (LRMDS, 2020).

Among the quality resource types which LRMDS provides access are learning resources (LRs)that cover any digital or non-digital educational resource with a learning purpose designed to be used directly by the students or integrated into teacher-developed lesson plans; teaching resource (TRs)which is any educational resource digital or non-digital that supports the teachers in curriculum development, delivery and pedagogy or teacher trainers in the delivery of professional development programs, and professional development materials (PDM) that have to do with any digital or non-digital education training and development resource or program designed with a training and development purpose. All these can be accessed directly from the web-based repository or availability is communicated by the system (Framework for LRMDS, 2008).

LRMDS portal can be accessed by users through registration using their DepEd email account. They can search and download learning resources aligned to the K to 12 curriculum in different formats. Categories are provided for easy selection of media resources needed by the users.

Currently, education has been widely and entirely spreading and oral teaching is insufficient key to successful pedagogy, therefore, the teacher needs to use instructional materials to make teaching and learning process

motivating (Dahar & Faize, 2011). Instructional materials are tools locally made or imported that help to facilitate the teaching/learning process. They are also used to compose portals that could make tremendous enhancement of intellectual use and impact of the instructional materials (Nicholls, 2000; Raw, 2003).

According to Gagne (2005), instructional materials can be used to develop higher learning abilities to the learners through self-teaching or guided learning. This implies that the instructional materials mainly comprise "eliciting performance" and "providing feedback on performance correctness," in addition to "providing learning guidance" for guided discovery learning. The purpose of instructional materials or technology in education is to stretch the students' imagination and to encourage them to solve problems in their lives.

Further, learning means obtaining knowledge or comprehension skill by study, instruction or experience. Subsequently, electronic learning or e – learning is the liberation of education (all activities significant to instruction, teachings, and learning) through diverse electronic media. The perception of the e-learning concept differs from "training via the Internet" to a more extended definition as "an approach to facilitate and improve learning in terms of personal computers, Compact Discs-Read Only Memory (CD-ROMs) and the Internet". (Karim & Masrek, 2005). Through these e – learning, software opens up the opportunity and access on the online education.

Technologies and online resources can help overcome learning difficulties in three specific ways: by providing a platform for training or rehearsal; through the use of assistive technologies, and by using technologies to make learning possible where it was not possible before (Abbot, 2007).

Davies and colleagues (2005) described a number of benefits of digital technologies and online resources for learning with the 14 – 19 age group compared to traditional learning. These benefits can be organizational, such as the ability for students to plan personalized pathways of education provision. They can also support the teaching process, by providing the ability for staff to monitor student progress online (for example via e – assessment or e – portfolios), and provide increased flexibility for learners through the provision of 'anytime, anyplace learning', reaching the non – traditional learners and the learners outside formal education.

Adeogun (2001) stated a strong positive link between the instructional resources and the academic performance. According to Adeogun, schools that possess more instructional resources performed better than schools that have less instructional resources. This finding supported the study by Babayomi (1999) that private schools performed better than public schools because of the availability and adequacy of teaching and learning resources. Moreover, Adeogun (2001) noted that there was a low level of instructional resources available in public schools, hence, commented that public schools had acute shortages of both teaching and learning resources.

He further commented that effective teaching and learning cannot occur in the classroom environment if essential instructional resources are not available.

Kerr, et al(2003) identified a number of characteristics of successful learning communities: shared ownership and equality; history of collaboration; flat hierarchies; time to develop trust and relationships; built – in formative evaluation, and a positive ethos. The ways in which learners take part in the communities that support online learning and revision sites have also been the subject of research.

Much recent research and funding have focused on building internet – based repositories that contain collections of high- quality learning resources, often called 'learning objects'. (Wiley, 2001)

Resources in such repositories are typically described using metadata. Much like a library card catalogue, metadata for learning resource usually contain basic information about the resource. These include, subject area, resource type, rights management, and author information. These metadata records are intended to support users (including teachers and students) in finding relevant resources. The National Science Digital Library (NSDL) is an example of such an educational digital repository. The U.S National Science Foundation sponsored NSDL to provides access to a comprehensive collection of science, technology, engineering and mathematics (STEM) education content and service to learners, educators, and academic policy – makers (Lagoze, 2002; Wattenberg, 1998; Zia, 2001).

Similar national initiatives aimed at building large scale repositories of learning resources exist in other countries, including the Curriculum Online in the Uk. The Canadian eduSource project, and the Australian Learning Federation.

Fuller and Clark (1994) suggested that the quality of instructional processes experienced by a learner determines quality of education. In their view they suggest that quality instructional materials creat into the learners quality learning experience. Mwiria (1995) also supports that students performance is affected by the quality and quantity of teaching and learning resources. This implies that the schools that possess adequate teaching and learning materials such as textbooks, charts, pictures, real objects for students to see, hear and experiment with, stand a better chance of performing well in examination than poorly equipped ones.

Related Studies

Many studies had been conducted locally and I nternationally which are aligned on the implementation of Learning Resources Management and Development System. Some dealt on the implementation of e-learning, online materials, web portals and leadership abilities, talents, approaches, and practices of the 21st century teachers. These attitudes and extent of implementation issues had been mentioned in this review of related studies to establish a good and solid background for the present study.

The study of Sipahi (2020) while similar to the present study because both delved into the use of LRMDS, they are different from each other because the

former was done in Carcar, Cebu as its locale of the study, this study was conducted in Samar. Also, while the present study was participated by two (2) respondents, the teachers and the LRMDS coordinators in both the elementary and secondary schools, Sipahi's was only participated by the secondary teachers; both studies were participated by public schools. Finally, both studies found the teachers rarely use the LRMDS portal. Sipahi (2020) also found out that The teachers would rather prepare and use their teaching materials. Most teachers in District II never wanted to publish learning material in DepEd LR portal. Moreover, the teachers from both districts agree that DepEd LR portal is easy to access and does not require sophisticated hardware and high-speed internet connectivity.

The study of Mtebe (2015) and the current study were both on LRMDS, though the former was conducted in Africa and the latter in Samar, Philippines, they also talked about the subject of tertiary education for the former, this present study is for elementary and secondary public schools. Further, both studies encouraged the use of learning materials to respond to the local educational needs. According to Mtebe (2015), institutions should identify effective strategies for supporting increased, cost effective, efficient, timely and relevant response and solutions to concerns, issues and program with the learning management system, say the DepEd Learning Portal.

Eduwebtv online portal and Learning Resource Management and Development System (LRMDS) were at the center of Mahmud and colleagues' (2012) and this study, respectively. Both researches looked into the utilization

of online learning resource systems for teaching and learning process by the teachers. The two studies used descriptive statistics in analyzing the gathered data. However, Mahmud et al. specifically, examined the readiness in utilizing the educational resources from the Eduwebtv along; a) background information, b) knowledge of Eduwebtv, c) skills in using Eduwebtv, and d) attitude towards using Eduwebtv of the teachers in the secondary schools from the five states of Malaysia. In contrast, this study assessed the actual utilization of the LRMDS portal by secondary school teachers from the Biliran Division, Philippines. However, both studies revealed that teachers were yet to maximize the learning resources available from these portals.

Further, this study and the research conducted by Natarajan and Hedberg (2006) delved on usability of web-based knowledge portals. Both researches had uncovered sporadic utilization of the portals and some users were unaware of the many learning resources that the two portals. Contrastingly, Natarajan and Hedberg (2006) looked into the usability of the portal of Centre for Research in Pedagogy and Practice (CRPP) which is within the National Institute of Education in Singapore while this study assessed the utilization of the Learning Resource Management and Development System, a flagship of DepEd in the Philippines. Unlike their study which involved CRPP's staff members, the present study was participated by public secondary school teachers.

The study of Kosmas (2017) and the present study share a striking resemblance as both investigated the act of contributing to and using

educational resources from an online community. But while Kosmas (2017) concentrated on (a) the patterns of knowledge sharing amongst teachers in an official online community for PD purposes and (b) teachers' perceptions and motivation to participate in such online community, the current study explored on teachers' utilization of DepEd's LRMDS portal.

The study of Okongo and colleagues (2015) entitled "Effect of Availability of Teaching and Learning Resources on the Implementation of Inclusive Education in Pre-school Centers in Nyamira North sub-county, Kenya," was similar to the current study since it focused on the availability of teaching and learning resources. Also, both studies were quantitative research which made use of descriptive statistics. The two studies similarly found inadequate learning resources available to teachers. However, the identified differences were along the respondents since the study of Okongo et. al. involved head teachers and classroom teachers in pre-school centers while the present study involved LRMDS coordinators and classroom teachers in the elementary and secondary schools. Aside from this, Okongo, et al. focused on inclusive education while the present study covered the mainstream curriculum. But like the what DepEd has done on LRMDS thus far, efforts had been made in the study to assimilate the learners with special needs although the program has encountered a lot of challenges; policies had been put in place to provide for the achievement of universal education and the realization of vision 2030 as Okongo, et al. had found.

The study concluded that availability of the teaching and learning resources towards the implementation of inclusive education in pre-school Centres in Nyamira North Sub-county improves curriculum delivery, come across the needs of learners with special needs and enhance pupils' enrolment and retention in pre-schools centers. The essential learning resources like Braille slates, large prints, audiotapes and loudspeakers, wheel chairs, crutches and sandpaper letters when made available lead to higher pupil enrolment and retention. The challenges to procurement of teaching and learning resources is due to lack of finance, ridged procurement procedures, unavailability of material and market logistics that needs to be tackled by sound procurement policies.

The reviewed study of Okongo and colleagues was found related to the present study since both studies dealt with learning resources and teaching that measures the extent of implementation.

Similarly, a study by Ogaga and colleagues (2016) entitled “Effects of Instructional Materials on the Teaching and Learning of Social Studies in Secondary Schools in Oju Local Government Area of Benue State”, which centers on determining the effect of instructional materials on the teaching and learning of social studies in secondary schools in Oju local government Area of Benue state. Based on the results, it was generally agreed that instructional material and their usage have profound influence on student academic performance and achievement.

From the results of the study, Ogaga and colleagues concluded that the selection of important instructional material, available and the ability of teachers to improvise all hard significant relationship between teaching and learning of social studies. In this case, the study draws the attention of the teachers, proprietors, principals as well as government in Oju to take priority in the provision instructional materials since they boost student performances.

Additionally, Liu (2010) conducted a study on "Social Media Tool as a Learning Resource" by which, he investigated the different social media tools used by the students, their perceptions and attitudes towards these tools, and their preference of social networking groups. In contrast, the current study focused on learning resources available from the LRMDS which can take many forms such as printed, digital, audio, video, and many others. Teachers rather than students were the respondents of the present study – another contrasting aspects of Liu's and this research. But both studies maximize the internet as a tool in delivering quality education.

Furthermore, Igiri et al. (2015) and this study focused on instructional materials in teaching and learning. But unlike Igiri et al.'s study which involved five comparable senior secondary schools in Yakurr, the present research enjoined the LRMDS coordinators and the classroom teachers in the Division of Biliran. Contrastingly, Igiri and company used simple percentage method in analyzing data while this paper utilized descriptive statistics and inferential statistics particularly, Pearson r.

Yet, both studies underscored the significance of relevant instructional materials being accessible to teachers, be it online or physical copies.

The use of essential and relevant instructional materials in the teaching and learning process had been the focus of this study and Okoji's (2013). Both highlighted the fact that when the teachers make good use of instructional facilities such as slide projectors, it helps them to bring innovation to their teaching. Better results are expected from the learners when the instructional materials possess the characteristics of appropriateness, relevancy, visibility, sufficiency, simplicity and attraction. But the contrasting aspects of the two studies was this study involved the LRMDS coordinators and the classroom teachers in Biliran Division while Okoji's study had adult learners from Lead City University in Oyo State, Nigeria.

Another study similar to the current one was that of Kigwilu and Akala (2017) entitled, "Resource Utilisation and Curriculum Implementation in Community Colleges in Kenya" which also centered on teaching and learning resources. However, the two studies differ along the platform because Kigwilu and Akala focused on the physical sources of learning materials such as libraries and textbooks while the current study centered on learning resources available online through the LRMDS portal.

However, a study by Adyinka and colleagues (2012) on "Impact of web portals on e – learning" somehow examined the impact of web portal on e-learning among undergraduate students, as well as considering the benefits of using the web portal and the problems encounter when using it.

The results in his study revealed that the generalization of the respondents confirmed that web portal positively impact e-learning in such ways that it is being used as supplementary to pass across information to the learners in addition to learning through the electronic format, in enhances information sharing, needing the information and processing of each user, it provides the strategy to overcome the problem of distance, and improves students' computer and information literacy skills. The study also showed the challenges faced by the students when using web-portal such as; loss/forgotten password, slow network/ server access problem, incessant power failure and swift and unannounced removal of important information.

Both studies were considered related to the present studies because they proposed and measures the utilization of a web portal which is the main focus in this study in terms of the Learning Resource Management and Development.

Tety (2016) conducted a study on the " Role of Instructional Materials in Academic Performance in Community Secondary Schools in Rombo District", in which he examined the extent to which the selected community secondary schools in Rombo district utilize quality and adequate instructional materials in classrooms and how this has promoted academic. The findings revealed that teachers consider instructional materials as key to academic performance. This implies that the Schools with inadequacy of instructional materials and instructors are likely to perform low where as schools with

adequate instructional materials and instructors are likely to perform high performance of students.

It can be concluded also in his study that in order to raise academic performance in these schools teachers need to be creative in preparing relevant instructional materials and be dedicated to improvisation.

A study by Kononets (2018) on "Experience in Implementing Resource-Based Learning in Agrarian College Of Management and Law Poltava State Agrarian Academy" aimed to present experience of introduction of the resource-based learning of students at the study of disciplines of computer cycle the tools of electronic educational resources in the Agrarian College of Management and Law Poltava State Agrarian Academy.

Her study concluded that the problem of upgrading of preparation of students, optimization, intensification of process of studies and individualization of studies of students of agrarian colleges will do possible to decide the modern going near organization of educational process are the resource-oriented studies, and also ICT of educational purpose, which electronic educational resources which provide achievement of pedagogical and didactics aims are, no doubt, as with the use of ICT and web-technologies of possibility of organization of individual work of students and her quality broaden considerably.

The foregoing related literature and studies have supplied rich materials and ideas to the researcher. They served as guide in the conceptualization of the present study, too.

CHAPTER III

METHODOLOGY

This chapter presents the various methods and procedures in the conduct of the study. Specifically, it includes the research design, the instrumentation, the validation of the instrument, the sampling procedure, the data-gathering procedure and the statistical treatment of the data.

Research Design

This study utilized a descriptive correlational research design.

In particular, the descriptive phase covered the determination of the profile of the LRMDS coordinators and the teachers as well as the status of the LRMDS implementation and utilization in DepEd Biliran.

Additionally, the correlation phase involved the test of the relationship between the profile of the coordinators and teachers and the implementation and the utilization of LRMDS. The differences in the respondents' perception of the implementation and utilization were also looked into.

Instrumentation

This study employed a survey questionnaire as the main instrument in data gathering. This was administered to the two groups of respondents, the LRMDS Coordinators and the teacher-respondents per district of the DepEd Biliran Division.

Survey Questionnaire Set – A. This survey questionnaire was designed to gather the needed data directly from the public school LRMDS Coordinators of Biliran Division. This portion contained two (2) major parts.

Part I was intended for gathering data in their profile such as: age and sex, civil status, number of years as LRMDS coordinators, educational qualification, and the number of relevant in – service trainings.

Part II was designed to collect the profile of LRMDS along the following; adequacy of personnel, adequacy of facilities and equipment, sufficiency of budget allocation, extent of implementation along goals and objectives, learning resource planning, learning resource center structuring and portal utilization.

Survey Questionnaire Set – B. This second type of survey questionnaire was intended to gather the needed data directly from the public school teachers in the Biliran Division. This section was also divided into two (2) distinct parts. Part I was the section for gathering the profile of the public school teachers like: age and sex, civil status, teaching experience, educational qualification, and number of relevant in – service trainings. Part II was intended for collecting data on the following; adequacy of personnel; adequacy of facilities and equipment, and sufficiency of budget allocation; extent of implementation along goals and objectives; learning resource planning; learning resource center structuring, and portal utilization.

For the possible options in the second part (Part II), it covered the extent of Implementation and Utilization of LRMDS in DepEd Biliran along the (a) Adequacy of Personnel of Survey Questionnaire Set – A (For LRMDS Coordinator – Respondents), and second part for Survey – Questionnaire Set – B (For Teacher – Respondents), the following categories of options were

utilized: Yes, and None only; if Yes, how many personnel, and who managed it (just identify if School head, ICT Coordinator and other. For the (b) Adequacy of Facilities and Equipment, the following categories of options were used: 5 Very Adequate (VA), 4 Adequate (A), 3 Fair (F), 2 Inadequate (I), and 1 for Not Existing (NE). For the (c) Sufficiency of Budget Allocation, the following categories of options were used: 5 Very Sufficient (VA), 4 Sufficient (A), 3 Fair (F), 2 Insufficient (I), and 1 for None (N). For the (d) Goals and Objectives; (e) Learning Resource Planning; and (f) School Learning Resource restructuring, the following categories of options were used: 5 Excellent (E), 4 Very Good (VG), 3 Good (G), 2 Fair, and 1 for Poor (P). For (g) Portal Utilization the following scale for respondent's options were used: 5 Always (A) for 5-7 times in a week, 4 Often (O) for 2-4 times in a week, 3 Sometime(S) for only once a week, 2 Rarely (R) for only once in a month or year, and 1 Never for (N) or never used at all.

Validation of Instrument

The research instruments that were utilized in this study were validated through expert validation.

The drafted survey questionnaires by the researcher were submitted to her adviser and the panel members for expert validation centering on the very content of the instrument. Suggestions and recommendations coming from the experts were noted and incorporated in the final revision of the questionnaire before it was administered to the target respondents.

Sampling Procedure

To collect the required data for the completion of the study, total enumeration was used for the LRMDS Coordinator – respondents. Hence, all the 34 public school LRMDS Coordinators from the public elementary and secondary schools in the DepEd Biliran Division were identified and sampled as respondents of this study.

On the other hand, for the teacher-respondent population, stratified random sampling was used. A simplified formula for proportion was used to calculate the sample size for each district of the DepEd Biliran Division (Yamane, 1967:886). The formula were shown as follow:

$n=N/n+Ne^2$

Whereas; n= corrected sample size, N = population size, and e = Margin of error (MoE), e = 0.05 based on the research condition. Hence, the sampling frame for teacher-participants is shown in table I (Sampling Frame of the Teacher-Respondents). As identified, out of 1284 total population only 1030 were considered as the teacher-respondents of the study. Specifically, the respondents in each district were as follows: Almeria District (142), Kawayan District 1 (87), Kawayan District 2 (98), Maripipi District (80), Naval District 1 (103), Biliran District (136), Cabucgayan District 1 (78), Cabucgayan District 2 (101), Caibiran District 1 (109), and Caibiran District 2 (97).

Data Gathering Procedure

In this study, the researcher firstly asked for the approval of the request letter addressed to the DepEd Biliran School Division Superintendent. Later, another request letter, together with the Letter of Endorsement from the DepEd Biliran School Division Superintendent, was addressed to the public school LRMDS coordinators and the school teachers all throughout the districts of the DepEd Biliran Division was submitted for approval.

Upon approval of the said request letters, the validated survey questionnaires were administered to all the LRMDS coordinator–respondents and the identified teacher–respondents. Any response from all the respondents was treated with confidentiality by the researcher. When all the copies of the survey questionnaires were filled out, the data that were gathered, were tallied, tabulated, and analyzed using the specified statistical tools in order to come up with the desired findings and conclusions of the study.

Statistical Treatment of Data

The data that were gathered through the use of the survey questionnaires were organized, tallied, tabulated, analyzed and interpreted using the Statistical Package for Social Sciences version 16.0.

The descriptive statistics was used to analyse the profile and the implementation and the utilization of the LRMDS in the Division. In particular, the frequency count and the percentage were used to describe the

profile of the respondents while the mean and the rank were utilized to interpret the LRMDS implementation and utilization.

On the other hand, the test of correlation was conducted through Pearson r with the level of significance set at .o5. In addition, the independent means t-test were used to test the difference in LRMDS implementation and utilization as assessed by the coordinators and the teachers.

On the other hand, the scoring and the interpretation used were as follows:

(b) Adequacy of facilities and equipment

Numerical Equivalent	Statistical Limits	Interpretation
5	4.20 – 5.00	Very Adequate (VA)
4	3.40 – 4.19	Adequate (A)
3	2.60 – 3.39	Fair (F)
2	1.80 – 2.59	Inadequate (I)
1	1.00 – 1.79	Not Existing (NE)

(c) Sufficiency of budget allocation

Numerical Equivalent	Statistical Limits	Interpretation
5	4.20 – 5.00	Very Sufficient (VS)
4	3.40 – 4.19	Sufficient (S)
3	2.60 – 3.39	Fair (F)
2	1.80 – 2.59	Insufficient (I)
1	1.00 – 1.79	None (N)

(d) Goals and Objectives, (e) Learning Resource Planning, and (f) School Learning Resource restructuring

Numerical Equivalent	Statistical Limits	Interpretation
5	4.20 – 5.00	Excellent (E)
4	3.40 – 4.19	Very Good (VG)
3	2.60 – 3.39	Good (G)
2	1.80 – 2.59	Fair
1	1.00 – 1.79	Poor (P)

CHAPTER IV

PRESENTATION, ANALYSIS AND INTERPRETATION OF DATA

This chapter accordingly stipulates the results and discussion of the data gathered through the research instrument. The order of the discussion was based on the sequence of the objectives of this study.

Profile of the LRMDS Coordinator- Respondents

The profile of the LRMDS Coordinator – respondents in this study in terms of: age, sex, civil status, educational qualification, number of number of years as LRMDS coordinator, and the relevant in-service training was presented in Tables 1, 2, 3, 4, 5, and 6, respectively.

On the assumption that the coordinators of any area or program, project, or activity do some administrative functions, in the district of any DepEd school divisions in that they render functions and duties similar to that of school administrators or school heads, this researcher has adapted the findings of studies and other literature of principals/ school heads in schools as to how their profie relate to their performance.

Age.

Table 1 presents the age distribution of the LRMDS Coordinator - respondents.

Table 1 Age Distribution of the LRMDS Coordinator- Respondents		
	f	**Percentage**
18-34	10	29.41
35-49	19	55.88
50 - 65	5	14.71
Total	**34**	**100.00**

As depicted in Table 1, majority 19 or 55.88 percent were aged 35 – 49 years old, 5 or 14.71 percent were belonged to 50 – 65 age bracket, while 10 or 29.41 percent fell under 18 – 34 years old category. This implies that ICT coordinators are considered to be in old age where they are responsible enough on their actions.

Sex Distribution. As table 2 reflected, most were 18 or 52.94 percent of the ICT coordinators was males while 16 or 47.06 percent was females. This implies that the distribution of respondents in terms of sex was almost equal.

Table 2 likewise reveals that from the LRMDS Coordinator-respondents, the males dominate affirming the survey made by the Organization for Economic Cooperation and Development (OECD, 2017) among 22 member countries which indicated the unique gender distribution of those in the administration. Also, the finding of underrepresentation of female in administrative is supported by the findings of the studies of Riel and Byrd (1997). The findings of Huang et al. (2012) which stressed that socialization factors such as aspiration qualifications, and experiences cannot assure the women of equal opportunity with their men counterpart in administrative career development.

Table 2		
Sex Distribution of the LRMDS Coordinator -Respondents		
	f	**%**
Male	18	52.94
Female	16	47.06
Total	**34**	**100.00**

Civil Status. The Civil status of the LRMDS – Coordinator respondents is illustrated in Table 3.

Table 3		
Civil Status Distribution of the LRMDS Coordinator - Respondents		
	f	**%**
Single	14	41.18
Married	20	58.82
Widow/er	0	0.00
Total	**34**	**100.00**

As regards to the civil status of the LRMDS coordinators, 20 or 58.82 percent was married, while 14 or 41.18 was single. This implies that the LRMDS coordinators were bombarded with a lot of challenges which could be attributed from family, personal, or work-related matters.

Table 4
Educational Qualification of the LRMDS Coordinator - Respondents

	f	%
Doctoral Degree Holder	1	2.94
CAR Holder in a Doctoral Program	0	0.00
Master's Degree with unit in Ph.D	0	0.00
Master's Degree Holder	4	11.76
CAR Holder in a Masteral Program	14	41.18
Bachelor's Degree with Masteral Units	14	41.18
Bachelor's Degree Holder	1	2.94
Total	**34**	**100.00**

Table manifest the educational qualification of the LRMDS Coordinator – respondents. Markly shown by Table 4 how on or 2.94 of the respondents is a doctoral degree holder. With both the CAR holder in a masteral program and bachelor's degree with masteral units had an equal frequency of the highest education obtained by the majority and the LRMDS Coordinator-respondents 14 or 41.18 percent, while 4 or 11.76 percent were classified as master's degree holder. Finally, a considerable number of 1 or 2.94 percent was identified as bachelor's degree holder, the lowest among the respondents. This implies there is a need for the classroom teachers to pursue/enroll in higher education programs to obtain more knowledge and for personal and professional growth.

While with the earlier cited implication on educational attainment, this finding in the study finds theoretical support in the study of Priscellas et al. (2016) entitled, "Effectiveness of School Administrators' Leadership Skills and

Behavior and their School Performance in Area III Leyte Division," which posited that school leaders have to embody the type of leaders who can lead and are capable to address the problems faced by the schools, particularly in raising the quality of education. Further the research findings argued that school leaers have to possess a refutable track record based on their achievement.

Number of years as LRMDS Coordinator. The number of years as LRMDS Coordinator is presented in Table 5.

Table 5

Number of Years as LRMDS Coordinator - Respondents

Number of Years	*f*	%
1- 5 years	8	23.53
6-10 years	9	26.47
11 - 15 years	10	29.41
16- 20 years	2	5.88
21- 25 years	0	0.00
26 and above	5	14.71
Total	**34**	**100.00**

As divulged in Table 5, a large portion, 10 or 29.41 percent of the LRMDS coordinators acted as such for11 – 15 years in the service, the highest with 9 or 26.47 percent with 2 or 5.88 percent working as LRMDS coordinator for 16 – 20 years. Interesting to note is how 8 of the 34 LRMDS coordinators in the DepEd Biliran Division had only 1-5 years and 5 or 14.17 percent had 26 years and above. This implies that the LRMDS coordinators in the Division were already exposed much on their functions since majority had been in the service as LRMDS coordinator for quite some time.

In the study of Alkherb (1996), "The relationship between the principals' length of administrative experience and organizational leadership behavior in elementary schools in Saudi Arabia", he said that the wealth of relevant administrative experiences reflects to take on the rudimentary functions expected of them. Moreover, the length of service implies quality service to attend to the deeper dimension of their work.

Number of Relevant in-service Trainings. The relevant in-service trainings as to international, national, regional, division, and district/school for LRMDS coordinators is presented in Table 7.

Table 7

Relevant Training of the LRMDS Coordinator -Respondents

Number of times	International		National		Regional		Division		District/School	
	f	%	*f*	%	*f*	%	*f*	%	*f*	%
more than 11 times	0	0	0	0.00	4	11.76	4	11.76	1	2.94
6-10 time	0	0	0	0.00	3	8.82	1	2.94	5	14.71
1-5 times	0	0	2	5.88	7	20.59	18	52.94	19	55.88
none or 0 times	34	100	32	94.12	20	58.82	11	32.35	9	26.47
Total	34	100	34	100.00	34	100.00	34	100.00	34	100.00

As revealed in Table 7, all the LRMDS coordinators had not attended any international level trainings. This implies that ideas and competence of the Division LRMDS coordinators are dependent only with their local trainings and experiences.

As depicted from the same table, from the 34 of the coordinator-respondents, most, 32 or 94.12 percent of the LRMDS coordinators had not participated in any national level training, while there were only two (2) who had experienced attending in national level training in 1 – 5 times leaving 7, 18, and 19 attending the national, regional, division, and district-levels of

relevant training respectively. This implies that LRMDS coordinators should be encouraged to attend national level trainings to improve their knowledge and skills.

Meanwhile, 20 or 58.82 percent did not even experience a regional level relevant training, 7 or 20.59 percent only attended 1 – 5 times, 4 or 11.76 percent participated more than 11 times, and 3 or 8.82 percent were given the opportunity to attend 6 – 10 times. This implies that regional level relevant training for ICT coordinators are very limited.

From the data shown by Table 7, one can safely see the very significant need of giving the LRMDS coordinators who head this program at the district levels to attend relevant training from the district, division, regional and national training to equip them adequately to raise the bar of performance in the implementation and the utilization of the LRMDS as desired and planned.

In the study of Egboka (2018), "Principal Application of Management Support Practices for Enhancing teachers' Job Performance in Secondary Schools," in Emugo State, Nigeria, it was confirmed that trainings enables an individual to improve his existing skills, knowledge and abilities and exposes them to new approaches and trends in education to equip him with required skills. Thus, attendance in relevant trainings by those assuming administrative and supervisory functions is an avenue for them to improve their professional development for an enhanced competencies and qualifications to perform their job effectively.

Still on relevant trainings, again Alkherb (1996) reminded the policy-making bodies of education, how one's wealth of relevant experiences and trainings reflect his/her qualification to take on the discharge of his/her duties and functions expected of him/her and , also how these better qualify him/her to attend to the deeper dimensions of his/he work.

As manifested from the same table, 18 or 52.94 percent had attended division level relevant training for ICT Coordinators, 11 or 32.35 are not privileged to participate, 4 or 11.76 percent were thankful for having participated more than 11 times, and only 1 or 2.94 percent had experienced division level training for 6 – 10 times.

On the other hand, can be noted that 19 or 55.88 percent had attended ICT relevant training initiated by the district/school 1 – 5 times, 9 or 26.47 percent still do not have any training participated, 5 or 14.71 percent had the opportunity to having experienced school level training 6 – 10 times, and only 1 or 2.94 percent was lucky enough to have participated more than 11 times. This implies that school head should give equal opportunity among its teachers on sending them to relevant training and seminars for technical and professional skills development.

Profile of the Teacher- Respondents

The profile of the teacher – respondents in this study in terms of: age, sex, civil status, educational qualification, number of number of years as LRMDS coordinator, and relevant in-service training is presented in Tables 7, 8, 9, 10, 11, and 12, respectively.

Age. As revealed in Table 7, of the 1030 teacher-respondents in this study, most, 19 or 55.88 percent was in the 35 – 49 years old category, 10 or 29.41 percent belonged to the 18 – 34 category, and a considerable number of 5 or 14.71 percent at 50 – 65 years old category.

Table 7
Age Distribution of the Teacher- Respondents

	f	Percentage
18-34	136	13.20
35-49	702	68.16
50 - 65	192	18.64
Total	**1030**	**100.00**

Numerically, the majority, 702 of them, followed by the 50 – 65 age category at 192 and the lowest age category of 18 – 34 years old comprising the 1030 teacher-respondents in the study.

Be it as it may, it can be safely said that the majority being aged 35 – 49 category, observations, experiences, and studies seem to agree that these respondents are in their adulthood, thus associated with diminishing physical activities and mental abilities, but at a stage where meaningful life experiences and strategies are developed to compensate the dwindling or declining cognitive abilities.

Sex. The distribution of respondents in terms of sex is shown in Table 8.

Table 8
Sex Distribution of the Teacher -Respondents

	f	%
Male	316	30.68
Female	714	69.32
Total	**1030**	**100.00**

As illustrated in the table, majority, 714 or 69.32 percent of the 1030 teacher-respondents were females while only 316 or 30.68 percent were males. This implies that the male respondents were out-numbered by females.

Although the female-respondents underrepresented in administration by their counterpart, the LRMDS coordinator-respondents on sex distribution, female-respondents in this study are over represented in the handling of the implementation and the utilization of Learning Resources Management and Development (LRMDS) of the DepEd, more particularly in the 34 districts of the Division of Biliran.

The changing age of individuals seen as a person and as a member of a workplace significantly affects with how they deal with changes in both their life cycle and their ability to the changing environment, hence Nagy et al. (nd) said that age is not something that must be ignored in an organizational setting, as it may have impact on their career development. Thus, ignoring the age of the working population is key to the integration of key career development issues across the life span.

Moreover, age is said as a personal characteristic that prays on major role in the classroom system. According to Amadi and Allagoa (2017), in their study, “Demographic Variables as Determinants of Teachers’ Effectiveness in Classroom Management in Secondary Schools in River state, Nigeria," if the teacher holds a positive expectation and perception of some motivation, the students tend to achieve more hence the teachers are advised not to hold negative perceptions and expectations about a group of learners, not before

meeting them. The study established that age impact on the teaching and learning activities that teachers implement in the classroom bringing out individual differences among learners.

Civil Status. The Civil status of the teacher - respondents is illustrated in Table 9.

Table 9

Civil Status Distribution of the Teacher - Respondents

	f	%
Single	245	23.79
Married	737	71.55
Widow/er	48	4.66
Total	**1030**	**100.00**

As gleaned in Table 9, of the 1030 teacher-respondnets, 737 or 71.55 percent was married, 245 or 23.79 percent was single, and 48 or 4.66 percent was widow/wer.

The findings of the study on civil status suggested the predominance of married teacher-respondents in the Division of Biliran. The marital status of the teacher-respondents also plays a key role in their effectiveness in the discharge of their official duties and functions along the implementation and utilization of the learning resources available in their respective classroom. Based on Bandura's idea (Odanga, Aloka, & Reburu, 2015), a triadic relationships exists among teachers personal factors such as the marital status, the environmental factors such as the teaching profession and the behavioral characteristics such as self-efficacy determining the effectiveness of the teachers in the teaching learning process. established in the study is that the

teachers' marital status has influenced in the teachers' effectiveness found very significant between the married and the un-married ones. The teachers' efficacy determines their competence in using instructional resources and strategies, engaging students and managing the classroom.

Educational Qualification. The educational qualification of the teacher -respondents are provided by Table 10.

Table 10
Educational Qualification of the Teacher- Respondents

	f	%
Doctoral Degree Holder	46	4.47
CAR Holder in a Doctoral Program	26	2.52
Master's Degree with unit in Ph.D	16	1.55
Master's Degree Holder	134	13.01
CAR Holder in a Masteral Program	334	32.43
Bachelor's Degree with Masteral Units	423	41.07
Bachelor's Degree Holder	51	4.95
Total	**1030**	**100.00**

As shown in Table 10, most teacher-respondents, 423 or 41.07 percent of the teachers had bachelor's degree with masteral units, 334 or 32.43 percent as CAR holder in a masteral program, 134 or 13.01 percent with master's degree holder, 46 or 4.47 percent had doctoral degree holder, 26 or 2.52 percent as CAR holder in a doctoral program, and 16 or 1.55 percent were master's degree with PhD units. The data on educational qualification notably show how many teachers rose from being baccalaureate degree holders to entrance to the serive to earnng units leading to a master's degree and to a

doctorate degree and how 66 teachers out of the 1030 teacher-respondents of the study earned the doctoral degree. Among others, their educational rise brought them better competence and put them in a respectable status as professionals.

Associating this impressive desire of the teachers to improve themselves, teachers are considered as the most important resources in the school which often is associated with their students' academic performance. Hence, improving the teachers' effectiveness is seen as a means to enhance student learning. Accordingly, there are teacher characteristics that determine their effectiveness. Burroughs et al. (2019) identified this as the teachers' professional knowledge – their subject matter/ content knowledge, curricular knowledge and their pedagogical knowledge. The teachers' professional knowledge is affected by their undergraduate degrees, graduate studies taken.

Number of years in Teaching. The number of years in teaching of the classroom-teacher respondents is presented in Table 11.

Table 11

Number of Years in Teaching of the Classroom -Teacher Respondents

Number of Years	*f*	%
1- 5 years	155	15.05
6-10 years	257	24.95
11 - 15 years	241	23.40
16- 20 years	92	8.93
21- 25 years	148	14.37
26 and above	137	13.30
Total	**1030**	**100.00**

As reflected in Table 11, most of the teacher-respondents, 257 or 24.95 percent, had been in the service for 6 – 10 years; 241 or 23.40 percent was classified as 11 – 15 years; 155 or 15.05 percent reached 1 – 5 years in the service; 148 or 14.37 percent had 21 – 25 years in service; 137 or 13.30 percent had 26 years and above; and 92 or 8.93 percent with 16 – 20 years. It is safe to say that the teachers in the Biliran Division were already seasoned and skilled. The issue to settle in these findngs of the study is of what relevance are these to the implementation and the utilization of the LRMDS of the DepED in the Division of Biliran as perceived by the classroom teachers.

DepEd Order No. 3, series of 2016 requires that teacher applicants for Teacher I position be a teacher education graduate. Already settled in the earlier cited studies and literature is how teachers impact on their students' academic learning outcomes. To that end, two things need to be looked into: first, that a number of teacher variables, including years of teaching experience and second, the teacher variables which include teaching experience had no significant influence on the students' learning outcomes (Evetan & Evetan, 2015) on their study, "Teachers' Teaching experience and Academic Performance in Mathematics and English Language in Public Secondary Schools in Ogun State, Nigeria." The study posits that the positive effect of experience on teachers' effectiveness is more crucial in the early years of teaching because of the principle of learning by doing.

Therefore understanding the extent of teachers' experience in teaching is the crux to planning professional development, specially, at the start of the teaching careers.

Number of Relevant in-service Trainings. The number of relevant in-service trainings as to international, national, regional, division, and district/school for teacher - respondents is presented in Table 12.

Table 12.

Relevant Training of the Teacher -Respondents

Number of times	International		National		Regional		Division		District/School	
	f	%	*f*	%	*f*	%	*f*	%	*f*	%
more than 11 times	2	0.19	1	0.10	34	3.30	34	3.30	18	1.75
6-10 time	10	0.97	17	1.65	107	10.39	44	4.27	183	17.77
1-5 times	1018	98.83	92	8.93	196	19.03	744	72.23	512	49.71
none or 0 times	0	0.00	920	89.32	693	67.28	208	20.19	317	30.78
Total	**1030**	**100.00**	**1030**	**100.00**	**1030**	**100.00**	**1030**	**100.00**	**1030**	**100.00**

As presented in Table 12, majority 1018 or 98.83 percent of the 1030 classroom teacher-respondents had attended trainings in international level training 1 – 5 times; 10 or 0.97 percent had attended 6 – 10 times, and 2 or 0.19 percent had attended more than 11 times. This implies that classroom teachers are really wanted to have a quality instruction experience among our learners that is globally competitive.

Categorized as to the level of trainings, Table 12 gives a very impressive record of relevant training at all levels when compared to their counter LRMDS coordinator-respondents which was nil in the national and international levels. As gleaned in the table, 920 or 89.32 percent had not attended national level training; 92 or 8.93 percent had attended 1 – 5 times; 17 or 1.65 percent attended 6 – 10 times; and there was only 1 who had

attended a national level training for more than 11 times or more. This implies that teachers were sent to national level training for professional development.

Further shown by the same table, a large portion 693 or 67.28 percent had not attended any regional level training, 196 or 19.03 participated in regional training 1 – 5 times; 107 or 10.39 percent attended 6 – 10 times; and 34 or 3.30 percent had experienced more than 11 times. Impliedly, the classroom teacher-respondents had only a very limited opportunity to attend in relevant trainings at the national level.

Meanwhile, 744 or 72.23 percent had been given the chance to attend the division level relevant training of 1 – 5 times; 208 or 20.19 percent had not attended; 44 or 4.27 percent attended 6 – 10 times; and 34 or 3.30 percent had experienced division level relevant training for more than 11 times. This implies that only few division-initiated trainings were undertaken by the Division.

Lastly, district-wise, the majority of the teacher-respondents, 512 or 49.71 percent had attended 1 – 5 times; 317 or 30.78 percent had not participated any training; 183 or 17.77 percent enjoyed the training 6 – 10 times; and a considerable number of 18 or 1.75 percent was very much privileged to have participated district/school level training for more than 11 times. This implies how school administrators made their decision as to who from those classroom teachers should attend trainings.

While school heads are to exercise their discretionary power whom to send to trainings, the choice should be that those who need the training most should go. This is where spreading the better principle is done.

Aligned with this, according to Sipahi (2020), most of the teachers need more professional enhancement and development training to improve their resourcing skills. Again, Egboka (2018) emphasizing the importance of training of those in the workplace, he reminds the enabling element of training to improve the existing skills, knowledge and abilities while at same time exposing the teachers to the new approaches and trends in education thereby equipping with the required skills of their job.

Extent of implementation and utilization of LRMDS

The extent of implementation and utilization of LRMDS as to adequacy of personnel; adequacy of facilities and equipment; sufficiency of budget allocation; goals and objectives; learning resource planning; learning resource center structuring; portal utilization, and its frequency of use as perceived by the two groups of respondents is manifested in tables 13 to 20 for both the LRMDS coordinator and the teacher-respondents.

Adequacy of Personnel. The Adequacy of personnel as viewed by the two groups of respondents is presented in table 13.

Table 13

Adequacy of Personnel

There is an Assigned personnel:	LRMDS Coordinator						Teacher					
	Yes		NO		Total		Yes		NO		Total	
	f	%	*f*	%	*f*	%	*f*	%	*f*	%	*f*	%
Chairman for the Assessment and Evaluation of LR materials	5	14.71	29	85.29			128	12.43	902	87.57		
how many, and who?	***1 (ICT)***				34	100.00	***1 (ICT)***				1,030	100.00
Meta data Analyst	1	2.94	33	97.06			58	5.631	972	94.37		
how many, and who?					34	100.00					1,030	100.00
Development and Production Officer	2	5.88	32	94.12			83	8.058	947	91.94		
how many, and who?	***1 (ICT)***				34	100.00	***1 (ICT)***				1,030	100.00
Desktop Publisher and Lay Out Artist	1	2.94	33	97.06			58	5.631	972	94.37		
how many, and who?	***1 (ICT)***				34	100.00	***1 (ICT)***				1,030	100.00
Chairman for the Quality Assurance	0	0.00	34	100.00			47	4.563	983	95.44		
how many, and who?	***1 (ICT)***				34	100.00	***1 (ICT)***				1,030	100.00
Distance Learning Coordinator	1	2.94	33	97.06			47	4.563	983	95.44		
how many, and who?	***1 (ICT)***				34	100.00	***1 (ICT)***				1,030	100.00

On the extent of the implementation and the utilization of LRMDS along the issue of adequacy of personnel, the 34 coordinator-respondents' perception was on the Assessment and Evaluation; Meta Data Analysis, Development and production; Desktop Publishing and Layouting; Quality Assurance Learning, and Distance Learning Coordination as perceived by both respondents, the LRMDS coordinators and the teachers.

Assessment and Evaluation. Out of the 34 LRMDS coordinators of each district in the DepEd Biliran Division, 5 or 14.74% perceived it to be existing with a chairmen against the 29 or 85.29 percent who perceived it to be without a chairman. On the other hand, on the same issue, the 1030 teacher-respondents perceived, 128 or 12.43 believed the existence of the chairman on this issue with the 902 or 87.57 percent negating it.

Meta Data Analysis. As to the presence of an analyst personnel-wise, out of 34 coordinator-respondents, only 1 or 2.92 percent perceived the presence the meta data analyst with the majority, 29 or 97.16 negating it. The teacher-respondents, 1030 of them, only 58 or 5.631 percent perceived the presence of the Meta Data Analyst, while 972 or 94.70 denies the analyst's existence.

Development and Production. The presence of the development and Production Officer along Assessment and Evaluation, 2 or 5.88 percent of the 34 coordinator-respondents believed there was this officer tasked in the development production of learning materials with 32 or 94.12 negating the officer's presence.

To the 1030 teacher-respondents on the issue of having an officer specially tasked in the district for the development and production of learning resource materials, only 83 or 8.058 percent perceived that there was this officer with 947 or 91.94 believing the absence of that officer.

Desktop Publishing and Lay Outing. Specially needed in the implementation and the utilization of LRMDS is an artist task in desktop publishing and lay outing. Sought to determine the perception of both the coordinator and the teachers on the presence of an artist specially appointed or designated to look into this aspect of the adequacy of personnel. But of the 34 district coordinators identified in this study, only 1 or 1.94 percent expressed his awareness of the artist tasked to the desktop publishing and lay outing as against the 33 or 37.12 who perceived negatively.

On the 1030 teacher-respondents on the presence of the desktop publishing and lay outing artist on learning materials only 58 or 5.631 perceived positively as against the 972 or 94.31 who denied the artist's presence.

Quality Assurance. On this, the 1030 teachers were to give their perception as to the presence of the chairman specially tasked to ensure the quality assurance of the learning resource materials, only 47 or 4. 563 perceived there was this chairman with 983 or 95.44 percent negating the chairman's presence.

Distance Learning Coordinator. Lastly, the 1030 teacher-respondents were asked of their perception on the presence of the coordinator to make sure of the presence of distance learning aspect of the LRMDS. Only 47 or 4.563 perceived that there was a Distance Learning Coordinator while 983 or 95.44 percent denied the coordinator's presence in the districts.

One of the strateiges adopted by today's successful organization is its deliberate use of its personnel to help gain or maintain an edge against its competitors (Gomez-Mejica et al., 1995). The authors posit that the general approach an organization adopts to ensure that its effectivity uses its people to accomplish its mission.

Organizations are continuously challenged by competitiveness, thus its changing strategies to guarantee success/gains of high performance work systems which are generally linked to human resources and their capabilities, new technology and its opportunities and the efficient work structures and

policies that allows employees and technology to interact. The strength of these links on organizations' competitiveness (Noe et al., 2005).

Relating the issue on personnel adequacy along the LRMDS implementation and utilization as defined by the DepEd, the data gathered in the study show that the personnel charged with the assessment and evaluation of learning resource materials; meta data; analysis; development and production; desktop publication and lay outing; quality assurance, and distance learning coordination are all found wanting of personnel tasked in making sure that there on effective LRMDS' implementation and utilization in every school in the district, form the local to the national levels of the DepEd.

It is safe to infer that the inadequate personnel to man the LRMDS implementation and utilization surely leads to the impoverish program which in turn results to poor teaching and learning process.

The personnel being inadequate maybe seen as proof of lack of funds to sustain the employment of personnel for the six areas of the LRMDS implementation and utilization, designation of personnel maybe resorted to or where funds to warrant employment. Gomez-Mejica et. al. (1995) suggests that recruitment of personnel be seriously considered for recruitment to focus on attracting qualified candidates to ensure proper fit between hires and their jobs.

Finally, the result of the study along the adequacy of personnel speak of the sameness or congruence of both respondents of the study on the issue.

In congruence, Tety (2016) recommends the provisions for instructional material supplies, supports from stakeholders, and availability of localized materials.

Table 14
Adequacy of Facilities and Equipment

Indicator	LRMDS Coor Xw	Teacher Xw	Composite Means	Rank	Interpretation
1. Computer service for students	3.12	2.61	2.87	4th	F
2. Computer service for teachers and administrators	3.18	2.87	3.03	2nd	F
3. printing service	3.00	2.78	2.89	3rd	F
4. functional photocopy machine in the school	2.44	2.41	2.43	6th	I
5. TV set to be used for educational purposes	1.79	1.74	1.77	10th	I
6. CD/ DVD players for media and educational purposes	1.74	1.70	1.72	11th	I
7. Functional overhead projector for educational purposes	3.00	2.72	2.86	5th	F
8. Functional LCD for educational purposes	2.29	2.47	2.38	7th	I
9. Classroom condition (floors, walls, and roofs, shutter, student seats, file cabinet, blackboards and availability of space to accumulate all the students)	3.21	3.08	3.15	1st	F
10. Library services (reading room, chairs and tables, shelves, reference books, regular opening hours for students)	2.26	2.17	2.22	9th	I
11. Store room	2.29	2.42	2.36	8th	I
GRAND MEAN	**2.57**	**2.45**	**2.51**		**INADEQUATE**
Legend:					
5 Very Adequate (VA)		4.50-5.50			
4 Adequate (A)		3.6-4.5			
3 Fair (F)		2.6-3.5			
2 Inadequate (I)		1.5-2.5			
1 Not Existing (NE)		0.5-1.5			

Adequacy of Facilities and Equipment. Along the issue of adequacy of the facilities and equipment of the LRMDS implementation and utilization, 11 indicators were assist by both the LRMDS coordinators and the teacher-respondents: service for students; computer service for teachers; printing

service; functional overhead projector for educational purposes; and classroom condition; functional photocopy machines;

TV set to be used for educational purposes; functional LCD projector; library service, CD/DVD players and store room. From the 11 indicators to determine the adequacy of facilities and equipment the respondents of the study only identified 5 to be fair provided for LRMDS implementation and utilization and they were ranked from 1-5 as fair: service for students; computer service for teachers; printing service; functional overhead projector for educational purposes; and classroom condition, and functional photocopy machines, while all the remaining 6 indicators were inadequate such as: functional photocopy machines; TV set to be used for educational purposes; functional LCD projector; library service, store room, CD/DVD players.

Providing the workforce/personnel with adequate facilities and equipment which are necessary in reaching the defined goal which is the effective implementation and utilization of learning resource materials is a task of the organization, the DepEd.

A closer look at the 11 indicators along adequacy of facilities and equipment makes one to conclude that while these are those that can readily result to the success of the LRMDS of the DepEd. On the other hand, these indicators of LRFMDS, they also be seen as benefits for the implementers, users and those that benefit from such provisions. These can be twofold – those accruing to the teachers and those that accrue to the learners. To the teachers, the learning resource materials facilitate their teaching and enhances learns' learning.

Observable in the data provided by Table 14 is how the indicators never got beyond a "fair" perception. This implies among others the dire need of raising these, facilities and equipment, to the level of adequacy. Therefore, Sipahi (2020) concluded, teachers need to handle insufficient provision for learning materials.

Sufficiency of Budget Allocation. The extent of implementation and utilization of LRMDS along the sufficiency of budget allocation is presented in Table 15.

Table 15
Budget Allocation

Indicator	LRMDS Coordinator Xw	Teacher Xw	Composite Means	Rank	Interpretation
1. Fund for the development of learning resources	2.89	2.61	2.75	2nd	F
2. Fund for the internet connectivity	3.26	2.81	3.04	1st	F
3. Funds for professional growth of LRMDS staff	2.26	2.28	2.27	5th	I
4. Sustainability measures	2.71	2.55	2.63	4th	F
5. Fund for the facilities and equipment	2.80	2.56	2.68	3rd	F
GRAND MEAN	**2.78**	**2.56**	**2.67**		**FAIR**
Legend:					
5	Very Sufficient (VS)	4.50-5.50			
4	Sufficient (S)	3.6-4.5			
3	Fair (F)	2.6-3.5			
2	Insufficient (I)	1.5-2.5			
1	None (N)	0.5-1.5			

As gleaned in Table 15, there were five (5) indicators which measure the sufficiency of the budget allocation. Four (4) of the five (5) indicators such as fund for the development of learning resources, fund for internet connectivity, sustainability measures, and fund for the facilities and equipment had a composite means of 2.75, 3.04, 2.63, and 2.68, respectively interpreted as fair. However, there is an inadequacy of funds for professional growth of LRMDS staff which obtained a composite mean of 2.27 described as inadequate. Again,

Gomez-Mejica et al. (1995) emphasized the need of providing the personnel with a fit of their job through development and training.

It reached a grand mean of 2.67 labelled as fair. This implies that there is only a fair budget intended for the LR centers. This result further enhanced the call for institutions to identify effective strategies for supporting increased, cost-effective approaches for maximized performance (Mtebe, 2015).

Goals and Objectives. The goals and objectives extents of the implementation and the utilization of LRMDS is presented in Table 16 as determined by seven (7) indicators along: strengthened learning resource and development; improved instructional learning materials; digitized student learning; enhanced provision of quality instructional and learning materials;

Table 16
Goals and Objectives

Indicator	LRMDS Coordinator Xw	Teacher Xw	Composite Means	Rank	Interpretation
1. Strengthened learning resource development and distribution systems at school level	2.94	2.88	2.91	3rd	VG
2. Improved of instructional and learning materials through support for the assessment, acquisition, adaptation, development, production and, distribution of teaching/ learning materials	3.11	2.96	3.04	1st	G
3. Digitized student learning materials (including from PASMEP, PROBE, PRODED, BEAM, TEEP SEDIP, etc.) particularly for reading.	2.77	2.54	2.66	6th	G
4. Enhanced provisions of quality instructional and learning materials	3.09	2.79	2.94	2nd	G
5. Modified and enhanced instructional and learning materials for Implementing Alternative Delivery modes and learning Systems	2.97	2.67	2.82	4th	G
6. Improved development and utilization of Quality assurance (including Monitoring and Evaluation) systems for provision and utilization of learning resources	2.86	2.59	2.73	5th	G
7. Developed ICT – enabled solutions to support the strengthening of the learning resource support systems.	2.66	2.40	2.53	7th	F
GRAND MEAN	**2.91**	**2.69**	**2.80**		**GOOD**

Legend:		
5	Excellent (E)	4.50-5.50
4	Very Good (VG)	3.6-4.5
3	Good (G)	2.6-3.5
2	Fair	1.5-2.5
1	Poor (P)	0.5-1.5

modified and enhanced instructional and learning materials; improved development and utilization of quality assurance, and developed ICT.

As manifested in Table 16, in terms of the goals and objectives, out of the seven (7) indicators there are six (6) which is perceived by the respondents as Good. These indicators are strengthened learning resource development and distribution systems at school level, improved of instructional and learning materials through support for the assessment, acquisition, adaptation, development, production and, distribution of teaching/learning materials, digitized student learning materials (including from PASMEP, PROBE, PRODED, BEAM, TEEP SEDIP, etc.) particularly for reading, Enhanced provisions of quality instructional and learning materials, modified and enhanced instructional and learning materials for Implementing Alternative Delivery modes and learning Systems, and improved development and utilization of Quality Assurance (including Monitoring and Evaluation) systems for provision and utilization of learning resources which obtained a composite means of 2.91, 3.04, 2.66, 2.94, 2.82, and 2.73, respectively.

Meanwhile, developed ICT-enabled solutions to support the strengthening of the learning resource support systems had a composite mean of 2.53 assessed as Fair.

It obtained a grand mean of 2.80 signified as Good. This implies that the goals and objectives of the LR centers as viewed by the classroom teachers and ICT coordinators are good.

In support of this, Sipahi (2020) found out that the teachers reported that available learning materials in the DEpEd Learning Resource Portal are beneficial to the currently handled subjects, especially the accessible teaching guides, and TLMs.

Learning Resource Planning. The extent of implementation and utilization of LRMDS along learning resource planning is provided in Table 17.

Table 17
Learning Resource Planning

Indicator	LRMDS Coordinator Xw	Teacher Xw	Composite Means	Rank	Interpretation
1. LR staffs are well identified informed, and trained on their function and task	3.00	2.77	2.89	1st	G
2. There is a LP plan that reflects the needs for area, content and competencies	2.86	2.65	2.76	5th	G
3. The LR plans cater the needs in improving the school's academic performance	2.94	2.72	2.83	4th	G
4. LR team members have assessed and evaluated existing school LRs	3.00	2.71	2.86	2nd	G
5. Lead school have reproduced LRs for their satellite school	2.94	2.56	2.75	6th	G
6. Teachers have developed or redeveloped LRs aligned to the school LR needs.	2.97	2.73	2.85	3rd	G
GRAND MEAN	**2.95**	**2.69**	**2.82**		**GOOD**
Legend:					
5	Excellent (E)	4.50-5.50			
4	Very Good (VG)	3.6-4.5			
3	Good (G)	2.6-3.5			
2	Fair	1.5-2.5			
1	Poor (P)	0.5-1.5			

As manifested in Table 17, there are six (6) indicators to measure the Learning Resource Planning of which all the indicators were rated Good. LR staffs are well identified informed, and trained on their function and task; there is a LP plan that reflects the needs for area, content and competencies; the LR plans

cater to the needs in improving the school's academic performance; Lead schools have reproduced LRs for their satellite school, and teachers have developed or redeveloped LRs aligned to the school LR needs. It had a composite means of 2.89, 2.76, 2.83, 2.86, 2.75, and 2.85, respectively.

It had a grand mean of 2.82 interpreted as Good. This implies that as to the learning resource planning, its implementation and utilization was seen as good by the ICT coordinators and classroom teachers. Coinciding this, Sipahi (2020) found out that the perception of the teachers towards the DepEd Learning Resource Portal and other non-DepEd initiated learning materials providers has a significant impact.

Learning Resource Center Structuring. The extent of implementation and utilization of LRMDS as perceived by the classroom teachers and ICT coordinators in terms of learning resource center structuring is revealed in Table 18 along the following major indicators:

Accessibility. In terms of accessibility, room exclusively to LRC, reliable internet connection, and established connections for users obtained a composite mean of 3.09, 2.87, and 2.84, respectively, assessed as Good. It obtained a section mean of 2.93 interpreted as Good. This means that the portal can be accessed easily with a good internet connection. However, even if this is the case, teachers who are not taking advantage of the available existing materials have no or limited resourcing skills (Sipahi, 2020).

Security and Safety. As gleaned in Table 17, the place is secure, there is fire extinguisher, emergency measures and procedures are posted, standard electrical installation, and there is a visitor monitoring/logbook.

These had a composite mean of 3.22, 2.83, 2.99, 2.74, and 3.17, respectively, and described as Good. It had a section mean of 2.99 evaluated as Good. This means that in terms of security and safety, the implementation and utilization of LRMDS is good. Unfortunately, many educational institutions are rushing into adopting online learning management systems without careful planning and without a thorough understanding of the security aspects of online learning Alwi and Fan (2010) warn.

Table 18

Learning Resource Center Structuring

Indicator	LRMDS Coordinator Xw	Teacher Xw	Composite Means	Rank	Interpretation
Accessibility			***2.93***		***GOOD***
1. Room exclusively to LRC	3.35	2.82	3.09	1st	G
2. There is a reliable internet connection	2.89	2.85	2.87	2nd	G
3. There is an established connections for users	2.94	2.74	2.84	3rd	G
Safety & Security			***2.99***		***GOOD***
1. The place is secure	3.29	3.14	3.22	1st	G
2. There is a fire extinguisher	2.83	2.82	2.83	4th	G
3. Emergency measures and procedures were posted	3.00	2.98	2.99	3rd	G
4. There is a standard electrical installation	2.43	3.04	2.74	5th	G
5. There is a visitor Monitoring/ Logbook	3.14	3.20	3.17	2nd	G
Maintenance			***2.69***		***GOOD***
1. Computers were provided by the LRC	3.00	2.80	2.90	3rd	G
2. Computers were functioning well	3.34	2.66	3.00	1st	G
3. There is a functioning printer	3.09	2.82	2.96	2nd	G
4. There is a functioning disc (CD, DVD) duplicator	2.83	2.30	2.57	9th	F
5. UPS is functioning well	2.97	2.38	2.68	4th	G
6. Anti – virus software installed on all computers	2.86	2.26	2.56	6th	F
7. The anti – virus is up – to – date	2.66	2.25	2.46	7th	F
8. All required softwares are licensed, registered and installed	2.63	2.22	2.43	8th	F
Furnishing			***2.59***		***FAIR***
1. Adequate ventilation and lighting	2.51	2.63	2.57	3rd	G
2. Tables and chairs in good condition	2.29	2.82	2.56	4th	G
3. Shelves for storing books and other materials	2.29	2.60	2.45	5th	G
4. Cabinets with working locks	2.60	2.82	2.71	1st	G
5. Adequate lighting	2.97	2.32	2.65	2nd	G
Availability of Important Documents			***2.62***		***GOOD***
1. Available copy of the LR plan in LRC	2.91	2.66	2.79	1st	G
2. Copy of the School LRC Operation Guidelines available in the LRC	2.80	2.53	2.67	2nd	G
3. Copy of the organizational structure available in the LRC	3.03	2.27	2.65	3rd	G
4. Available copies of the LRMDS Guidelines	2.97	2.21	2.59	4th	G
5. Available sample copies of online resources on CD or DVD	2.66	2.11	2.39	5th	F
GRAND MEAN	**2.85**	**2.63**	**2.76**		**GOOD**

Legend:		
5	Excellent (E)	4.50-5.50
4	Very Good (VG)	3.6-4.5
3	Good (G)	2.6-3.5
2	Fair	1.5-2.5
1	Poor (P)	0.5-1.5

Maintenance. Along the Maintenance of the LRMDS, computers were provided by the LRC, computers are functioning as well, there is a functioning printer, and UPS is functioning well. These had a composite means of 2.90, 3.00, 2.96, and 2.68, respectively signified as Good.

Meanwhile, there is a functioning disc duplicator, anti-virus software installed on all computers, the anti-virus is up-to-date, and all required software are licensed, registered and installed. These received a composite mean of 2.57, 2.56, 2.46, and 2.43, respectively and categorized as Fair.

It obtained a section mean of 2.69 as described as Good. This implies that the extent of LRMDS maintenance and utilization is Good. In support of this findings, Mtebe (2015) articulated that efficient, timely and relevant response and solutions to concerns, issues and program with the learning management system, say the DepEd Learning Portal, must be provided.

Furnishing. As regards to furnishing, on adequate ventilation and lighting, tables and chairs in good condition, shelves from storing books and other materials, cabinets with working locks, and adequate lighting all these had obtained a composite means of 2.57, 2.56, 2.45, 2.71, and 2.65, respectively, interpreted as Good.

It received a section mean of 2.59 and described as Good. This means that the extent of implementation and utilization of LRMDS in as far as furnishing is concerned, the same is found Good.

Availability of Important Documents. As reflected in Table 17, the indicators on available copy of the LR plan in LRC, copy of the school LRC operation,

copy of the organizational structure available in the LRC, and available copies of the LRMDS guidelines, these had a composite mean of 2.79, 2.67, 2.65, and 2.59, respectively, labelled as Good.

Meanwhile, available copies of online resources on CD or DVD had a composite mean of 2.39 which was interpreted as Fair. It received a section mean of 2.62, described as Good.

The grand mean reached to 2.76 and was labelled as Good. This implies that the extent of implementation and utilization of LRMDS in terms of Learning Resource Center Structuring as perceived by the ICT coordinators and the classroom teachers is Good. It is reminded that without back-up copies of the learning resources, online versions may lead to unauthorized modification and/or destruction of educational assets (Zuev, 2012).

Portal Utilization. The portal utilization is presented in Table 19.

Table 19

Portal Utilization

LRMDS Coordinator				Teacher			
Yes		NO		Yes		NO	
f	%	*f*	%	*f*	%	*f*	%
32	94.12	2	5.88	971	94.27	59	5.73

As gleaned in Table 19, it can be noted that 32 or 94.12 percent of the LRMDS coordinators utilized the LRMDS portal. Meanwhile 971 or 94.27 percent of the classroom teachers also utilized the portal.

This implies that the portal is helpful and beneficial to LRMDS coordinators and the classroom teachers as evidenced by the percentage of utilization. In connection to this, Chirwa (2018) explained that lack of ICT literacy skills and

unreliable internet connectivity would result to both teachers and the learners missing out the various and varied learning resources in the Internet.

Frequency of Portal Utilization. The frequency of portal utilization is disclosed in Table 20 showing the five (5) inidcators to which both respondents of the study, the LRMDS COORDINATORS OF EACH DISTRICT AND THE CLASSROOM TEACHERS OF EACH DISTRICT OF DepEd Biliran Division, should assess.

Table 20
Frequency of Portal Utilization

Indicator	LRMDS Coordinator Xw	Teacher Xw	Composite Means	Rank	Interpretation
1. Access to LRMDS website (http://www.lrmds.deped.gov.ph/)	2.54	2.11	2.33	4th	R
2. Finding and selecting learning resources in the K – 12 Ladder	1.34	2.14	1.74	5th	R
3. Downloading of Learning Resources	2.71	2.24	2.48	2nd	R
4. Using the downloaded resources as source of teaching and learning materials and or references/ supplementary materials	2.77	2.27	2.52	1st	R
5. Sharing the downloaded resources to others as source of teaching and learning materials and or references/ supplementary materials	2.77	2.13	2.45	3rd	R
GRAND MEAN	**2.43**	**2.18**	**2.30**		**R**
Legend:					
	4.50-5.50	Always (A)	times in a week)		
	3.6-4.5	Often (O)	2-4 times in a week		
	2.6-3.5	Sometime(S)	once a week		
	1.5-2.5	Rarely (R)	once in a month/ year		
	0.5-1.5	Never (N)	never used		

As depicted in Table 20, the frequency of the portal utilization is rare. Access to LRMDS website, finding and selecting learning resources in the k-12 ladder, downloading of learning resources, using the downloaded resources as source of teaching and learning materials and/or references/supplement any materials, and sharing the downloaded resources to other as source of teaching and learning materials and/or references/supplement any materials

had a composite mean of 2.33, 1.74, 2.48, 2.52, and 2.45, respectively, and interpreted as Rarely.

It had a grand mean of 2.30 and signified as Rarely. This implies that though the teachers and LRMDS coordinators find it useful in using the LRMDS portal, its sustainability and frequency of utilization is being affected and perhaps could be attributed to its monitoring and evaluation and sustainability.

Relative to this felt problem on portal utilization, the teachers may resort to looking for sources, other than the DepEd LR Portal only when necessary or when the information quality guarantees user's satisfaction (Tella, 2012).

Comparison of Perception of the Two Groups of Respondents on the Extent of Implementation and Utilization of LRMDS

The comparison of the differences on the perception of the two respondents of the implementation of utilization of LRMDS along the eight (8) variables, to wit: Adequacy of facilities and equipment; Sufficiency of Budget Allocation; Goals and Objectives; Learning Resource Planning; School Learning Resource Center Restructuring, and Portal Utilization is provided by Table 21.

Table 21

Difference between the Perceptions on the Extent of Implementation of LRMDS and the Two Groups of Respondents

Variables	Group	Mean	SD	df	t-value	p-value	Interpretation
Adequacy of Facilities and Equipment	LRMDS Coor	2.57	0.802	1062	-0.984	0.325	NS
	Teacher	2.45	0.706				
Sufficiency of Budget Allocation	LRMDS Coor	2.78	1.01	1062	-1.47	0.143	NS
	Teacher	2.56	0.835				
Goals and Objectives	ICT Coordinator	2.88	0.844	1062	-1.48	0.138	NS
	Classroom Teacher	2.69	0.737				
Learning Resource Planning	LRMDS Coor	2.94	0.797	1062	-1.85	0.065	NS
	Teacher	2.69	0.764				
School Learning Resource Center Restructuring	LRMDS Coor	2.84	0.852	1062	-1.52	0.129	NS
	Teacher	2.62	0.814				
Portal Utilization	ICT Coordinator	2.41	0.826	1062	-1.61	0.107	NS
	Classroom Teacher	2.18	0.675				

Correlation is significant at the .05 level (2-tailed)

As revealed in Table 21, it is clear that there is no significant difference between the perception of the two groups of respondents in terms of adequacy of facilities and equipment (t(1062)=-0.984, p=325). This means that there is no sufficient evidence that perceptions of the LRMDS coordinators and the classroom teachers differs significantly. Likewise, Navidad (2019) in

his study, “Manage Learning Resource Materials, Technology Utilization and Teachers’ Competence in Selected Schools,” discovered significant difference on the assessment of the master teachers and school heads pertaining to sufficiency of resources for LRM.

In terms of Sufficiency of Budget Allocation, there is no significant difference between the responses of the LRMDS coordinators and classroom-teacher respondents (t(1062)=-1.47, p=.143). This implies that the null hypothesis is accepted and concluded that the means of the ICT coordinator and classroom teachers are the same. In line with this, Navidad (2019) further found out that the master teachers and the school heads consistently assessed the efficacy of learning resource materials indicating the prudent use of the budget.

As regards to the goals and objectives, there is no significant difference between the perception of the classroom teachers and the LRMDS coordinators on goals and objectives as evident in the t-test (t(1062)=-1.48, p=0.138). This means that responses of the classroom teachers and LRMDS coordinators do not differ significantly. Reflective of these findings, Domingo (2018) concluded that the challenge and expectations of the management of learning resource materials are daunting and great, but goals can still be achieved.

In relation of Learning Resource Planning, there is no significant difference between the LRMDS coordinators and the classroom teachers (t(1062)=-1.85, p=0.065). This means that there is no sufficient evidence that the LRMDS coordinators and the classroom teachers responses differs

significantly. In like manner, Navidad (2019) found out that the master teachers and schools are both in strong agreement that the management of the learning resource materials in terms of planning is good.

As regards to School Learning Resource Center Restructuring, there is an insufficient evidence to support that there is a significant difference in the perception between the classroom teachers and the LRMDS coordinators, ($t(1062)=-1.52$, $p=.129$). In perspective, Chiu (2015) stated that a technology-enhanced learning environment does not automatically produce high-quality learning outcomes rather, it needs to be supported by suitable learning materials and strategies.

And finally, with regards to the difference of the perception between the classroom teachers and the LRMDS coordinators, there is no sufficient evidence to show that they are different ($t(1062)=-1.61$, $p=.107$. This means that the null hypothesis is accepted and concluded that no difference exists. In contrast, Navidad (2019) found a statistical difference in the assessment of the master teachers and the school heads regarding the management of learning resource materials.

Relationship of the Profile

Variates of the Respondents and

the LRMDS Extent of Implementation

And Utilization

The relationship between Extent of the Implementation and the Utilization and LRMDS coordinators and the teacher -related variates is presented in Table 22 and 23 respectively.

Table 21

Relationship between Extent of Implementation and Utilization and LRMDS Coordinators-related Variates

Variables		**Extent of Implementation and Utilization of LRMDS**
Age	Correlation Coefficient	.152
	Sig. (2-tailed)	.703
	Interpretation	NS
Sex	Correlation Coefficient	.356*
	Sig. (2-tailed)	.039

	Interpretation	S
Educational Qualification	Correlation Coefficient	.476*
	Sig. (2-tailed)	.018
	Interpretation	S
Number of Years as LRMDS Coordinator	Correlation Coefficient	.160
	Sig. (2-tailed)	.367
	Interpretation	NS
Number of Relevant in-service trainings	Correlation Coefficient	.121
	Sig. (2-tailed)	.495
	Interpretation	NS

Correlation is at the .05 level (2-tailed)

As revealed in Table 21, sex η=.356, p=.039 and the educational qualification (η=.476, p=.018) shows significant relationship to the extent of implementation and utilization of LRMDS portal. This means that gender and education qualification have direct positive effect to the extent of implementation and utilization of LRMDS. This implies that school administrators should encourage their LRMDS coordinators to enroll in higher degree programs in order to widen their horizon, increase their knowledge, and improve their skills.

Meanwhile, age (η=.152, p=.703), number of years as LRMDS coordinator (η=.160, p=.367), and number of relevant in-service (η=.121, p=.495) training reveals no relationship with the implementation and the utilization of LRMDS portal. This means that age, experience as LRMDS coordinator, and relevant in-service trainings attended do not affect the implementation and the utilization of LRMDS portal.

Relationship between the extent of implementation and utilization of LRMDS and teacher-related variates

As presented in Table 22, age (η=.208, p=.000), sex (η=.145, p=.000), educational qualification (η=.403, p=.000), and teaching experience (η=.273, p=.000) show significant relationship with the implementation and the utilization of LRMDS portal. This signifies that age, sex, educational qualification, and teaching experience contribute to the positive result on the implementation and the utilization of LRMDS portal.

In contrast to this results, Sipahi (2020), concluded that there was too little, if not none, with regards to the teachers' attempts and willingness to have their own materials assessed, quality assured and shared through the DepEd learning portals or other websites.

Table 22

Relationship between Extent of Implementation and Utilization and Teacher-related Variates

Variables		**Extent of Implementation and Utilization of LRMDS**
Age	Correlation Coefficient	**.208****
	Sig. (2-tailed)	**.000**
	Interpretation	**HS**
Sex	Correlation Coefficient	**.145****
	Sig. (2-tailed)	**.000**
	Interpretation	**HS**
Educational Qualification	Correlation Coefficient	**.403****
	Sig. (2-tailed)	**.000**
	Interpretation	**HS**
Teaching Experience	Correlation Coefficient	**.273**
	Sig. (2-tailed)	**.000**
	Interpretation	**HS**
Number of Relevant in-service trainings	Correlation Coefficient	**.087**

Sig. (2-tailed)	**.480**
Interpretation	**NS**

**Correlation is significant at the .05 level (2-tailed)*

*** Correlation is highly significant at the .01 level (2-tailed)*

The spread of data in Table 22 shows no significant relationship between the number of relevant in-service trainings (η=.087, p=.480) of the classroom teachers to the extent of the implementation and the utilization of LRMDS portal. This means that relevant trainings attended by the teachers do not affect its implementation and utilization. On the contrary, resourcing ample choices of TLMs, can seem difficult, especially when potential users lack the requisite skills and attitude – which will make them shy away from using something they are not familiar with (Mapunda, 2004).

CHAPTER V

SUMMARY OF FINDINGS, CONCLUSIONS, AND RECOMMENDATIONS

This chapter contains the summary of the major findings of the study and the conclusions drawn and recommendations drawn therefrom.

Summary of Findings

The salient findings of the present study are herein summarized based on the specific questions sought to be answered in this research study.

1. Majority, 702 or 68.16 percent of the teacher- respondents were aged 35 – 49 years old, 192 or 18.64 percent belonged to 50 – 65 age bracket, while 136 or 13.20 percent was with 18 – 34 years old category.

2. Most, 19 or 55.88 percent of the teacher-respondents was 35 – 49 years old; 10 or 29.41 percent belonged to the 18 – 34 category, and a considerable number of 5 or 14.71 percent fell under 50 – 65 years old.

3. Majority, 714 or 69.32 percent of the classroom teachers was females while only 316 or 30.68 percent were males.

4. Most 18 or 52.94 percent of the ICT coordinators were Males while 16 or 47.06 percent was females.

5. The 737 or 71.55 percent of classroom teachers was married; 245 or 23.79 percent was single, and 48 or 4.66 percent was widow/wer. The 20 or 58.82 percent of LRMDS Coordinators was married while 14 or 41.18 were single.

6. The 20 or 58.82 percent of the LRMDS coordinators was married; while 14 or 41.18 was single.

7. Most, 423 or 41.07 percent of the teacher-respondents was bachelor's degree holders with masteral units; 334 or 32.43 percent was CAR holder in a masteral program; 134 or 13.01 percent was master's degree holder; 46 or 4.47 percent was doctoral degree holder; 26 or 2.52 percent was CAR holder in a doctoral program, while 16 or 1.55 percent was master's degree with PhD units.

8. The number of LRMDS coordinators with CAR in a masteral program and bachelor's degree with masteral units was the same at 14 or 41.18 percent while 4 or 11.76 percent was classified as master's degree holders. Finally, only 1 or 2.94 percent was a bachelor's degree holder.

9. A large portion, 10 or 29.41 percent of the LRMDS coordinators was 11 – 15 years in the service as LRMDS coordinator; 9 or 26.47 percent with 6 – 10 years; 8 or 23.53 percent was with 1 – 5 years, and 5 or 14.71 percent had been in the service as LRMDS coordinators for 26 years and above; and the last 2 or 5.88 percent had 16 – 20 years.

10. Most teacher-respondents, 257 or 24.95 percent had been in the service for 6 – 10 years; 241 or 23.40 percent was with 11 – 15 years; another 155 or 15.05 percent with 1 – 5 years in the service; 148 or 14.37 percent was with 21 – 25 years in service; still others, 137 or 13.30 percent was with 26 years and above, while the rest, 92 or 8.93 percent was with 16 – 20 years.

11. Majority, 1018 or 98.83 percent of the classroom teachers had attended trainings internationally for 1 – 5 times; 10 or 0.97 percent had attended 6 – 10 times, and 2 or 0.19 percent had attended more than 11 times.

12. All the LRMDS coordinators had not attended any international level trainings.

13. The 920 or 89.32 percent of the classroom teachers had not attended any national level trainings; 92 or 8.93 percent had attended 1 – 5 times, 17 or 1.65 percent attended 6 – 10 times, and only 1 had attended a national level training for more than 11 times or more.

14. Most, 32 or 94.12 percent of the LRMDS coordinators had not participated in any national level training, while there were only two (2) who had experienced a national level training 1 – 5 times.

15. A large portion of the teacher-respondents, 693 or 67.28 percent had not attended any regional level training; 196 or 19.03 participated in regional trainings for 1 – 5 times; 107 or 10.39 percent attended 6 – 10 times; and 34 or 3.30 percent had experienced more than 11 times.

16. The 20 or 58.82 percent of the LRMDS Coordinators did not even experience attending a relevant at the regional level; 7 or 20.59 percent only attended 1 – 5 times; 4 or 11.76 percent participated more than 11 times; and 3 or 8.82 percent were given the opportunity to attend 6 – 10 times.

17. The 744 or 72.23 percent of the classroom teachers had been given the chance to attend relevant division level for 1 – 5 times; 208 or 20.19 percent had not attended; 44 or 4.27 percent attended 6 – 10 times, and 34 or 3.30

percent had experienced attending a relevant division level training for more than 11 times.

18. The 18 or 52.94 percent had attended relevant division level training for LRMDS Coordinators; 11 or 32.35 without attendance at any division level trainings; 4 or 11.76 percent was fortunate for having participated more than 11 times at any division trainings, and only 1 or 2.94 percent had experienced division level training for 6 – 10 times.

19. Majority, 512 or 49.71 percent of the classroom teachers had attended district level trainings for 1 – 5 times; 317 or 30.78 percent had not participated any training; 183 or 17.77 percent enjoyed the training for 6 – 10 times, and a considerable number of 18 or 1.75 percent was very much privileged to have participated in district/school level trainings for more than 11 times.

20. The 19 or 55.88 percent of the LRMDS coordinators had attended LRMDS relevant trainings initiated by the district/school 1 – 5 times; 9 or 26.47 percent still did not have any training participated; 5 or 14.71 percent had the opportunity to having experienced school level training for 6 – 10 times, and only 1 or 2.94 percent was lucky enough to have participated for more than 11 times.

21. The 29 or 14.71 percent out of 34 LRMDS coordinators said that there is no chairman for the assessment and evaluation of LR materials; 33 or 97.06 responded that the LR centers had no meta data analyst, 32 or 94.12 percent replied they lacked the development and production officer, 33 or 97.06

expressed the absence of desktop publisher and layout artist; 34 or all of the LRMDS coordinators attested that there was no chairman for the quality assurance, and, finally, 33 or 97.06 reported that there was no distance learning coordinator.

22. Out of 34 LRMDS coordinators, 29 or 14.71 percent said that there was no chairman for the assessment and evaluation of LR materials; 33 or 97.06 believed there was LR centers with no meta data analyst; 32 or 94.12 percent replied that there was the development and production officer; 33 or 97.06 said there was no desktop publisher and layout artist; 34 or all of the LRMDS coordinators confirmed that there was no chairman tasked for the quality assurance, and, finally, 33 or 97.06 reported that there was no distance learning coordinator.

23. Majority, 902 or 85.57 percent of the classroom teachers, said that there was no chairman for the assessment and evaluation of LR materials; 972 or 94.37 percent commented that there was no meta data analyst; 947 or 91.94 percent responded that there was no development and production officer; 972 or 94.37 attended that there was an inadequacy of desktop publisher and layout artist; 983 or 95.44 percent provided information that there was no chairman for the quality assurance, and, lastly, 983 or 95.44 percent reported that the Division had no distance learning coordinators at the district level.

24. The computer service for students, computer service for the teachers and the administrators, printing service, functional overhead projector for educational purposes, classroom condition, functional photocopy machines, TV set to be used for educational purposes, functional LCD projector, library service, and store room had obtained a grand mean of 2.51 which signified as inadequate components for the LRMDS purposes.

25. On the five (5) variables that determined the implementation and the utilization of the LRMDS, their significance to the LRMDS was compared as seen by the respondents of the study. There were five (5) variables which measured the sufficiency of the budget allocation. As perceived by the two (2) respondents of the study, four (4) of the five (5) indicators such as fund for the development of learning resources, fund for internet connectivity, sustainability measures, and fund for the facilities and equipment were seen as fairly provided. However, there was an inadequacy of funds for the professional growth of LRMDS staff as indicated by a grand mean of 2.67 interpreted as fair.

26. In terms of the goals and objectives, out of the seven (7) indicators there are six (6) which was described as Good. These indicators were strengthened learning resource development and distribution systems at school level; improved of instructional and learning materials through support for the assessment, acquisition, adaptation, development; production and distribution of teaching/learning materials; digitized student learning materials (including from PASMEP, PROBE, PRODED,

BEAM, TEEP SEDIP, etc.) , particularly for reading; enhanced provisions of quality instructional and learning materials; modified and enhanced instructional and learning materials for Implementing Alternative Delivery modes and learning Systems, and improved development and utilization of Quality Assurance (including Monitoring and Evaluation) Systems for provision and utilization of learning. Meanwhile, there was a developed ICT-enabled solution to support the strengthening of the learning resource support systems with a grand mean of 2.80 categorized as Good.

27. There were six (6) indicators to measure the learning resource planning of which all the indicators were rated Good. These indicators were: LR staffs are well identified, informed, and trained on their function and task; there is a LP plan that reflects the needs for area; content and competencies; the LR plans cater to the needs in improving the school's academic performance; the LR plans cater to the needs in improving the school's academic performance; lead schools have reproduced LRs for their satellite school, and the teachers have developed or redeveloped LRs aligned to the school LR needs. It had a grand mean of 2.82 which was interpreted as Good. This implies that as to the learning resource planning, its implementation and utilization was seen as good by the LRMDS coordinators and the classroom teachers.

28. In terms of accessibility, indicators on the following were assessed as: room exclusively to LRC, reliable internet connection, and established connections for users obtained a composite means of 3.09, 2.87, and 2.84, respectively, that was assessed as Good. It obtained a section mean of 2.93 interpreted as Good.

29. In terms of security and safety, the following indicators were evaluated: the place is secure; there is fire extinguisher; emergency measures and procedures were posted; standard electrical installation; and there is a visitor monitoring/logbook which was computed as having a composite means of 3.22, 2.83, 2.99, 2.74, and 3.17, respectively, described as Good. It had a section mean of 2.99 marked as Good.

30. As regards to the maintenance of the LRMDS indicators like: computers were provided by the LRC; computers are functioning as well; there is a functioning printer; and UPS is functioning well. Meanwhile, there is a functioning disc duplicator, anti-virus software installed on all computers, the anti-virus is up-to-date, and all required software are licensed, registered and installed. It obtained a section mean of 2.69 perceived and interpreted as Good. This implies that the extent of LRMDS maintenance and utilization is Good.

31. As regards to indicators on furnishing, they were: the adequate ventilation and lighting; tables and chairs in good condition; shelves from storing books and other materials; cabinets with working locks; and adequate lighting. These received a section mean of 2.59 assessed as Good.

32. In terms of the availability of important documents, the indicators were: the available copy of the LR plan in LRC, copy of the school LRC operation; copy of the organizational structure available in the LRC; and available copies of the LRMDS guidelines; copies of online resources on CD or DVD received which got a grand mean of 2.76 labelled as Good.

33. The frequency of the portal utilization is rare: access to LRMDS website; finding and selecting learning resources in the k-12 ladder; downloading of learning resources; using the downloaded resources as source of teaching and learning materials and/or references/supplement any materials; and sharing the downloaded resources to others as source of teaching and learning materials and/or references/supplement any materials. Treated all, these got a grand mean of 2.30 labelled as Rarely.

34. There is no significant difference between the perception of the two groups of respondents in terms of adequacy of facilities and equipment ($t(1062)=-0.984$, $p=325$).

35. In terms of sufficiency of budget allocation, there was no significant difference between the responses of the LRMDS coordinators and the classroom teachers ($t(1062)=-1.47$, $p=.143$).

36. As regards to the goals and objectives, there is no significant difference between the perceptions of the classroom teachers and the LRMDS coordinators on goals and objectives as evident in the t-test ($t(1062)=-1.48$, $p=0.138$).

37. In relation to the learning resource planning, there is no significant difference between the LRMDS coordinators and the classroom teachers (t(1062)=-1.85, p=0.065).

38. Relative to the school learning resource center restructuring, there is insufficient evidence to show that difference between the responses of the classroom teachers and the LRMDS coordinators, thus differs significantly (t(1062)=-1.52, p=.129).

39. Finally, with regards to the difference of the perceptions between the classroom teachers and the ICT coordinators, there is no sufficient evidence to show that they differed (t(1062)=-1.61, p=.107.

Conclusion

On the bases of the significant findings of this study, the herein conclusions are arrived at as follows:

1. The LRMDS coordinators are considered to be in old age where they are responsible enough on their actions.

2. Classroom teacher-respondents were mature and responsible enough to look for resources necessary in fulfilling their instructional responsibilities.

3. The male teacher-respondents were out-numbered by females, gender-wise.

4. The distribution of respondents in terms of age is almost equal.

5. Classroom teachers are family-oriented and sometimes instructional responsibilities are being affected by family-related concerns.

6. LRMDS coordinators are confronted with a lot of challenges which could be attributed from family, personal, or work-related matters.

7. Classroom teachers should pursue/enroll in higher education programs to obtain more knowledge and for personal and professional growth.

8. The LRMDS coordinators were already exposed much on their functions since they had been in the service as LRMDS coordinator for quite some time; all of whom had more than five (5) years in service backing them up.

9. Backed up by the 257 teachers, majority, with 6-10 years of service, teachers were already seasoned and skilled, can be safely said of them.

10. Classroom teachers are really wanted to have a quality instruction experience among our learners that is globally competitive.

11. Ideas and competence of the LRMDS coordinators are dependent only with their local trainings and experiences in addition to the task of KAS they had with their academic preparations.

12. More teachers should be sent to national level trainings for professional development.

13. The LRMDS coordinators should be encouraged to attend national level training to improve their knowledge and skills.

14. Classroom teachers had only a very limited opportunity in attending regional level relevant trainings.

15. Regional level relevant training for LRMDS coordinators are very limited.

16. Few division-initiated trainings were implemented by the districts.

17. School administrators should give higher priority to those classroom teachers who have not attended any relevant training.

18. School heads should give equal opportunity among its teachers in sending them to relevant training and seminars for technical and professional skills development.

19. There are inadequate personnel tasked to ensure LRMDS implementation and utilization.

20. There is a congruent perception between the classroom teachers and the LRMDS coordinators along personnel adequacy in the learning resource center.

21. There is really a need to procure supplies and equipment in the LR to make it more functional and of great help.

22. There is only a fair budget intended for the LR centers.

23. The goals and objectives of the LR centers as viewed by the classroom teachers and the LRMDS coordinators are good.

24. As to the learning resource planning, its implementation and utilization was seen as good by both respondents of the study.

25. In terms of accessibility, the implementation and utilization of LRMDS is good.

26. Along the variable of security and safety, the implementation and utilization of LRMDS is good.

27. The extent of LRMDS maintenance and utilization is Good.

28. The extent of implementation and utilization of LRMDS in as far as furnishing is concerned is Good.

29. The extent of implementation and utilization of LRMDS in terms of learning resource center structuring is Good as perceived by the respondents of the study.

30. The portal is helpful and beneficial to the LRMDS coordinators and the classroom teachers as evident by the percentage of utilization.

31. The teachers and the LRMDS coordinators find it useful in using the LRMDS portal, but its sustainability and frequency of utilization is being affected which perhaps may be attributed on its monitoring, and evaluation and sustainability.

32. There is no sufficient evidence that perceptions of the LRMDS coordinators and the classroom teachers on LRMDS implementation and utilization differ significantly.

33. The null hypothesis is accepted, thus could be concluded that the mean of the LRMDS coordinator and the classroom teachers are the same.

34. The responses of the classroom teachers and the LRMDS coordinators on facilities and equipment do not differ significantly.

35. There is no sufficient evidence that the LRMDS coordinators and the classroom teachers responses on budget allocation differ significantly.

36. The null hypothesis is accepted and concluded no difference exist between the classroom teachers and the LRMDS coordinators along their perceptions on the goals and objectives of the LRMDS.

37. School administrators should encourage their LRMDS coordinators to enroll in higher degree programs in order to widen their horizon, increase their knowledge, and improve their skills.

38. Age, experience of LRMDS coordinators, and relevant in-service trainings attended do not affect the implementation and utilization of LRMDS portal.

39. Age, sex, educational qualification, and teaching experience contribute to the positive result to the implementation and the utilization of the LRMDS portal.

40. Relevant trainings attended by teachers do not affect the implementation and the utilization of the LRMDS portal.

Recommendations

1. There is a need to conduct a re-orientation/advocacy on LRMDS' implementation and utilization in DepEd Biliran composed of School Administrators and LRMDS Coordinators in the said Division to fully understand the LRMDS Framework, Guidelines and Specifications as bases for the strong foundation of the program towards the institutionalization and sustainability of the system.

2. The ICT and the LRMDS coordinators are empowered by the use of technology, but its functions are different; therefore, the ICT and the LRMDS Coordinators should not be given in a single designation. The LRMDS Organizational Chart should be followed/adhered to which will be found in the LRMDS Framework.

3. Networking and linkaging is the essential part in making wealth in an organization, therefore, school administrators and the LRMDS coordinators must be resourceful enough in order to provide adequate facilities and equipment in their School Learning Resource Center as well as to generate Income Generating Projects for LRMDS empowered funds.

4. The division focal person must capacitate the school heads and the LRMDS Coordinators through Capability Building Activities to address LRMDS concerns like LR Planning and Structuring; LR inventory; Utilization, Development, Modification, Quality Assurance, Evaluation, Storage and Maintenance; and Publication and Production of Resources.

5. Training and development of those in the LRMDS for an improved implementation and utilization of learning resources. Training must be spread out among teachers proportionate to the local needs of the school and the qualifications of the concerned based on their knowledge, ability and skills; no monopoly in attendance of these trainings by one or a few of the concerns.

6. More funds should be allocated for the training and development of the LRMDS staff and the Learning Resource Centers be provided with adequate personnel to bring their assigned task to success.

7. Implement PROJECT E-TELETECH (Enhanced- Teaching and Learning Through Innovative Technology Towards an Empowered LRMDS Implementation of DepEd Biliran) CY 2019-2020.

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Honors Received: Class Valedictorian

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Junior High School Graduated School Year: 2000 - 2004

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Number of Years in the Service: 10 years

Trainings Attended:

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- Job Orientation/ Seminar & Workshop (2013 Newly Hired)
- Learning Resource Management & Development System (Lrmds) Orientation/Seminar
- Resource Management & Development Is Batches Training
- Grade & Development Training For Planning And Budgeting Among School Heads (Resource Speaker)
- Grade & Development Sensitivity Training Among Pta Federation Development Spo, Ssg Officers (Resource Speaker)

- Division Mass Training On The Implementationof Grade Ii K To 12 Curriculum (Speaker)
- Seven-Day National Training Of Trainess On The Implementation Of The Grade Ii K To 12 Basic Education Program Held @ Ecotech, Cebu City
- One-Day Conference For School Heads And Brgy. Leaders Of Newly Hired Secondary School @ Redaja Mall, Catbalogan City
- 4th Quarter Conference - Workshop On Contextualization
- Regional Cluster Training Workshop Of Learning Resource Evaluators (Slrs) For Suplementary Learning Resources (Slrs)
- Three (3) Day Live-In Finalization And Lay-Outing Of Alternative Learning System (Als) Modules With Disaster Risk Reduction And Climate Change Adaptation (Drr-Cca)
- Four-Day Review And Finalization Of Contextualized Grade 2 Learning Materials (Aral,Pan., Math, Mtb-Mle)
- Level 2 evaluation Workshop Of Supplementary Learning Resources (Slrs) For Public School Libraries
- Level 2 evaluation Workshop Of Supplementary Learning Resources (Slrs) For Public School Libraries

LIST OF TABLES

LIST OF FIGURES