



# **iJRASET**

International Journal For Research in  
Applied Science and Engineering Technology



---

# **INTERNATIONAL JOURNAL FOR RESEARCH**

IN APPLIED SCIENCE & ENGINEERING TECHNOLOGY

---

**Volume: 11      Issue: V      Month of publication: May 2023**

**DOI: <https://doi.org/10.22214/ijraset.2023.52252>**

**[www.ijraset.com](http://www.ijraset.com)**

**Call:  08813907089**

**E-mail ID: [ijraset@gmail.com](mailto:ijraset@gmail.com)**

# Learning Resources Acquisition, Management, and Utilization Practices of select IPED and Non-IPED Schools Divisions in Mimaropa Region: Basis for the Proposed Learning Resource Service Model

Mariam B. Rivamonte

Education Program Supervisor

Learning Resource Management Section

Curriculum Implementation Division

Schools Division of Marinduque

**Abstract:** *The study determined the practices of select IPED and Non-IPED Schools Divisions in terms of learning resources acquisition, management, and utilization. It also aimed to identify the extent of practices, its compliance with the DepEd guidelines, the significant differences between the IPED and Non-IPED schools divisions' extent of practices and compliance with the DepEd guidelines, as well as the gaps and some major issues encountered in terms of learning resources acquisition, management, and utilization.*

*Data analysis revealed that in terms of the mode of acquisition of learning resources, both small, medium, and large as well as mega schools in IPED and Non-IPED Schools Divisions' primary source of learning resources acquisition is the school Maintenance and Other Operation Expenses (MOOE) or DepEd fund. All schools also depended on the DepEd-delivered learning resources, while others were from foreign funded program. As support funds, schools were also supported by the Local Government Units (LGUs), Private Institutions, PTA, alumni, and other stakeholders.*

*On the other hand, in terms of learning resources acquisition, management and utilization practices of IPED and Non-IPED schools divisions have the same practices employed. As to the extent of practices in learning resources management of both small, medium, large and mega schools, both IPED and Non-IPED schools divisions have an excellent rating with a rating ranging from 4.53 – 5.0 in terms of needs assessment, planning, selecting, purchasing, distributing, inventory controlling, storage and disposal. In terms of the frequency of utilization of all learning resources available, both small, medium, and large as well as mega schools in IPED and Non-IPED schools divisions often use all available learning resources. There is only a bit difference in the frequency of utilization of Math and Science Equipment, Library Resources, Sports, MAPEH, TLE and ICT equipment and they are sometimes utilized by small and medium schools in IPED schools division. In terms of adequacy in the maintenance activities of learning resources, small, medium, large, as well as mega schools in both IPED and Non-IPED Schools Divisions have applied all the practices in the maintenance of all learning resources. There are no significant differences in terms of learning resources acquisition, management and utilization practices as employed by both IPED and Non-IPED schools divisions. In light of the preceding findings of the study, the researcher proposes a service model for the acquisition, management, and utilization of learning resources for more effective implementation and to sustain their learning resources acquisition, management, and utilization practices.*

**Keywords:** *Learning Resources, Acquisition, Management, Utilization, IPED and Non-IPED Schools Division, Needs Assessment, Planning, Selecting, Purchasing, Distributing, Inventory Controlling, Storage and Disposal.*

## I. INTRODUCTION

Learning resources play a significant role in the teaching-learning process and in carrying out the objectives of the educational system. Successful implementation of our educational system depends on the acquisition, management, and utilization of all these learning resources; thus, school and community learning centers must be resourceful enough to acquire such learning resources needed if not available and provided by the Department of Education.

Based on the Article XIV of the 1987 Philippine Constitution," the Department of Education is mandated to provide free elementary and secondary education, including rent-free learner's materials to public schools. In line with this mandate, DepEd has been providing learner's materials and other instructional materials to public schools since 1976.

In developing the Basic Education Curriculum, also known as the K to12 Program under Republic Act 10533, DepEd shall produce and develop learning materials (Section 10.3). The production and development of locally- produced teaching and learning materials shall be encouraged. The approval of these materials shall be devolved to the regional and division education unit by national policies and standards. In support of the upholding and goals of the Department, the Bureau of Learning Resources assures the provision of Science and Mathematics Equipment to all Public Elementary, Junior, and Senior High Schools across the country for the betterment of Science and Mathematics Education. Learning resources are not only for those learning inside the classroom but also for those in the community learning centers. These learning resources could be contextualized or localized based on the needs of the learners in the community, like the Indigenous Peoples (IPs). IP education is one of the DepEd priorities.

In response to the distinct educational needs of IP communities, DepEd has earlier issued DepEd Order No. 42, s.2004 ("Permit to Operate Primary Schools for Indigenous Peoples and Cultural Communities") and DepEd Order No. 101, s.2010 ("The Alternative Learning System (ALS) Curriculum for Indigenous Peoples (IPs) Education"). DepEd ensures universal and equitable access of all IPs to quality and relevant basic education services towards functional literacy and shall provide adequate and culturally appropriate learning resources and environment for IP learners. As a result, all learners can access high-quality and good basic education programs that lead to functional literacy. Aside from ensuring that textbooks and other materials are properly selected and developed supplemental learning resources are offered to IP students, the Department of Education (DepEd) should establish a policy that encourages creating and maintaining culture-responsive organizations, infrastructures, learning environments, and places in education.

Learning Resources for public elementary and secondary learners include IPed, ALS, and Madrasah learners, who usually pass through quality assurance processes in which they are evaluated or assessed, tested, and validated before they are finalized, published, and reproduced. They could also be referred to or classified as any digital or non-digital educational resource with a learning purpose.

Public elementary and secondary schools, including IPed schools, follow guidelines in acquiring, utilizing, and managing all available learning resources. Their practices depend on the policy guidelines set by the Department of Education through the Bureau of Learning Resources. They conducted an annual inventory of all existing learning resources, commonly listing all available learning resources in school and community learning centers. It also serves as the catalog of school-owned properties provided by the Department of Education to all public schools. It also includes those learning resources which are locally developed or designed by teachers or those contextualized learning resources.

Another source of learning resources is the DepEd LR Portal, which contains quality-assured materials printed for use in home-based activities, and the DepEd Commons, which is currently populated with interactive e-books that provide weekly lessons for use in home-based activities.

IPed is a program that supports our public schools and other education programs that the government runs. In designing a culturally suitable curriculum, DepEd use a culturally responsive resources for learning. This Program Support Fund (PSF) will be used for activities relating to three thematic focus areas: curriculum and learning resource development, which includes, but is not limited to, sessions on curricular contextualization and learning resource building, but they are not limited to them. Consultations and workshops with IP elders, leaders, cultural bearers, community representatives, and other critical stakeholders by school and division officials. Production of learning products containing content that is relevant to IP communities have been thoroughly evaluated, as well as learning products including those that relevant IP communities have been thoroughly assessed that have Quality Control performed; adequacy and sufficiency of all these learning resource materials is always the primary consideration in the attainment of the DepEd goals and objectives, Natividad, 2019. It is, therefore, essential to consider that an inventory of learning resources also leads to proper acquisition to address the insufficiency of learning resources in every classroom. The acquisition is always part of the inventory reporting of learning resources. It is the process of purchasing learning resources needed to address some issues in the scarcity of resources. On the other hand, if schools ever need to purchase learning resources required, they should ensure that these materials are of quality and could address the inadequacy of learning resources and, most of all, the needs of the present K to 12 curricula. Since the creation of the Learning Resource Management Section (LRMS) under the Curriculum Implementation Division in every Schools Division brought by the Rationalization Plan (DM 82 s. 2017), all concerning the acquisition, management and utilization of learning resources are being monitored by the School LR team headed by the School Head through the School Property Custodian, designated School Librarian and teachers. There is an existing guideline regarding the



acquisition, utilization, and management of learning resources by the Department of Education. The school must be resourceful enough to practice proper acquisition, management, and utilization of the existing learning resources to address the scarcity and sustain their availability in both the IPed and Non-IPed Schools Divisions. It tempted the researcher to study some practices employed by the select IPed and Non-IPed Schools Divisions in the MIMAROPA Region regarding the acquisition, management, and utilization of learning resources to serve as basis for the proposed learning resource model.

### Conceptual Framework

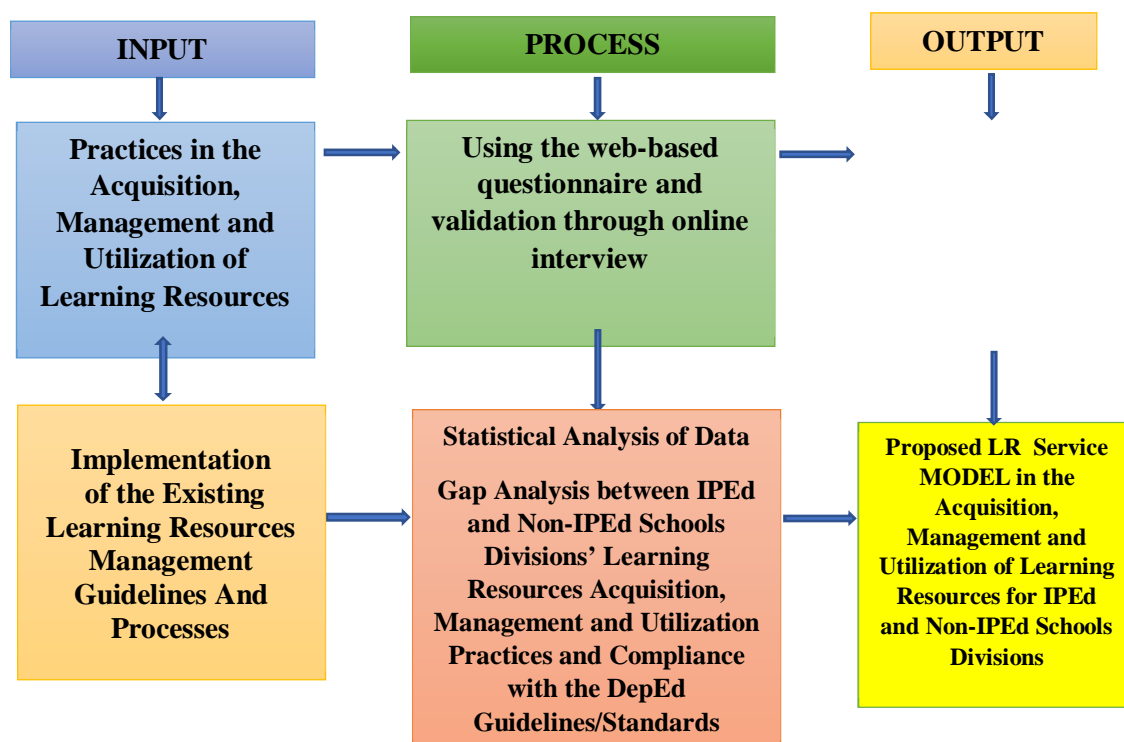


Figure 3: Research Paradigm

This research employed the IPO or the INPUT, PROCESS, and OUTPUT, wherein; the input focuses on the existing condition in terms of practices in the acquisition, utilization, and management of learning resources based on the Learning Resource management guidelines and standard procedures, whereas, the research processes involved are through the utilization of web-based questionnaire and validation through an online interview or via video conferencing.

Practices in acquiring, managing, and utilizing learning resources were then identified in both IPed and Non-IPed Schools Divisions. The output is the actual status of practices and the proposed Learning Resource Service Model to improve the said practices further.

It used One Sample T-Test and Paired T-Test to determine the gaps in learning resource acquisition, management, and utilization practices of small, medium, large and mega schools in IPed and Non-IPed Schools Divisions. As an OUTPUT of the process, gaps were identified in all practices employed.

The respondents also give possible suggestions to address the gaps. Therefore, the expectation that 100% of IPed and Non-IPed Schools Divisions will have the same practices employed within the standards was met. To close the gap and improve the learning resource acquisition, management, and utilization practices of both IPed and Non-IPed Schools Divisions, a model called the AMULeRs Model was proposed the researcher.



Table 1: Target Population  
For IPed Schools Division

Table 1: List of Respondents for IPed Schools Division

Schools Division	Municipalities	Districts	No. of School Heads	No. of School Property Custodians	No. of School Library Designates
Occidental Mindoro	Abra De Ilog	Abra de Ilog	14	14	14
	Calintaan	Calintaan	5	5	5
	Magsaysay	Magsaysay	10	10	10
	Mamburao	Mamburao	10	10	10
	Paluan	Paluan	8	8	8
	Rizal	Rizal	5	5	5
	Sablayan	Sablayan North	3	3	3
		Sablayan South	4	4	4
	San Jose	San Jose North	7	7	7
		San Jose West	3	3	3
	Santa Cruz	Santa Cruz	7	7	7
TOTAL			76	76	76

For Non-IPed Schools Division

Table 2: List of Respondents for Non-IPed Schools Division

Schools Division	Municipalities	Districts	No. of School Heads	No. of School Property Custodians	No. of School Library Designates
Marinduque	Boac	Boac North	18	18	18
		Boac South	15	15	15
	Buenavista	Buenavista	22	22	22
	Gasán	Gasán	22	22	22
	Mogpog	Mogpog	30	30	30
	Santa Cruz	Santa Cruz East	23	23	23
		Santa Cruz North	23	23	23
		Santa Cruz South	21	21	21
	Torrijos	Torrijos	35	35	35
	TOTAL		209	209	209

### B. Research Instrument

It uses the web-based researcher-made questionnaire for the reliable and fast gathering of data. In the data analysis, a descriptive method that includes survey research was utilized in the study. Frequency, percentage, rank, and mean were employed in the data analysis to determine the similarities and differences in learning resources practices regarding the learning resources acquisition, management, and utilization practices of IPed and Non-IPed Schools Divisions. At the same time, the T-test was also used to find their significant differences.

### III. RESULTS

#### A. PART 1. Learning Resources Practices Employed by IPed and Non-IPed Schools Divisions

This section discusses the mode and practices of learning resources acquisition. The data were presented through a table and categorized based on the school sizes in terms of mode and practices in the acquisition, management, and utilization of learning resources.

##### 1) Learning Resources Acquisition

##### a) Mode of Acquisition

Table 1.1.1 Mode of Acquisition of Learning Resources of IPed and Non-IPed Schools Divisions

Mode of Acquisition	IPed Schools Division						Non-IPed Schools Division							
	Small		Medium		Large		Small		Medium		Large		Mega	
	MP	R	MP	R	MP	R	MP	R	MP	R	MP	R	MP	R
MOOE or DepEd Fund	100%	1	100%	1	100%	2.5	100%	1	100%	1	100%	1	100%	1
Foreign funded	25.40%	3	66.67%	2	100%	2.5	32.37%	3	40%	3	62.50%	2	50%	3
PTA	15.87%	4	33.33%	4	100%	2.5	15.11%	4	20%	4	37.5%	3.5	50%	3
Other Stakeholders (LGUs, Private Institutions, and Alumni)	34.92%	2	41.67%	3	100%	2.5	41.01%	2	50%	2	37.5%	3.5	50%	3

\*MP- Mean Percentage

\*R- Rank

Table 1.1.1 presents the learning resources mode of acquisition for the IPed and Non-IPed Schools Divisions. For IPed Schools Division, it could be noticed that the topmost primary source of small, medium and large schools in the acquisition of learning resources is the school MOOE or DepEd fund. Second to the rank for small school is fund from other stakeholders such as LGUs, Private Institutions, and alumni; third is from foreign funded learning resources and last is from Parent, Teachers Association of PTA. For medium schools, next source of fund aside from school MOOE or DepEd fund is from foreign funded learning resources and third is the fund or donations from other stakeholders and last is from Parents-Teachers Association of PTA. For large schools, all stated modes are their common sources in learning resources acquisition.

On the other hand, for Non-IPed Schools Divisions, the results reveal that the top 3 primary sources or mode of acquisition of most of the Non-IPed small schools are through their school Maintenance and Other Operating Expenses (MOOE) or DepEd fund. Second is from other stakeholders such as LGUs, private institutions, and alumni; and third is from foreign fund learning resources; and the last is from Parents-Teachers Association (PTA). For medium schools, we could also glean that Non-IPed medium schools' primary source is the school MOOE or DepEd fund, and second is from other stakeholders and sources from Parents-Teachers Association or PTA. For large and mega schools, their primary source of acquisition is the school MOOE or DepEd fund, as well as the Parents- Teachers Association. They are also supported by other support funds, such as funds from other stakeholders.

## b) Learning Resources Acquisition Practices

Table 1.1.2. Learning Resources Acquisition Practices of IPed and Non-IPed Schools Divisions

Practices of Acquisition	IPed Schools Division						Non-IPed Schools Division							
	Small		Medium		Large		Small		Medium		Large		Mega	
	MP	R	MP	R	MP	R	MP	R	MP	R	MP	R	M P	R
Harvesting and downloading from LR Portal	74.60%	2	75%	2	100%	2.5	79.14%	1	78.33%	2	75%	1.5	100%	2
Localizing, Indigenizing and Contextualizing	88.89%	1	83.33%	1	100%	2.5	76.26%	3	63.33%	3	62.5%	3.5	100%	2
Selecting and evaluating available Learning Resources	60.32%	3	41.67%	3	100%	2.5	76.92%	2	80%	1	75%	1.5	50%	4
School-based development	38.09%	4	25%	4	100%	2.5	52.52%	4	55%	4	62.5%	3.5	100%	2

Table 1.1.2 shows the learning resources acquisition practices of the IPed and Non-IPed Schools Divisions. It could be gleaned that most of the IPed small, medium, and large schools learning resources were acquired through localization, indigenization, and contextualization with 88.89%, 83.33% and 100% percentage rating respectively. Second to the rank is through harvesting from the LR Portal with 74.60%, 75% and 100% percentage rating. Selecting and evaluating available learning resources ranked 3rd with 60.32%, 41.67 and 100% percentage rating; while school-based development ranked 4th or last with 38.09%, 25% and 100% percentage rating. This only proves that IPed schools either small, medium or large are implementing the aforementioned learning resources acquisition practices; however, most of their materials were locally, indigenously, and contextually developed to address the needs of every IPed learner. On the other hand, in terms of learning resource acquisition practices of the Non-IPed school's division, it could be gleaned that most of the Non-IPed small schools learning resources were acquired through harvesting and downloading from the LR portal with 79.14% percentage rating, selecting and evaluating available learning resources with 76.92% percentage rating ranked second. Next in rank is localizing and contextualizing learning resources with 76.26% percentage rating, while school-based development ranked 4th or last among the given practices of Non-IPed small schools with 52.52% percentage rating. For medium schools, selecting and evaluating available learning resources ranked 1<sup>st</sup> with 80% percentage rating, followed by harvesting from the LR portal with 78.33%, next is through localization and contextualization with 63.63%; while the last is through school-based development with 55% mean percentage. For both large and mega schools, all the practices were also applied wherein, they acquired their learning resources through harvesting from the LR portal as well as selecting and evaluating learning resources, localizing and contextualizing as well as school-based development was also evident.



- 2) Learning Resources Management Practices
  - a) Needs Assessment

Table 1.2.1. Learning Resources Needs Assessment Practices of IPed and Non-IPed Schools Divisions

Indicators	IPed Schools Division					Non-IPed Schools Division				
	Small	Verbal Description	Medium	Verbal Description	Large	Verbal Description	Small	Verbal Description	Medium	Verbal Description
Performing gap analysis by looking at the current school situation and the desired or necessary situation or actual needs	4.83	Excellent	4.75	Excellent	5	Excellent	4.88	Excellent	4.87	Excellent
Identifying priorities and the importance of determining if the identified needs are real and worth addressing	5	Excellent	5	Excellent	5	Excellent	4.92	Excellent	4.93	Excellent
Identifying the specific problem areas and opportunities on the needed requirements if appropriate solutions are to be applied	4.90	Excellent	5	Excellent	5	Excellent	4.91	Excellent	4.93	Excellent
Identifying possible solutions	4.97	Excellent	5	Excellent	5	Excellent	4.96	Excellent	4.92	Excellent

Table 1.2.1 shows the extent of performance in learning resources management- needs assessment practices of IPed and Non-IPed Schools Divisions. The first indicator, performing gap analysis by looking at the current school situation, has an excellent rating for both small, medium, and large schools, with mean scores of 4.83, 4.75, and 5 respectively. The second indicator, identifying priorities and the importance of determining if the identified needs are real and worth addressing, has also an excellent rating of 5. The third indicator which is identifying the specific problem areas and opportunities on the needed requirements if appropriate solutions are applied has also an excellent ratings of 4.90, 5, and 5 for small, medium, and large schools; and for the last indicator which is identifying possible solutions, has an excellent rating of 4.97 for small schools and 5 for both medium and large schools. On the other hand, for Non-IPed Schools Divisions, all the given indicators for needs assessment practices have excellent ratings for both small, medium schools, large and mega schools.

## b) Planning

Table 1.2.2. Learning Resources Planning Practices of IPED and Non-IPED Schools Divisions

Indicators	IPED Schools Division						Non-IPED Schools Division					
	Small	Verbal Description	Medium	Verbal Description	Large	Verbal Description	Small	Verbal Description	Medium	Verbal Description	Large	Verbal Description
Identifying the appropriate learning resources that will address the needs based on the result of the needs assessment	4.97	Excellent	4.92	Excellent	4	Very Good	4.95	Excellent	4.97	Excellent	5	Excellent
Forming a project team that will plan for the learning resources need	4.83	Excellent	4.83	Excellent	4	Very Good	4.89	Excellent	4.82	Excellent	5	Excellent
Defining the roles and responsibilities of each member of the team	4.98	Excellent	4.83	Excellent	4	Very Good	4.88	Excellent	4.85	Excellent	5	Excellent
Prioritizing the most learning resources needed	4.92	Excellent	5	Excellent	4	Very Good	4.92	Excellent	4.90	Excellent	5	Excellent

Table 1.2.2 shows the extent of performance in learning resources management- planning practices of IPED and Non-IPED schools. In terms of planning, all the indicators have an excellent rating also for both small and medium schools. However, a large school has only a very good rating, with a mean rating of 4 in all the indicators. On the other hand, Non-IPED small, medium, large and mega schools have an excellent rating in all the given indicators for learning resources management - planning practices.

## c) Selecting

Table 1.2.3. Learning Resources Selecting Practices of IPed and Non-IPed Schools Divisions

Indicators	IPed Schools Division						Non-IPed Schools Division					
	Small	Verbal Description	Medium	Verbal Description	Large	Verbal Description	Small	Verbal Description	Medium	Verbal Description	Large	Verbal Description
Forming a School-based Quality Assurance Team (SQAT)	4.86	Excellent	4.92	Excellent	4	Very Good	4.95	Excellent	4.95	Excellent	5	Excellent
Harvesting all the available resources	5	Excellent	4.92	Excellent	4	Very Good	4.96	Excellent	4.93	Excellent	5	Excellent
Evaluating all harvested resources using the Evaluation tool prescribed by the BLR through the Division LRMS	4.84	Excellent	4.83	Excellent	4	Very Good	4.84	Excellent	4.78	Excellent	5	Excellent
Approving all the learning resources based on the result of the evaluation	4.90	Excellent	5	Excellent	4	Very Good	4.90	Excellent	4.95	Excellent	5	Excellent

Table 1.2.3 shows the extent of performance in learning resources management- selecting practices of IPed and Non-IPed Schools Divisions. All the indicators are still with excellent ratings for both small and medium IPed schools. However, for large school, it has a very good rating. On the other hand, in terms of learning resources selecting practices as performed by the Non-IPed schools division, all the indicators have excellent ratings for both small and medium schools and large and mega schools, with a mean percentage rating ranging from 4.78 to 5.

## d) Purchasing

Table 1.2.4. Learning Resources Purchasing Practices of IPED and Non-IPED Schools Divisions

Indicators	IPED Schools Division						Non-IPED Schools Division							
	Small	Verbal Description	Medium	Verbal Description	Large	Verbal Description	Small	Verbal Description	Medium	Verbal Description	Large	Verbal Description	Mega	Verbal Description
Learning Resources to be purchased must be approved by the School Project Committee	4.92	Excellent	4.92	Excellent	4	Very Good	4.84	Excellent	4.88	Excellent	5	Excellent	5	Excellent
Procuring the learning resources must be by the RA9184 or the Government Procurement Reform Act and its implementing Rules and Regulations.	4.90	Excellent	4.92	Excellent	4	Very Good	4.90	Excellent	4.93	Excellent	5	Excellent	5	Excellent
Ensuring compliance with the relevant provision of DO 038 s 2019 (Amendments to DO No. 7 s. 2016 and 006 s. 2019- Revised Signing Authorities for Financial Matters)	4.97	Excellent	5	Excellent	4	Very Good	4.95	Excellent	4.95	Excellent	5	Excellent	5	Excellent
Following the right process of purchasing or procuring the learning resources needed	4.87	Excellent	5	Excellent	4	Very Good	4.97	Excellent	5	Excellent	5	Excellent	5	Excellent

Table 1.2.4 shows the extent of performance in learning resources management- purchasing practices of IPED and Non-IPED Schools Divisions. It could be noticed that for IPED schools division, all the indicators have excellent ratings for both small and medium schools; however for large school, it has a very good rating in all the indicators. On the other hand, in terms of learning resources purchasing practices of Non-IPED schools division, all the indicators have excellent ratings for both small, medium, large and mega schools.



## e) Distributing

Table 1.2.5. Learning Resources Distributing Practices of IPed and Non-IPed Schools Divisions

Indicators	IPed Schools Division						Non-IPed Schools Division							
	Small	Verbal Description	Medium	Verbal Description	Large	Verbal Description	Small	Verbal Description	Medium	Verbal Description	Large	Verbal Description	Mega	Verbal Description
Ensuring that all learning resources issued and delivered have property code numbers	4.84	Excellent	4.83	Excellent	4	Very Good	4.95	Excellent	4.95	Excellent	5	Excellent	5	Excellent
Issuing of the learning resources by the Supply officer/Designated Property Custodian to the teachers/advisers	4.90	Excellent	5	Excellent	4	Very Good	4.96	Excellent	4.93	Excellent	5	Excellent	5	Excellent
Maintaining a record/logbook of the learning resources issued	4.97	Excellent	5	Excellent	4	Very Good	4.95	Excellent	4.95	Excellent	5	Excellent	5	Excellent
Reminding of the standards or guidelines to be followed in taking care of the learning resources	4.87	Excellent	5	Excellent	4	Very Good	4.97	Excellent	4.95	Excellent	5	Excellent	5	Excellent

Table 1.2.5 shows the extent of performance in learning resources management- distributing practices of IPed and Non-IPed Schools Divisions. All the indicators have excellent ratings for both small and medium schools, but for large schools, it has a very good rating in IPed schools division. On the other hand, for the extent of performance in learning resources distributing practices of Non-IPed schools division, all the indicators have excellent ratings for both small, medium, large and mega schools.

## f) Inventory Controlling

Table 1.2.6 Learning Resources Inventory Controlling Practices of IPed and Non-IPed Schools Divisions

Indicators	IPed Schools Divisionn						Non-IPed Schools Division					
	Small	Verbal Description	Medium	Verbal Description	Large	Verbal Description	Small	Verbal Description	Medium	Verbal Description	Large	Verbal Description
Conducting a regular inventory of all learning resources available by the designated Property Custodian	4.97	Excellent	5	Excellent	4	Very Good	4.97	Excellent	4.95	Excellent	5	Excellent
Recording all the learning resources from the most recently delivered to the oldest	4.98	Excellent	4.83	Excellent	4	Very Good	4.95	Excellent	4.95	Excellent	5	Excellent
Ensuring that those condemned and destroyed learning resources are no longer on the list	4.92	Excellent	5	Excellent	4	Very Good	4.95	Excellent	4.97	Excellent	5	Excellent
Regular reporting and submission of inventory to the Division Supply Officer	4.98	Excellent	4.83	Excellent	4	Very Good	4.97	Excellent	4.95	Excellent	5	Excellent

Table 1.2.6 shows the extent of performance in learning resources management- inventory controlling practices of IPed and non-IPed Schools Divisions. It is revealed that all the indicators have excellent ratings for both small and medium schools, while a very good rating in all indicators for a large school in IPed schools division. On the other hand, it could be gleaned that all the indicators have excellent ratings for both small and medium schools, large and mega schools in Non-IPed schools division.

g) Storage

Table 1.2.7 Learning Resources Storage Practices of IPed and Non-IPed Schools Divisions

Indicators	IPed Schools Division						Non-IPed Schools Division							
	Small	Verbal Description	Medium	Verbal Description	Large	Verbal Description	Small	Verbal Description	Medium	Verbal Description	Large	Verbal Description	Mega	Verbal Description
Ensuring that:  here is a safe room for storing all delivered learning resources;	4.84	Excellent	4.83	Excellent	4	Very Good	4.96	Excellent	4.93	Excellent	5	Excellent	5	Excellent
there are cabinets, and shelves available	4.87	Excellent	5	Excellent	4	Very Good	4.97	Excellent	4.95	Excellent	5	Excellent	5	Excellent
the room is safe from termites	4.92	Excellent	4.92	Excellent	4	Very Good	4.96	Excellent	4.93	Excellent	5	Excellent	5	Excellent
proper care and maintenance are being followed	4.90	Excellent	5	Excellent	4	Very Good	4.95	Excellent	4.95	Excellent	5	Excellent	5	Excellent

Table 1.2.7 shows the extent of performance in learning resources management- storage practices of IPED and Non-IPED Schools Divisions. For IPED schools, all the indicators have excellent ratings for both small and medium schools, and with a very good rating in all indicators for large school. On the other hand, we could glean that all the indicators have excellent ratings for both small and medium schools and large and mega schools in Non-IPED schools division with mean rating ranging from 4.93- 5.

## h) Disposal

Table 1.2.8 Learning Resources Disposal Practices of IPed and Non-IPed Schools Divisions

Indicators	IPed Schools Division						Non- IPed Schools Division							
	Small	Verbal Description	Medium	Verbal Description	Large	Verbal Description	Small	Verbal Description	Medium	Verbal Description	Large	Verbal Description	Mega	Verbal Description
Identifying obsolete, damaged, worn out, and destroyed learning resources by the designated Property Custodian and submitting the list to the Div. Supply Officer	4.97	Excellent	5	Excellent	5	Excellent	4.96	Excellent	4.97	Excellent	5	Excellent	5	Excellent
Ensuring that all condemnable and destroyed learning resources are no longer on the inventory list	4.97	Excellent	4.92	Excellent	4	Excellent	4.97	Excellent	4.93	Excellent	5	Excellent	5	Excellent
Notifying the school of the disposal date by the Div. Supply Office in coordination with the Disposal Committee	4.98	Excellent	5	Excellent	5	Excellent	4.95	Excellent	4.97	Excellent	5	Excellent	5	Excellent
Following the recommended measures to facilitate disposing of the learning resources	4.97	Excellent	5	Excellent	4	Excellent	4.97	Excellent	4.95	Excellent	5	Excellent	5	Excellent

Table 1.2.8 shows the extent in learning resources management - disposal practices of IPed and Non-IPed Schools Divisions. In the IPed schools, all the indicators have excellent ratings for both small and medium schools, while for a large school, indicators 1 and 3 have excellent and very good ratings for the 2nd and 4th indicators. However, in the Non-IPed schools, it could be noticed that all the indicators have excellent ratings for both small and medium schools and large and mega schools.



## 3) Learning Resources Utilization Practices

## a) Frequency of Utilization Practices

Table 1.3.1 Frequency of Practices in Learning Resources Utilization in the IPed and Non-IPed Schools Divisions

Indicators	IPed Schools Division						Non-IPed Schools Division							
	Small	Verbal Description	Medium	Verbal Description	Large	Verbal Description	Small	Verbal Description	Medium	Verbal Description	Large	Verbal Description	Mega	Verbal Description
Math and Science equipment available are used in teaching.	3.35	Sometimes	3	Sometimes	4	Often	4.12	Always	3.95	Often	4.57	Always	5	Always
Available learning resources in the library are used in teaching.	2.88	Sometimes	3.38	Sometimes	4	Often	3.83	Often	3.75	Often	4.43	Always	5	Always
All available Teaching aids like SLMs, SRMs, intervention materials, models, charts, maps, globes, pictures, etc are being utilized for teaching.	3.85	Often	3.85	Often	4	Often	4.34	Always	4.35	Always	4.57	Always	5	Always
All Sports and MAPEH equipment are used for teaching.	3.05	Sometimes	4.31	Always	4	Often	4.35	Always	4.28	Always	4.14	Often	5	Always
The reference books are properly utilized.	3.73	Often	3.23	Sometimes	4	Often	3.59	Often	3.49	Often	4.29	Always	5	Always
The textbooks are used in the teaching.	4.13	Often	3.77	Often	4	Often	4.26	Always	4.2	Often	4.57	Always	5	Always
ICT equipment is used in teaching.	3.23	Sometimes	4.31	Always	4	Often	4.42	Always	4.47	Always	4.14	Often	5	Always
TLE equipment is used in teaching.	3.18	Sometimes	3.54	Often	4	Often	4.03	Often	3.88	Often	4.29	Always	5	Always
Other contextualized learning materials available in all subject areas are used in teaching.	4.23	Always	3.46	Often	4	Often	3.9	Often	3.77	Often	4.71	Always	5	Always
SLMs and other Learning activity sheets are distributed to learners to deliver learning.	4.05	Often	4.38	Always	4	Often	4.62	Always	4.72	Always	4.57	Always	5	Always
Relevant activities in textbooks are mapped and harvested based on the MELCs to supplement activities in the modules.	4.08	Often	4	Often	4	Often	4.39	Always	4.38	Always	4.43	Always	5	Always

Table 1.3.1 shows the frequency of learning resources utilization in the IPed and Non-IPed Schools Divisions. In IPed school division, it could be gleaned that for all available Math and Science equipment, both small and medium schools utilize them sometimes, with mean ratings of 3.35 and 3, respectively, while large school utilizes them often. As to available learning resources in the library, both small and medium schools use them sometimes, with 2.88 and 3.38 mean ratings. Large school uses library resources often. In terms of all available teaching and learning materials like Self-Learning Modules (SLMs), Supplementary Reading Materials (SRMs), intervention materials, models, charts, maps, globes, pictures, and others, both small, medium, and large schools use them often with 3.85, 3.85 and 4 mean ratings respectively.

However, in terms of Sports and MAPEH equipment, IPed small schools sometimes utilize them with 3.05 mean rating, medium schools use them always with 4.31 mean rating and large school often use them with 4 mean rating. All reference books are properly utilized often by both small and large schools, with 3.73 and 4 mean ratings respectively. However, medium schools sometimes utilize reference books in the teaching-learning process.

Since textbooks are the primary learning resources, small, medium, and large schools often use them with 4.13, 3.77, and 4 mean ratings. For ICT equipment, small schools sometimes utilize them with a 3.23 mean rating, medium schools always use them with a 4.31 mean rating, and large school often utilizes them with a 4 mean rating. In terms of utilization of TLE equipment, small schools sometimes use them with a 3.18 mean rating, and both medium and large schools use them often with a 4 mean rating, respectively. For contextualized learning materials, schools always use them with a 4.23 mean rating, and medium and large schools often use them with a 4 mean rating.

Self-Learning Modules (SLMs)s and Learning Activity Sheets (LASs) distributed and delivered to learners are often utilized by small and large schools, with 5 and 4 mean ratings. In contrast, those medium schools use them always with a 4.38 mean rating. For other relevant activities, both print and non-print, which were harvested from the LR Portal to supplement the Self-Learning Modules and Learning Activity Sheets, which are aligned with the present MELC, both small, medium, and large schools utilize them often with 4.08, 4 mean ratings.

On the other hand, for Non-IPed schools division, we could glean that for all available Math, and Science equipment, both small, large, and mega schools utilize them always with mean ratings of 4.21, 4.57, and 5, respectively, while medium schools utilize them often. Likewise, as to available learning resources in the library, both small, medium, large, and mega schools use them with a mean rating, and both large and mega schools always use them with 4.43 and 5 mean ratings.

In terms of all available teaching and learning materials like Self-Learning Modules (SLMs), Supplementary Reading Materials (SRMs), intervention materials, models, charts, maps, globes, pictures, and others, both small, medium, large, and mega schools use them always with 4.34, 4.35, 4.57 and 5 mean ratings respectively. For MAPEH equipment, IPed small, medium and large schools utilize them always with 4.35, 4.28, and 5 mean percentage ratings, while large schools use them often with a 4.14 mean rating. All reference books are often utilized adequately by both small and medium schools, with 3.59 and 3.49 mean ratings, respectively, while large and mega schools always use reference books in the teaching-learning process, with 4.29 and 5 mean ratings. Since textbooks are the primary learning resources, small, medium, large, and mega schools always utilize them with 4.26, 4.21, 4.57, and 5 mean ratings.

For ICT equipment, small, medium, and mega schools always use them with 4.42, 4.47, and 5 mean ratings, while medium schools often utilize them with a 4.14 mean rating. In terms of utilization of TLE equipment, small and medium schools often use them with 4.03 and 3.77 mean ratings, while large and mega schools always use them with 4.29 and 5 mean ratings, respectively. For contextualized learning materials, small and medium schools utilize them often with a 3.9 and 3.77 mean rating, while large and mega schools use them always with 4.71 and 5 mean ratings.

Self-Learning Modules (SLMs) and Learning Activity Sheets (LASs) distributed and delivered to learners during this pandemic are always utilized by small, medium, large and mega schools with 4.62, 4.72, 4.57, and 5 mean ratings. For other relevant activities, both print and non-print, which were harvested from the LR Portal to supplement the Self-Learning Modules and Learning Activity Sheets which are aligned with the present MELC, both small, medium, large and mega schools utilize them always with a 4.39, 4.38, 4.43 and 5 mean ratings.

## b) Adequacy of Maintenance Activities

Table 1.3.2 Adequacy of Maintenance Activities of IPed and Non-IPed Schools Divisions

Indicators	IPed Schools Division						Non-IPed Schools Division					
	Small	Verbal Description	Medium	Verbal Description	Large	Verbal Description	Small	Verbal Description	Medium	Verbal Description	Large	Verbal Description
There are available storage cabinets in every classroom, in the library, and/or in the storage room.	3.35	Undecided	4.23	Strongly agree	4	Agree	4.41	Strongly agree	4.27	Strongly agree	4.71	Strongly agree
Textbooks, SRMs, Reference materials are well-arranged in the bookshelves or cabinet.	3.74	Agree	3.77	Agree	4	Agree	4.28	Strongly agree	4.33	Strongly agree	4.71	Strongly agree
Teaching aid materials are well-kept and are always maintained for use.	4.03	Agree	3.85	Agree	4	Agree	4.46	Strongly agree	4.43	Strongly agree	4.71	Strongly agree
Equipment and other materials are always maintained to protect from damage.	4.03	Agree	4.08	Agree	4	Agree	4.47	Strongly agree	4.5	Strongly agree	4.86	Strongly agree
Have an updated and well-kept record of all learning resources inventory.	4.10	Agree	4	Agree	4	Agree	4.48	Strongly agree	4.46	Strongly agree	4.71	Strongly agree
Old textbooks and other references which are already more than five years are already disposed.	3.15	Undecided	3.98	Agree	4	Agree	4.43	Strongly agree	3.83	Agree	4	Agree
Report the damaged equipment and learning resources at once to the Schools Division Office for replacement.	3.53	Agree	4.15	Agree	4	Agree	3.87	Agree	4.12	Agree	4.52	Strongly agree

Continuation of Table 1.3.2 Adequacy of Maintenance Activities of IPed and Non-IPed Schools Divisions

Digital files of learning resources were properly compiled and there are available backups for files safekeeping.	3.25	Undecided	4.62	Strongly Agree	4	Agree	4.18	Agree	3.93	Agree	4.29	Strongly agree	5	Strongly agree
All books and other references have plastic covers.	3.4	Undecided	3.54	Agree	4	Agree	4.12	Agree	3.77	Agree	4.29	Strongly agree	5	Strongly agree
Provision of other separate sheets for use by the learners to preserve the SLMS or Activity sheets for future use	3.7	Agree	3.85	Agree	4	Agree	3.96	Agree	3.80	Agree	4.43	Strongly agree	5	Strongly agree

Table 1.3.2 shows the adequacy of learning resource maintenance of IPed and Non-IPed Schools Divisions. We could glean from the table above that IPed small, medium, and large schools all agree in most of the indicators except for the other indicators wherein small schools are undecided in terms of maintenance activities, among which are the availability of storage cabinets in every classroom, in the library and in the storage room, old textbooks and other references which are already more than five (5) years are already disposed of, properly compiled digital learning resources and the availability of backups for files safekeeping as well as ensuring that all books and other references have plastic covers. However, we could also glean that among the given indicators, medium schools strongly agree that they have available storage cabinets in the classroom as well as in the library and storage room and digital files of learning resources were also properly compiled with available backups for files safekeeping. On the other hand, for Non-IPed schools, it could be gleaned in the table that small, medium, large and mega schools agree and strongly agree in most of the indicators wherein most Non-IPed schools division have adequacy in terms of maintenance of all learning resources available.

#### B. PART 2. Significant Difference in Learning Resources Practices Employed by IPed and Non-IPed Schools Divisions by School Size

In terms of Learning Resources Acquisition, Management, and Utilization of IPed and Non-IPed Schools Divisions, there are no significant differences noted in most of the indicators. Whether noted as substantial or not, this will be analyzed in the discussion below.

##### 1) Learning Resources Acquisition Practices

###### a) Mode of Acquisition

- Through MOOE

Table 2.1.1.a. Results of T-test in Terms of Learning Resources Mode of Acquisition of IPed and Non-IPed Schools Divisions Through MOOE

Size	IPed	Non IPED	Comparative Error	Difference	Significance
Small	100%	100%	0.00000	0.00	Not Significant
Medium	100%	100%	0.00000	0.00	Not Significant
Large	100%	100%	0.00000	0.00	Not Significant
Mega	0	100%	0.00000	0.00	Not Significant

Table 2.1.1.a shows that there are no significant differences between IPed and Non-IPed schools in terms of LR acquisition through the use of MOOE as its mode with 0.000 comparative error and 0.00 discrepancy.



- Through Foreign funded

Table 2.1.1.b. Results of T-test in Terms of Learning Resources Mode of Acquisition of IPed and Non-IPed Schools Divisions Through Foreign Funded

Size	IPed	Non IPED	Comparative Error	Difference	Significance
Small	25.40%	32.37%	24.962981	6.97	Not Significant
Medium	66.67%	40%	38.094852	26.67	Not Significant
Large	100%	62.5%	42.435245	37.50	Not Significant
Mega	0	50%	Nan	50.00	Not Significant

Table 2.1.1.b revealed that there are no significant differences between IPed and Non-IPed schools in terms of learning resources mode of acquisition through foreign funds with a comparative error of 24.962981 or with a difference of 6.97 for small schools, 38.094852, with a difference of 26.67 for medium schools, and 42.435245 or 37.50 difference for large school and with unidentified value for a mega school.

- Through PTA

Table 2.1.1.c. Results of T-test in Terms of Learning Resources Mode of Acquisition of IPed and Non-IPed Schools Divisions Through PTA

Size	IPed	Non IPED	Comparative Error	Difference	Significance
Small	15.87%	15.11%	27.341451	0.76	Not Significant
Medium	33.33%	20%	51.442481	13.33	Not Significant
Large	100%	37.5%	54.783665	62.50	Significant
Mega	0	50%	Nan	50.00	Not Significant

Table 2.1.1.c shows that there are no significant differences between IPed and Non-IPed schools in terms of learning resources mode of acquisition through PTA for small and medium schools, with 27.341451 comparative error and 51.442481 or .76 and 13.33 difference, respectively. However, for large schools, there is a significant difference in learning resources acquisition through PTA between IPed and Non-IPed schools divisions with 54.783665 comparative error and a difference of 65.20. Mega schools remain with unidentified value.

- Through Other Stakeholders

Table 2.1.1.d. Results of T-test in Terms of Learning Resources Mode of Acquisition of IPed and Non-IPed Schools Divisions Through Other Stakeholders (LGUs, Private Institutions, Alumni)

Size	IPed	Non IPED	Comparative Error	Difference	Significance
Small	34.92%	41.01%	23.661792	6.09	Not Significant
Medium	41.67%	50%	46.772005	8.33	Not Significant
Large	100%	37.5%	54.783665	62.50	Significant
Mega	0	50%	Nan	50.00	Not Significant

In the above table, we could notice that there are no significant differences in IPed and Non-IPed schools divisions in terms of learning resources mode of acquisition through other stakeholders like LGUs, private institutions and alumni for small, and medium schools with 23.661792 comparative error and 46.772005 or 6.09 and 8.33 difference respectively. However, for large schools, there is a significant difference in terms of learning resources acquisition through other stakeholders (LGUs, Private Institutions, Alumni) between IPed and Non-IPed schools division with 54.783665 comparative error and with a difference of 65.20. Mega school remains with unidentified value.

### b) Practices of Acquisition

- Through Harvesting and Downloading from LR Portal

Table 2.1.2.a. Results of T-test in Terms of Learning Resources Acquisition Practices of IPed and Non-IPed Schools Divisions Through Harvesting and Downloading from LR Portal

Size	IPed	Non IPED	Comparative Error	Difference	Significance
Small	74.60%	79.14%	14.578443	4.54	Not Significant
Medium	75%	78.33%	30.644302	3.33	Not Significant
Large	100%	75%	34.648232	25.00	Not Significant
Mega	0	100%	Nan	100	Not Significant

Table 2.1.2.a shows that there are no significant differences between IPed and Non-IPed schools divisions in terms of learning resources mode of acquisition through other stakeholders like LGUs, private institutions, and alumni for small and medium schools with 14.578443 comparative error and 30.644302 or 6.09 and 34.648332 difference respectively. The mega school remains with unidentified value.

- Through Localizing, Indigenizing and Contextualizing

Table 2.1.2.b. Results of T-test in Terms of Learning Resources Acquisition Practices of IPed and Non-IPed Schools Divisions Through Localizing, Indigenizing and Contextualizing

Size	IPed	Non IPED	Comparative Error	Difference	Significance
Small	88.89%	76.76%	11.506454	12.13	Significant
Medium	83.33%	63.33%	27.720288	20.0	Not Significant
Large	100%	65.5%	15.114524	34.5	Significant
Mega	0	100%	Nan	100	Not Significant

Table 2.1.2.b shows the learning resources acquisition practices through localizing, indigenizing, and contextualizing. We could notice that there are significant differences in small schools in IPed and Non-IPed schools divisions with 11.506454 comparative error and a difference of 12.13, as well as in the large school with a comparative error of 15.114524 and a difference of 34.5. However, there are no significant differences between the medium-sized schools in IPed and Non-IPed Schools Divisions. Mega schools remain with unidentified value.

- Through Selecting and Evaluating Available Learning Resources

Table 2.1.2.c. Results of T-test in Terms of Learning Resources Acquisition Practices of IPed and Non-IPed Schools Divisions Through Selecting and Evaluating Available Learning Resources

Size	IPed	Non IPED	Comparative Error	Difference	Significance
Small	60.32%	76.92%	10.623476	34.50	Significant
Medium	41.67%	80%	44.671472	38.33	Not Significant
Large	100%	75%	34.648232	25.00	Not Significant
Mega	0	50%	Nan	50	Not Significant

Table 2.1.2.c shows that when it comes to learning resources acquisition practices through selecting and evaluating learning resources, there is a significant difference in small-sized schools in both IPed and Non-IPed schools divisions with 10.623476 comparative error and a difference of 34.50. However, there are no significant differences in the medium-sized and large-sized schools in both IPed and Non-IPed Schools Division. Mega schools remain with unidentified value.

- Through School-Based Development

Table 2.1.2.d. Results of T-test in Terms of Learning Resources Acquisition Practices of IPed and Non-IPed Schools Divisions Through School-Based Development

Size	IPed	Non IPED	Comparative Error	Difference	Significance
Small	38.09%	52.52%	22.554134	14.43	Not Significant
Medium	25%	55%	51.856726	30.00	Not Significant
Large	100%	62.5%	42.435245	37.50	Not Significant
Mega	0	100%	Nan	100	Not Significant

The above table shows the learning resources acquisition practices through school-based development. It shows that there are no significant differences in small, medium, and large schools in both IPed and Non-IPed schools divisions. The mega school remains with unidentified value.

## 2) Learning Resources Management Practices

### a) Needs Assessment

Table 2.2.1.a. Results of T-test in Terms of Learning Resources Management (Needs Assessment) Practices of IPed Schools Division

Indicators	Mean			Average Mean	Stand. Dev.	Variance	N	T	d.o.f	critical value	t  < crit. value =>.05
	Small	Medium	Large								
1	4.83	4.75	5	4.86	0.1276	0.3572	3	-1.9004	2	4.303	Not Significant
2	4.95	5	4.98	4.9767	0.0255	0.1597	3	-1.5849	2	4.303	Not Significant
3	4.90	5	5	4.9667	0.0579	0.2406	3	-0.9972	2	4.303	Not Significant
4	4.97	5	5	4.99	0.0173	0.1315	3	-1.0012	2	4.303	Not Significant

The above table shows there are no significant differences in the learning resource management- needs assessment practices in small, medium, and large-sized schools in an IPed Schools Division in all the given indicators.

Table 2.2.1.b. Results of T-test in Terms of Learning Resources Management (Needs Assessment) Practices of Non- IPed Schools Division

Indicators	Mean				Average Mean	Stand. Dev.	Variance	n	T	d.o.f	critical value	t  < crit. value =>.05
	Small	Medium	Large	Mega								
1	4.88	4.87	4.88	5	4.9075	0.0619	0.2488	4	-2.9887	3	3.182	Not Significant
2	4.92	4.93	5	5	4.9625	0.0435	0.2086	4	-1.7241	3	3.182	Not Significant
3	4.91	4.93	5	5	4.96	0.0469	0.2166	4	-1.7058	3	3.182	Not Significant
4	4.96	4.92	5	5	4.97	0.0383	0.1957	4	-1.5666	3	3.182	Not Significant

Likewise, for Non-IPed Schools Division, there are also no significant differences in the learning resources management- needs assessment practices between small, medium, large and mega-sized schools in all indicators regarding needs assessment practices.

## b) Planning

Table 2.2.2.a. Results of T-test in Terms of Learning Resources Management (Planning) Practices of IPed Schools Division

Indicators	Mean			Average Mean	Stand. Dev.	Variance	N	T	d.o.f	critical value	t   < crit. value =>.05
	Small	Medium	Large								
1	4.97	4.92	4	4.63	0.5461	0.739	3	-1.1735	2	4.303	Not Significant
2	4.83	4.83	4	4.5533	0.4792	0.6922	3	-1.6145	2	4.303	Not Significant
3	4.98	4.83	4	4.6033	0.5279	.7266	3	-1.3015	2	4.303	Not Significant
4	4.92	5	4	4.64	0.5557	.7455	3	-1.1221	2	4.303	Not Significant

The above table shows that there are no significant differences between small, medium and large schools in all the given indicators in terms of learning resources management – planning practices in an IPed schools division, with -1.1735, -1.6145, -1.3015 and -1.1221 which are less than its critical value of 4.303.

Table 2.2.2-b. Results of T-test in Terms of Learning Resources Management (Planning) Practices of Non- IPed Schools Division

Indicator s	Mean				Average Mean	Stand. Dev.	Variance	n	t	d.o.f	critical value	t   < crit. value =>.05
	Small	Medium	Large	Mega								
1	4.95	4.97	5	5	4.98	0.0245	0.1565	4	-1.6327	3	3.182	Not Significant
2	4.89	4.82	5	5	4.9275	0.0885	0.2975	4	-1.6384	3	3.182	Not Significant
3	4.88	4.85	5	5	4.9325	0.079	0.2811	4	-1.7089	3	3.182	Not Significant
4	4.92	4.90	5	5	4.955	0.0527	0.2296	4	-1.7078	3	3.182	Not Significant

The above table shows the significant differences in learning resources management- planning practices in Non-IPed schools division. It could be noticed that there are no significant differences between small, medium, and large schools with -1.6327, -1.6384, -1.7089, and -1.7078, which are less than its critical value of 3.182.



### c) Selecting

Table 2.2.3.a. Results of T-test in Terms of Learning Resources Management (Selecting) Practices of IPed Schools Division

Indicators	Mean			Average Mean	Stand. Dev.	Variance	n	t	d.o.f	critical value	t   < crit. value =>.05
	Small	Medium	Large								
1	4.86	4.92	4	4.5933	0.5148	0.7175	3	-1.3682	2	4.303	Not Significant
2	5	4.92	4	4.64	0.5557	0.7455	3	-1.1221	2	4.303	Not Significant
3	4.84	4.83	4	4.5567	0.4822	0.6944	3	-1.5924	2	4.303	Not Significant
4	4.90	5	4	4.6333	0.5508	0.7422	3	-1.153	2	4.303	Not Significant

The above table shows that there are no significant differences between small, medium, and large-sized schools in an IPed Schools Division in the different indicators of in learning resources management- selecting practices with -1.3682, -1.1221, -1.5924, and -1.153, which are less than its critical value of 4.303.

Table 2.2.3.b. Results of T-test in Terms of Learning Resources Management (Selecting) Practices of Non-IPed Schools Division

Indicators	Mean				Average Mean	Stand. Dev.	Variance	n	t	d.o.f	critical value	t   < crit. value =>.05
	Small	Medium	Large	Mega								
1	4.95	4.95	5	5	4.975	0.0289	0.17	4	-1.7301	3	3.182	Not Significant
2	4.96	4.93	5	5	4.9725	0.0342	0.1849	4	-1.6082	3	3.182	Not Significant
3	4.84	4.78	5	5	4.905	0.1124	0.3353	4	-1.6904	3	3.182	Not Significant
4	4.90	4.95	5	5	4.9625	0.0479	0.2189	4	-1.5658	3	3.182	Not Significant

Similarly, for the Non-IPed Schools Division, it could be noticed that there are also no significant differences between small, medium, large and mega-sized schools in all the indicators in terms of learning resource management- selecting practices.

### d) Purchasing

Table 2.2.4.a. Result- s of T-test in Terms of Learning Resources Management (Purchasing) Practices of IPed Schools Division

Indicators	Mean			Average Mean	Stand. Dev.	Variance	n	t	d.o.f	critical value	t   < crit. value =>.05
	Small	Medium	Large								
1	4.92	4.92	4	4.6133	0.5312	0.7288	3	-1.2608	2	4.303	Not Significant
2	4.90	4.92	4	4.6067	0.5255	0.7249	3	-1.2964	2	4.303	Not Significant
3	4.97	5	4	4.6567	0.5689	0.7543	3	-1.0453	2	4.303	Not Significant
4	4.87	5	4	4.6233	0.5438	0.7374	3	-1.1997	2	4.303	Not Significant

The above table shows that there are no significant differences between small, medium, and large-sized schools in all the indicators in IPed schools division in terms of learning resource management- purchasing practices.

Table 2.2.4.b. Results of T-test in Terms of Learning Resources Management (Purchasing) Practices of Non-IPEd Schools Division

Indicators	Mean				Average Mean	Stand. Dev.	Variance	n	t	d.o.f	critical value	t   < crit. value =>.05
	Small	Medium	Large	Mega								
1	4.84	4.88	5	5	4.93	0.0824	0.2871	4	-1.699	3	3.182	Not Significant
2	4.90	4.93	5	5	4.9575	0.0507	0.2252	4	-1.6765	3	3.182	Not Significant
3	4.95	4.95	5	5	4.975	0.0289	0.17	4	-1.7301	3	3.182	Not Significant
4	4.97	5	5	5	4.9925	0.0152	0.1233	4	-0.9868	3	3.182	Not Significant

In like manner, for Non-IPEd Schools Division, it could be noticed in the above table that there are also no significant differences between small, medium, large and mega-sized schools in all indicators in terms learning resources management- purchasing practices.

#### e) Distributing

Table 2.2.5.a. Results of T-test in Terms of Learning Resources Management (Distributing) Practices of IPEd Schools Division

Indicators	Mean			Average Mean	Stand. Dev.	Variance	n	T	d.o.f	critical value	t   < crit. value =>.05
	Small	Medium	Large								
1	4.84	4.83	4	4.5567	0.4822	0.6944	3	-1.5924	2	4.303	Not Significant
2	4.90	5	4	4.6333	0.5508	0.7422	3	-1.153	2	4.303	Not Significant
3	4.97	5	4	4.6567	0.5689	0.7543	3	-1.0453	2	4.303	Not Significant
4	4.87	5	4	4.6233	0.5438	0.7374	3	-1.1997	2	4.303	Not Significant

The above table shows that there are no significant differences between small, medium, and large-sized schools in IPEd Schools Division in all the indicators in terms of learning resources- distributing practices.

Table 2.2.5.b. Results of T-test in Terms of Learning Resources Management (Distributing) Practices of Non-IPEd Schools Division

Indicators	Mean				Average Mean	Stand. Dev.	Variance	n	t	d.o.f	critical value	t   < crit. value =>.05
	Small	Medium	Large	Mega								
1	4.95	4.95	5	5	4.975	0.0289	0.17	4	-1.7301	3	3.182	Not Significant
2	4.96	4.93	5	5	4.9775	0.0264	0.1625	4	-1.7045	3	3.182	Not Significant
3	4.95	4.95	5	5	4.975	0.0289	0.17	4	-1.7301	3	3.182	Not Significant
4	4.97	4.95	5	5	4.98	0.0245	0.1565	4	-1.6327	3	3.182	Not Significant

The above table shows that like IPEd schools, there are no significant differences between small, medium, large and mega-sized schools in Non- IPEd Schools Division in all the indicators in terms of learning resources management- distributing practices.

# f) Inventory Controlling

Table 2.2.6.a. Results of T-test in Terms of Learning Resources Management (Inventory Controlling) Practices of IPed Schools Division

Indicators	Mean			Average Mean	Stand. Dev.	Variance	n	t	d.o.f	critical value	t   < crit. value =>.05
	Small	Medium	Large								
1	4.97	5	4	4.6567	0.5689	0.7543	3	-1.0453	2	4.303	Not Significant
2	4.98	4.83	4	4.6033	0.5279	0.7266	3	-1.3015	2	4.303	Not Significant
3	4.92	5	4	4.64	0.5557	0.7455	3	-1.1221	2	4.303	Not Significant
4	4.98	4.83	4	4.6033	0.5279	0.7266	3	-1.3015	2	4.303	Not Significant

The above table shows that there are no significant differences between small, medium, and large IPed schools in terms of learning resource management- inventory controlling practices. We could see that the result of the T-test is less than the critical value. Thus, all schools in IPed Schools Division have been applying the same practices or the four (4) indicators in terms of inventory controlling of learning resources.

Table 2.2.6.b. Results of T-test in Terms of Learning Resources Management (Inventory Controlling) Practices of Non-IPed Schools Division

Indicators	Mean				Average Mean	Stand. Dev.	Variance	n	T	d.o.f	critical value	t   < crit. value =>.05
	Small	Medium	Large	Mega								
1	4.97	4.95	5	5	4.98	0.0245	0.1565	4	-1.6327	3	3.182	Not Significant
2	4.95	4.95	5	5	4.975	0.0289	0.17	4	-1.7301	3	3.182	Not Significant
3	4.95	4.97	5	5	4.98	0.0245	0.1565	4	-1.6327	3	3.182	Not Significant
4	4.97	4.95	5	5	4.98	0.0245	0.1565	4	-1.6327	3	3.182	Not Significant

The above table shows that in terms of learning resource management- inventory controlling practices in Non-IPed Schools Division, there are no significant differences between small, medium, and large as well as mega-sized schools. The result of the T-test is less than the critical value. Thus, both sizes of Non-IPed Schools Division have been applying the same practices or the four (4) indicators in terms of inventory controlling of learning resources.

## g) Storage

Table 2.2.7.a. Results of T-test in Terms of Learning Resources Management (Storage) Practices of IPed Schools Division

Indicators	Mean			Average Mean	Stand. Dev.	Variance	n	T	d.o.f	critical value	t  < crit. value =>.05
	Small	Medium	Large								
1	4.84	4.83	4	4.5567	0.4822	0.6944	3	-1.5924	2	4.303	Not Significant
2	4.87	5	4	4.6233	0.5438	0.7374	3	-1.1997	2	4.303	Not Significant
3	4.92	4.92	4	4.6133	0.5312	0.7288	3	-1.2608	2	4.303	Not Significant
4	4.90	5	4	4.6333	0.5508	0.7422	3	-1.153	2	4.303	Not Significant

The above table shows that there are no significant differences between small, medium, and large IPed schools in terms of learning resources management- storage practice. We could see that the result of the T-test is less than the critical value. Thus, both sizes of schools in the IPed Schools Division have been applying the same practices regarding the storage of learning resources.

Table 2.2.7.b. Results of T-test in Terms of Learning Resources Management (Storage) Practices of Non-IPed Schools Division

Indicators	Mean				Average Mean	Stand. Dev.	Variance	n	T	d.o.f	critical value	t  < crit. value =>.05
	Small	Medium	Large	Mega								
1	4.96	4.93	5	5	4.9725	0.0342	0.1849	4	-1.6082	3	3.182	Not Significant
2	4.97	4.95	5	5	4.98	0.0245	0.1565	4	-1.6327	3	3.182	Not Significant
3	4.96	4.93	5	5	4.9725	0.0342	0.1849	4	-1.6082	3	3.182	Not Significant
4	4.95	4.95	5	5	4.975	0.0289	0.17	4	-1.7301	3	3.182	Not Significant

The above table shows that in terms of learning resources management- storage practices of Non-IPed Schools Division, there are no significant differences between small, medium, large and mega-sized Non- IPed schools. The result reveals that the T-test is less than the critical value. Thus, both sizes of schools in a Non-IPed Schools Division have been applying the same practices in the storage of learning resources.

### h) Disposal

Table 2.2.8.a. Results of T-test in Terms of Learning Resources Management (Disposal) Practices of IPed Schools Division

Indicators	Mean			Average Mean	Stand. Dev.	Variance	N	t	d.o.f	critical value	t   < crit. value =>.05
	Small	Medium	Large								
1	4.97	5	5	4.99	0.0173	0.1315	3	-1.0012	2	4.303	Not Significant
2	4.97	4.92	4	4.63	0.5461	0.739	3	-1.1735	2	4.303	Not Significant
3	4.98	5	5	4.9933	0.0122	0.1105	3	-0.9465	2	4.303	Not Significant
4	4.97	5	4	4.6567	0.5689	0.7543	3	-1.0453	2	4.303	Not Significant

The above table shows that there are no significant differences between small, medium, and large IPed schools in terms of learning resources management- disposal practices. The result of the T-test is less than the critical value. Thus, both sizes of schools in the IPed Schools Division have been applying the same practices or the four (4) indicators regarding the disposal of learning resources.

Table 2.2.8.b. Results of T-test in Terms of Learning Resources Management (Disposal) Practices of Non- IPed Schools Division

Indicators	Mean				Average Mean	Stand. Dev.	Variance	n	t	d.o.f	critical value	t   < crit. value =>.05
	Small	Medium	Large	Mega								
1	4.96	4.97	5	5	4.9825	0.0208	0.1442	4	-1.6827	3	3.182	Not Significant
2	4.97	4.93	5	5	4.975	0.0331	0.1819	4	-1.5106	3	3.182	Not Significant
3	4.95	4.97	5	5	4.98	0.0245	0.1565	4	-1.6327	3	3.182	Not Significant
4	4.97	4.95	5	5	4.98	0.0245	0.1565	4	-1.6327	3	3.182	Not Significant

The above table shows that in the learning resources management- disposal practices of the Non-IPed Schools Division, there are no significant differences between small, medium, large, and mega-sized Non- IPed schools. We could also see that the result of the T-test is less than the critical value. Thus, both sizes of schools in the Non-IPed Schools Division have been applying the same practices or the four (4) indicators regarding the disposal of learning resources.

### 3) Learning Resources Utilization Practices

#### a) Frequency of Utilization Practices

Table 2.3.1.a. Results of T-test in Terms of Learning Resources Frequency of Utilization Practices in IPed Schools Division

Indicators	Mean			Average Mean	Stand. Dev.	Variance	n	T	d.o.f	critical value	t  < crit. value =>.05
	Small	Medium	Large								
1	3.35	3	4	3.45	0.5074	0.7123	3	-5.291	2	4.303	Significant
2	2.88	3.38	4	3.42	0.5611	0.7491	3	-4.8773	2	4.303	Significant
3	3.85	3.85	4	3.9	0.0866	0.2943	3	-22.0006	2	4.303	Significant
4	3.05	4.31	4	3.7867	0.6566	0.8103	3	-3.2007	2	4.303	Not Significant
5	3.73	3.23	4	3.6533	0.3907	0.6251	3	-5.97	2	4.303	Significant
6	4.13	3.77	4	3.9667	0.3104	0.5571	3	-9.8124	2	4.303	Significant
7	3.23	4.31	4	3.8467	0.5562	0.7458	3	-3.5916	2	4.303	Not Significant
8	3.18	3.54	4	3.5733	0.411	0.6411	3	-6.0123	2	4.303	Significant
9	4.23	3.46	4	3.8967	0.3952	0.6286	3	-4.8356	2	4.303	Significant
10	4.05	4.38	4	4.1433	0.2065	0.4544	3	-7.1854	2	4.303	Significant
11	4.08	4	4	4.0267	0.0464	0.2154	3	-36.3332	2	4.303	Significant

The above table shows the significant difference in terms of frequency in learning resources utilization in an IPed schools division. We can notice substantial differences in most of the given indicators except for indicators no. 4 and no. 7. There are no significant differences in terms of utilization of all sports and MAPEH equipment, as well as the utilization of ICT in teaching.

Table 2.3.1.b. Results of T-test in Terms of Learning Resources Frequency of Utilization Practices in Non-IPed Schools Division

Indicators	Mean				Average Mean	Stand. Dev.	Variance	n	t	d.o.f	critical value	t  < crit. value =>.05
	Small	Medium	Large	Mega								
1	4.21	3.95	4.57	5	4.4144	0.4724	0.6873	4	-2.4979	3	3.182	Not Significant
2	3.83	3.75	4.43	5	4.2525	0.5835	0.7639	4	-2.5621	3	3.182	Not Significant
3	4.34	4.35	4.57	5	4.565	0.3088	0.5557	4	-2.8174	3	3.182	Not Significant
4	4.35	4.28	4.14	5	4.4425	0.3817	0.6178	4	-2.9211	3	3.182	Not Significant
5	3.59	3.49	4.29	5	4.0925	0.7019	0.8378	4	-2.5858	3	3.182	Not Significant
6	4.26	4.2	4.57	5	4.5075	0.3662	0.6051	4	-2.6898	3	3.182	Not Significant
7	4.42	4.47	4.14	5	4.5075	0.359	0.5992	4	-2.7437	3	3.182	Not Significant
8	4.03	3.88	4.29	5	4.3	0.4964	0.7046	4	-2.8203	3	3.182	Not Significant
9	3.9	3.77	4.71	5	4.345	0.603	0.7765	4	-2.1725	3	3.182	Not Significant
10	4.62	4.72	4.57	5	4.7275	0.1921	0.4383	4	-2.8371	3	3.182	Not Significant
11	4.39	4.38	4.43	5	4.55	0.3008	0.5485	4	-2.992	3	3.182	Not Significant

On the other hand, in terms of the frequency of learning resources utilization practices in a Non-IPed Schools Division, there are no significant differences between small, medium, large and mega-sized schools. The result only proves that all the schools in the Non-IPed division employ the same practices in terms of utilizing all learning resources available.



## b) Adequacy of Maintenance Activities

Table 2.3.2.a. Results of T-test in Terms of Adequacy of Maintenance Activities of IPed Schools Division

Indicators	Mean			Average Mean	Stand. Dev.	Variance	N	T	d.o.f	critical value	t   < crit. value =>.05
	Small	Medium	Large								
1	3.35	4.23	4	3.86	0.4563	0.6755	3	-4.3273	2	4.303	Significant
2	3.74	3.77	4	3.8367	0.1423	0.3772	3	-14.1599	2	4.303	Significant
3	4.03	3.85	4	3.96	0.0964	0.3105	3	-18.686	2	4.303	Significant
4	4.03	4.08	4	4.0367	0.0407	0.2017	3	-40.9961	2	4.303	Significant
5	4.10	4	4	4.0333	0.0579	0.2406	3	-28.9174	2	4.303	Significant
6	3.15	4.15	4	3.71	0.4851	0.6965	3	-4.6059	2	4.303	Significant
7	3.53	4.15	4	3.8933	0.3235	0.5688	3	-5.9252	2	4.303	Significant
8	3.25	4.62	4	3.9567	0.686	0.8283	3	-2.6343	2	4.303	Not Significant
9	3.4	3.54	4	3.6467	0.3139	0.5603	3	-7.4675	2	4.303	Not Significant
10	3.7	3.85	4	3.85	0.15	0.3873	3	-13.2791	2	4.303	Significant

Regarding the adequacy of learning resources maintenance of IPed schools division, it could be noticed in the table that there are significant differences in most of the indicators except for indicators no. 9 and 10, which indicate that digital files of LRs have appropriately compiled. In addition, there are available backups for safekeeping files, and all books and other references have plastic covers. Small, medium, and large schools in an IPed schools division also differ in terms of adequacy and maintenance in the available storage cabinets in every classroom, in the library, and in the storage room. Textbooks, SRMs, and reference materials are well-arranged in the bookshelves or cabinet; maintaining and protecting all teaching aid materials as well as all equipment available; with an updated and well-kept record of all learning resources inventory; disposing old books and other references which are already obsolete or more than five(5) years and no longer usable; and reporting all damaged equipment and other learning materials in the Schools Division Supply Office for replacement.

Table 2.3.2.b. Results of T-test in Terms of Adequacy of Maintenance Activities of Non-IPed Schools Division

Indicators	Mean				Average Mean	Stand. Dev.	Variance	N	T	d.o.f	critical value	t   < crit. value =>.05
	Small	Medium	Large	Mega								
1	4.41	4.27	4.71	5	4.5975	0.3252	0.5703	4	-2.4754	3	3.182	Not Significant
2	4.28	4.33	4.71	5	4.58	0.3395	0.5827	4	-2.4742	3	3.182	Not Significant
3	4.46	4.43	4.71	5	4.65	0.265	0.5148	4	-2.6415	3	3.182	Not Significant
4	4.47	4.5	4.86	5	4.7075	0.2635	0.5133	4	-2.2201	3	3.182	Not Significant
5	4.48	4.46	4.71	5	4.6625	0.252	0.502	4	-2.6786	3	3.182	Not Significant
6	4.43	3.83	4	5	4.315	0.5218	0.7224	4	-2.6255	3	3.182	Not Significant
7	3.87	4.12	4.52	5	4.3775	0.4939	0.7028	4	-2.5208	3	3.182	Not Significant
8	4.18	3.93	4.29	5	4.35	0.4588	0.6773	4	-2.8335	3	3.182	Not Significant
9	4.12	3.77	4.29	5	4.295	0.5174	0.7193	4	-2.7252	3	3.182	Not Significant
10	3.96	3.80	4.43	5	4.2975	0.5392	0.7343	4	-2.6057	3	3.182	Not Significant

On the other hand, regarding the adequacy of learning resources maintenance practices in a Non-IPed Schools Division, there are no significant differences between small, medium, large and mega schools. Therefore, this only proves that all the Non-IPed schools divisions employ the same practices in terms of adequacy of maintenance practices of all learning resources available.

#### IV. CONCLUSION

Considering the study's initial findings, the researcher concluded the following:

- 1) Learning Resources Acquisition
  - Budget and fund allocation for small, medium, and large/ mega IPed and Non-IPed schools, which came from various sources, play a crucial role in the implementation of all school programs and projects in terms of the acquisition of learning resources in both IPed and Non-IPed schools divisions. Allocating the budget for the said item turned out as the most challenging task among the respondent schools, which resorted them to find support funds from LGUs, PTA, and other stakeholders, particularly from alumni and private institutions and from foreign-funded learning resources.
  - Learning resources of both IPed and Non-IPed small, medium, large/mega schools are acquired through localizing, indigenizing, contextualizing, selecting, and evaluating all available learning resources, harvesting from the LR Portal, as well as school-based development. Such practices are also based on the standards or guidelines set by the Department of Education through the Bureau of Learning Resources.
  - There is no significant difference in learning resources acquisition practices employed by IPed and Non-IPed Schools Divisions by school size in MIMAROPA Region and therefore, the null hypothesis is accepted.
- 2) Learning resources management practices were excellently performed by IPed and Non-IPed schools divisions in MIMAROPA Region in terms of needs assessment, planning, selecting, purchasing, distributing, inventory controlling, storage, and disposal of learning resources. There is no significant difference in learning resources management practices employed by IPed and Non-IPed Schools Divisions by school size in MIMAROPA Region and therefore, the null hypothesis is accepted.
- 3) The IPed and Non-IPed, small, medium, large, and mega schools utilize all available learning resources. Print learning resources such as textbooks and other supplementary learning and reading materials are the most utilize in every school.
- 4) There is no significant difference in learning resources utilization practices employed by IPed and Non-IPed Schools Divisions in MIMAROPA Region and therefore, the null hypothesis is accepted.

#### BIBLIOGRAPHY

- [1] Rose Chelangat (2019) Utilization of Teaching and Learning Resources in Social Studies Instruction: A Case of Private Primary Teachers' Training Colleges in Nakuru County, Kenya, Moi University
- [2] Kigwilu and Akala (2017) Resource Utilization and Curriculum Implementation in Community Colleges School of Education, University of Nairobi, Kikuyu, Kenya International Journal for Research in Vocational Education and Training (IJRVET) Vol. 4, Issue 4, December 2017
- [3] Tezera D, Yadesa D (2017) Assessment of Material Resource Utilization Practices and Its Challenges: The Case of Wollega University
- [4] Usen, Onodiong Mfreke (2016) Teachers' Utilization of School Facilities and Academic Achievement of Student Nurses in Human Biology in Schools of Nursing in Akwa Ibom State, Nigeria by Institute of Education, University of Uyo
- [5] Usman, Yunusa Dangara (2016), Educational Resources: An Integral Component for Effective School Administration in Nigeria
- [6] Onche, A. (2014). Meeting the Challenge of Accessibility and Utilization of Modern Instructional Materials in Rural Secondary Schools in Nigeria. International Journal of Multidisciplinary Studies
- [7] Defaru Mengistu (2014) The Current Practices of Educational Materials Management and Utilization in Secondary Schools of Jimma Town, [Jimma University, Ethiopia](http://www.jimmauniversity.edu.et)
- [8] Ampa, Basri, Andriani (2013) The Development of Contextual Learning Materials for the English Speaking Skills, International Journal of Education and Research Vol. 1 No. 9 September 2013
- [9] Kangethe, David Muhungi, (2011) Challenges of teaching and learning materials in public secondary schools in Tana River District, Kenya, Kenyatta University
- [10] Jeptanui. (2011). Efficiency in the use of Instructional Materials. A case study of Kapseret Zone Waring District. Unpublished project. Kenyatta University.
- [11] Owoeye, J. S. (2011). School Facilities and Academic Achievement of Secondary
- [12] School Agricultural Science in Ekiti State, Nigeria. Kampala: Kampala
- [13] International University.
- [14] Kangethe (2011). Challenges of Teaching and Learning Materials in Public Secondary Schools in Tana River District. Unpublished project. Kenyatta University Afolabi and Adeleke (2010) Assessment of Resources and Instructional Materials Status in the Teaching of Mathematics in South Western Nigerian
- [15] Kaaria (2009) Availability, acquisition, and utilization of teaching-learning resources of English language in primary schools in Bururi division of Imenti North District, Kenya, Kenyatta University
- [16] Other sources: Mark Anthony Llego, 2020 <https://www.teacherph.com/depd-learning-materials/> <https://books.google.com.ph/books?id=H6AM-RhmoAC;pg=PA24;hl=en#v=onepage;q=f=falsehttp://quickbooks.intuit.com/t/online-store-and-retail/basics-inventory->
- [17] Mark Anthony Llego 2011 <https://www.teacherph.com/national-indigenous-peoples-education-policy-framework/>
- [18] management <http://www.inc.com/encyclopedia/inventory-control-systems.html> <http://www.studymode.com/essays/Chapter-1-Inventory-System-612578.html> <http://erply.com/effective-inventory->
- [19] management <http://www.studymode.com/essays/Computer-Based-Inventory-System-401903.html> <http://docslide.us/documents/chapter-ii-limdocx.html> <http://www.technotrice.com/what-is-spiral-model-software-engineering/>



- [20] <https://fedena.com/blog/2018/11/benefits-of-managing-school-inventory-using-school-management-software.html>
- [21] International Journal of Education and Research, Vol. 1 No. 9 September 2013 ISSN: 2201-6333 (Print) ISSN: 2201-6740 (Online) [www.ijern.com](http://www.ijern.com)
- [22] Beth Lewis, July 2019 <https://www.thoughtco.com/tlm-teaching-learning-materials-2081658>
- [23] Akande, Samson Oyeniyi, "Knowledge, Perception, and Attitudes of Library Personnel towards Preservation of Information Resources in Nigerian Federal University Libraries" (2009). Library Philosophy and Practice (e-journal). 303.
- [24] Merlina Hernando Malipot , 2019. <https://mb.com.ph/2019/01/02/depd-releases-guidelines-on-science-math-tech-voc-learning-tools/>
- [25] Deped.gov.ph. 2010 Educational Facilities Manual Deped.gov.ph.Resources and Issuances What Is TOM? Total Quality Management Explained – BMC Software | Blogs



10.22214/IJRASET



45.98



IMPACT FACTOR:  
7.129



IMPACT FACTOR:  
7.429



# INTERNATIONAL JOURNAL FOR RESEARCH

IN APPLIED SCIENCE & ENGINEERING TECHNOLOGY

Call : 08813907089  (24\*7 Support on Whatsapp)