

The Utilization of the Instructional Materials in Science 7 in the Public Secondary Schools in the First Congressional District, Division of Camarines Sur

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DOI: <https://doi.org/10.51584/IJRIAS.2024.912005>

Received: 24 November 2024; Accepted: 02 December 2024; Published: 27 December 2024

ABSTRACT

Education is recognized to be the most important catalyst for human growth; as a result, many governments around the world devote significant resources and time to providing proper education to their citizens. A successful education system depends exhaustively on the availability, accessibility, and utilization of instructional materials. This descriptive research This study employed the descriptive-evaluative-correlational method of research determined the utilization of the Instructional Materials in Science 7 in the Public Secondary Schools in the First Congressional District Division of Camarines Sur. The survey design that was utilized to collect data is a researchers' made questionnaire checklist. A sample of 38 Grade 7 Science teachers in the First Congressional District of Public Secondary Schools Division of Camarines Sur were selected using purposive sampling, data collected were analyzed using frequency counting, percentage, weighted mean, rank, Kendal Coefficient of Concordance W, and its corresponding Chi-Square. The study reveals the extent of the utilization of the instructional materials in Science 7 in the Public Secondary Schools, all indicators rated as Much Evident; test of significant agreement on the rank orders of the extent of the Utilization of the Instructional Materials in Science 7 in the Public Secondary Schools, the Coefficient of Concordance W and the Computed X2 value yielded: Textbooks, 0.55 and 19.25, ($p < 0.01$); Workbooks, 0.24 and 8.40, ($p > 0.05$); Flashcards, 0.31 and 12.40, ($p > 0.05$); Charts & Supplementary Reading Materials, 0.64 and 22.40, ($p < 0.005$); Graphic Organizer and Interactive Materials, 0.68 and 27.20, ($p < 0.001$); Physical Objects, Photograph Illustrations, 0.65 and 22.75, ($p < 0.005$); and Multimedia, Movies & Games, 0.47 and 16.45, ($p < 0.05$). Thus, the null hypothesis was rejected along Textbooks, Charts & Supplementary Reading Materials, Graphic Organizer and Interactive Materials, Physical Objects, Photograph Illustrations, and Multimedia, Movies & Games, except Workbooks, and Flashcards; the extent of the Level of Teachers' Competencies in teaching Science 7, all indicators were rated Very Much Competent on Evaluation Skills; Classroom Management; Teaching Skills, and Mastery of Subject Matter.

Keywords: Instructional Materials, Science 7, Public Secondary Schools. First Congressional District.

INTRODUCTION

Education is recognized to be the most important catalyst for human growth; as a result, many governments around the world devote significant resources and time to providing proper education to their citizens. A successful education system depends exhaustively on the availability, accessibility, and utilization of instructional materials. Instructional materials have been identified as a powerful tool for achieving successful teaching and learning. The significance of quality and suitable instructional resources in teaching and learning may be demonstrated by their efficient use during classroom instruction. All the resources that teachers may use to make learning more exciting and relevant are included in instructional materials.

The K to 12 science curriculums will provide learners with a repertoire of competencies important in the world of work and in a knowledge-based society. It envisions the development of scientifically, technologically, and environmentally literate and productive members of society who are critical problem solvers, responsible stewards of nature, innovative and creative citizens, informed decision makers, and effective communicators.

This curriculum is designed around the three domains of learning science. Luistro (2016), the Department of Education Secretary through DepEd Order No. 35 s. 2016, stated that the quality of learning is influenced by the quality of teaching. Therefore, it is imperative for the Department of Education to hire and support their development in the teaching profession. The systematic application of effective methods for presenting and evaluating the learning objectives sought for each lesson leads to successful teaching, (UNESCO GMR 2014). Successful teachers can choose and use the most effective instructional strategies and materials to teach the identified content objectives. They also base their instructional decisions on the results of formative assessments, sincerely support their students' learning and holistic development, and are professional and ethical in the way they conduct their work.

According to Olawale (2013) studied the use of instructional materials for effective learning of Islamic studies, he emphasized that instructional materials include materials used to facilitate learning for better results. aim of this paper, therefore, is to look into the significance of Instructional materials in the effective teaching/learning of Islamic Studies in Nigerian Schools. It also investigates the Islamic point of view on instructional materials in the teaching/Learning process. The paper revealed that teaching/learning with instructional aids is not a new phenomenon in Islam, it has been traced to the Prophet of Islam who used Instructional materials on several occasions in the process of imparting knowledge to his followers.

In the same vein, Uzuegbu, Mbadiwe & Anulobi (2013) refer to instructional materials as any device used to assist the instructor in the preparation of a lesson, teaching of the lesson and facilitate students' learning of the subject matter.

Ogaga et al., (2016) pointed out that learning can occur because of newly acquired skills, knowledge, perception, facts, principles, new information at hand, etc. Learning can be reinforced with instructional materials of different varieties because they stimulate, motivate as well as arrest learners' attention for a while during the instruction process.

The primary focus of this research is on availability and utilization of instructional materials and to what extent had these been utilized in teaching Science 7, because instructional materials are very important to students' learning and comprehension of knowledge in the 21st century. Thus, one of the primary objectives of 1st Congressional District Science educators is advocating for academic achievement and excellent education in secondary schools.

Objectives of the Study

This study determined Utilization of the Instructional Materials in Science 7 in the Public Secondary Schools in the First Congressional District Division of Camarines Sur. Specifically, the researchers' intended to know (1) extent are the Utilization of the Instructional Materials in Science 7 in the Public Secondary Schools along: Textbooks, Workbooks Flashcards, Multimedia, Charts & Supplementary Reading Materials, Graphic Organizer and Interactive Materials, Physical Objects, Photograph Illustrations and Movies & Games; (2) the significant agreement on the rank orders of the extent of the Utilization of the Instructional Materials in Science 7 in the Public Secondary Schools along the aforementioned aspects; (3) the extent of the Level of Teachers' Competencies in teaching Science 7 in terms of: Mastery of the Subject Matter, Teaching Skills, Classroom Management, and Evaluation skills; (4) test the significant agreement on the rank orders of the extent of the Level of Teachers' Competencies in teaching Science 7 among the different groups of respondents; (5) the policy recommendations can be derived based from the findings of this study.

MATERIALS AND METHODS

The descriptive was used to determine the Utilization of the Instructional Materials in Science 7 in the Public Secondary Schools in the First Congressional District Division of Camarines Sur, and the correlational design was used to determine the significance of agreement of the rank orders of the extent of the Utilization of the Instructional Materials in Science 7 in the Public Secondary Schools along the aforementioned aspects and to determine the significance agreement on the rank orders of the extent of the Level of Teachers' Competencies in teaching Science 7 among the different groups of respondents.

Respondents

The respondents were thirty-eight (38) Grade 7 Science teachers. A total of 38 teachers in the Public Secondary Schools in the First Congressional District Division of Camarines Sur were selected using purposively sampling They came from the five (5) municipalities namely, Ragay District, Del Gallego District, Lupi District, Sipocot District, and Cabusao District. These respondents were taken for the year 2023.

Data Gathering Instrument

The instrument used in gathering the data was a structured researchers-made questionnaire checklist and structured interview guide. Part I was about Extent of the utilization of the instructional materials in science 7 in the public secondary schools, and Part II delved into the extent of the level of teachers' competencies in teaching Science 7. A total of 115 questions were included in this study. The questionnaire was proofread and validated by an Adviser. The reliability of the instrument has been tested after the validation. Suggestions and recommendations on each item if the questionnaire have been acquired for the improvement of the instrument.

Data Analysis

Mean was used to generate the Extent of the utilization of the instructional materials in science 7 in the public secondary schools. It was interpreted using the following scale:

Scale	Numerical Rating	Descriptive Rating	
		Extent of the utilization of the instructional materials	Level of teachers' competencies in teaching Science 7
4.5-5.00	5	Very Much Evident (VME)	Very Much Competent (VMC)
3.51-4.50	4	Much Evident (ME)	Much Competent (MC)
2.51-3.50	3	Evident (E)	Competent (C)
1.51-2.50	2	Fairly Evident (FE)	Fairly Competent (FC)
1.00-1.50	1	Strongly Disagree (SD)	Not Affected at all (NAA)

The researchers sent a letter to conduct the study to the Schools Division Superintendent of the Division of Camarines Sur through channel, to allow him to distribute questionnaires and conduct informal interviews for the data needed in the study.

RESULTS AND DISCUSSION

The Extent Utilization of the Instructional Materials in Science 7 in the Public Secondary Schools

The extent of the utilization of the Instructional materials in science 7 in the Public Secondary schools along; Textbooks, Workbooks, Flashcards, Multimedia, Charts & Supplementary Reading Materials, Graphic Organizer and Interactive Materials, Physical Objects, Photograph Illustrations and Movies & Games is presented in Table 1. The respondents' assessment of the Extent of the Utilization of the Instructional Materials in Science 7 in the Public Secondary Schools was generated through their ratings on the survey questionnaire prepared and distributed by the researcher himself.

It can be noted from the summary table, that the most used instructional materials by the Science teacher-respondents were Textbooks having a weighted mean of 4.33; then this was seconded by Workbooks, and Graphic Organizer and Interactive Materials with a weighted mean of 4.04, respectively; followed by the rating of Flashcard, 4.03; Physical Objects, Photograph Illustrations have a rating of 3.86; and lastly Charts & Supplementary Reading Materials, and Multimedia, Movies & Games with average mean of 3.69. The average weighted mean of the six indicators arrived at 3.95, and all were interpreted as Much Evident. This means that

the most used instructional materials by the Science teachers was Textbooks. Textbooks have a role to play in science learning, through imparting wide based information and knowledge to the students.

The findings imply that textbooks are an essential tool for the educational system. In one of the studies, it reveals the advantages or benefits of textbooks such as: (1) Textbooks serve as a guide to the prescribed curriculum and syllabus; (2) It transmits knowledge, skills, attitudes and values to the teacher and student alike; (3) It provides guidelines for teaching and learning; (4) Textbook save time and energy when searching information since it is a source of the materials.

They are an easily accessible reference point, readily available source of information; (5) Using textbooks makes teaching various subjects systematic as it is arranged according to themes; (6) They play major roles for weak students to achieve good grades as they are able to read on their own in more details; (7) It is a reliable point of reference; (8) Provides students with several examples, activities and experiments related to the topics so they can understand better; (9) Textbooks are illustrated so students are able to picture and visualize concepts; (10) They are a footpath and lighthouse as they provide detailed information and also provides references in case students or teachers require further information. With this, it can be concluded why textbooks were used commonly by the Science teachers.

Based on the Department of Education in South Africa, (2015), a textbook can serve different purposes such as a core resource, a source of supplementary material, an inspiration for classroom activities, and a curriculum itself. It also mentioned some of the advantages of textbooks for teachers, including textbooks assist in managing a lesson, it saves time, give direction to lessons, guide discussion, facilitate giving homework, making teaching easier, better organized, more convenient, and most of all, it provides confidence and security. It also traced some advantages of textbooks for learners for instance they see the textbooks as a ‘framework’ or ‘guide’, it helps them to organize their learning both inside and outside the classroom, and it enables them to learn ‘better, faster, clearer & easier. This was confirmed by the study of Behnke, (2019) stating that textbooks affect learning and teaching in many different ways.

Table 1. The Extent of the Utilization of the Instructional Materials in Science 7 in the Public Secondary Schools

INDICATORS	Regay District			Del Gallego District			Lupi District			Sipat District			Cabusao District			AVERAGE		
	WM	I	R	WM	I	R	WM	I	R	WM	I	R	WM	I	R	WM	I	R
1. Textbooks	3.89	ME	2	4.64	VME	1	4.52	VME	1	3.83	ME	1	4.79	VME	2.5	4.33	ME	1
2. Workbooks	3.44	E	7	4.56	VME	2	4.08	ME	2	3.35	E	5	4.79	VME	2.5	4.04	ME	2.5
3. Flashcards	3.68	ME	5	4.47	ME	3	4.07	ME	3	3.25	E	6	4.67	VME	4	4.03	ME	4
4. Charts & Supplementary Reading Materials	3.70	ME	4	4.13	ME	5	3.19	E	7	3.24	E	7	4.21	ME	6	3.69	ME	6.5
5. Graphic Organizer and Interactive Materials	3.80	ME	3	4.14	ME	4	3.81	ME	4	3.64	ME	3	4.81	VME	1	4.04	ME	2.5
6. Physical Objects, Photograph Illustrations,	3.95	ME	1	3.94	ME	6	3.73	ME	5.5	3.54	ME	4	4.17	ME	7	3.86	ME	5
7. Multimedia, Movies & Games	3.60	ME	6	3.22	E	7	3.73	ME	5.5	3.67	ME	2	4.25	ME	5	3.69	ME	6.5
AVERAGE Wkx	3.72	ME		4.16	ME		3.88	ME		3.50	ME		4.53	ME		3.95	ME	

The findings of the present study imply that textbooks are important and beneficial for teachers and students. This makes the teaching process easier, and students can learn better and more extensively. Hence, it is recommended that textbooks must be made available and accessible to students and teachers.

The Test of Significant Agreement on the Rank Orders of the Extent of the Utilization of the Instructional Materials in Science 7 in the Public Secondary Schools

Science teachers must be reflective and relevant in choosing diverse instructional materials, and the indicators were the ones used often by them.

Hence, a significant agreement was obtained. This implies that the respondents have similar experiences in the choice of instructional materials based on their functions and lessons targeted. Also, this implies that they have the same level of utilization.

Table 2. The Extent of the Utilization of Instructional Materials in Science 7 in the Public Secondary Schools

Indicators	Textbooks	Workbooks	Flashcards	Charts & Supplementary Reading Materials,	Graphic Organizer and Interactive Materials,	Physical Objects, Photograph Illustrations	Multimedia, Movies & Games
Sum of squared deviation of the mean	402	257	467	677	1017	678	494
Number of Cases	8	8	9	8	9	8	8
Number of Groups	5	5	5	5	5	5	5
Coefficient of Concordance W	0.55	0.24	0.31	0.64	0.68	0.65	0.47
Computed X² Value	19.25	8.40	12.40	22.40	27.20	22.75	16.45
Degree of Freedom	7	7	8	7	8	7	7
Tabular X² value							
0.05	14.07	14.07	15.51	14.07	15.51	14.07	14.07
0.025	16.62	16.62	18.17	16.62	18.17	16.62	16.62
0.01	18.48	18.48	20.09	18.48	20.09	18.48	18.48
0.005	20.28	20.28	21.96	20.28	21.96	20.28	20.28
0.001	24.32	24.32	26.12	24.32	26.12	24.32	24.32
Decision on Null Hypothesis H₀	Rejected	Accepted	Accepted	Rejected	Rejected	Rejected	Rejected
Significance of Agreement	0.01	NS	NS	0.005	0.001	0.005	0.05

The Extent of the Level of Teachers' Competencies in Teaching Science 7

The extent of the Level of Teachers' Competencies in teaching Science 7 in terms of: Mastery of the Subject Matter, Teaching Skills, Classroom Management, and Evaluation skills.

School teachers play a critical role in student learning and achievement. Research reveals that how teachers instruct and their interactions with students is the cornerstone around which to build effective schools. This is what teacher competencies are. Table 3 presents the Summary of the Extent of the Level of Teachers' Competencies in Teaching Science. This was taken after consolidating the individual results in each dimension.

Table 3. The Summary of the Extent of the Level of the Teachers' Competencies in Teaching Science 7

INDICATORS	Ragay District			Del Gallego District			Lupi District			Sipocot District			Cabusao District			AVERAGE		
	WM	I	R	WM	I	R	WM	I	R	WM	I	R	WM	I	R	WM	I	R
1. Mastery of Subject Matter	4.49	MC	4	4.45	MC	4	4.62	VMC	3.5	4.11	MC	4	4.88	VMC	1	4.51	VMC	4
2. Teaching Skills	4.60	VMC	3	4.50	VMC	3	4.64	VMC	2	4.43	MC	2	4.78	VMC	4	4.59	VMC	3
3. Classroom Management	4.65	VMC	1.5	4.70	VMC	1.5	4.62	VMC	3.5	4.37	MC	3	4.80	VMC	2	4.63	VMC	2
4. Evaluation Skills	4.65	VMC	1.5	4.70	VMC	1.5	4.68	VMC	1	4.62	VMC	1	4.79	VMC	3	4.69	VMC	1
AVERAGE W_x	4.60	VMC		4.59	VMC		4.64	VMC		4.38	MC		4.81	VMC		4.61	VMC	

This suggests that teachers need to keep learning to be abreast with the current educational trends, especially that education changes very quickly depending on the demands of the era requiring more capability, directly affecting the educational system.

So, this implies that teachers are responsible for operating the educational system and they need strong and efficient professional competencies. Since teachers must be equipped with necessary competencies in terms of their knowledge, attitude and skills to enhance, improve explore their teaching practices, especially in handling today’s 21st century learners.

The Test of Significant Agreement on the Rank Orders of the Extent of the Level of the Teachers’ Competencies in Teaching Science 7

To determine the test of Significant Agreement on the Rank Orders of the Extent of the Level of Teachers’ Competencies in Teaching Science 7, the researcher employed Kendall’s Coefficient of Concordance (W), and the Chi-square Test. Kendall’s coefficient of concordance is a measure that uses ranks to assess agreement between observers. In this, the researcher noted that Kendall’s Coefficient of Concordance can range from 0 to 1. The higher the value of Kendall’s, the stronger the agreement. Table 4 discloses the result.

Table 4. The Test of Significant Agreement on the Rank Orders of the Extent of the Level of the Teachers’ Competencies in Teaching Science 7

Indicators	Mastery of Subject Matter	Teaching Skills	Classroom Management	Evaluation Skills
Sum of squared deviation of the mean	504	1638	541	1217
Number of Cases	11	12	10	11
Number of Groups	5	5	5	5
Coefficient of Concordance W	0.18	0.46	0.26	0.44
Computed X ² Value	9.00	25.30	11.7	22.00
Degree of Freedom	10	11	9	10
Tabular X ² value				
0.05	18.31	19.68	16.92	18.31
0.025	21.16	22.62	19.68	21.16
0.01	23.21	24.72	21.67	23.21
0.005	25.19	26.76	23.59	25.19
0.001	25.59	31.26	27.88	29.59
Decision on Null Hypothesis H ₀	Accepted	Rejected	Accepted	Rejected
Significance of Agreement	NS	0.01	NS	0.025

Based on the statistical results, the Coefficient of Concordance W and the Computed X² value yielded: Mastery of Subject Matter, 0.18 and 9.00, (p>0.05); Teaching Skills, 0.46 and 25.30, (p<0.01); Classroom Management, 0.26 and 11.70, (p>0.05); and Evaluation Skills, 0.44 and 22.00, (p<0.025). Thus, the null hypothesis was rejected along Teaching Skills, and Evaluation Skills, except on the Mastery of Subject Matter, and Classroom Management, this means that there is significant agreement on the Rank Orders of the Extent of the Level of the Teachers’ Competencies in Teaching Science 7, along Teaching Skills, and Evaluation Skills.

This suggests that the Science teachers have common perceptions when it comes to teaching and evaluation skills.

This can be explained by the fact that teachers have different pedagogies and strategies in teaching the subject area based on Republic Act no. 10533 (Enhanced Basic Education Act of 2013); DepEd Order No. 43, s. 2013 (Implementing Rules and Regulations of Republic Act No. 10533), DepEd Order no. 31 s. 2012, and DepEd Order No. 21 s. 2019 or the Policy Guidelines on the K to 12 Basic Education Program.

Then, the commonalities on teachers' perception on evaluation skills can be construed as stated in DepEd Order No. 8, s. 2015 (Policy Guidelines on Classroom Assessment for the K to 12 Basic Education Program); DepEd Order No. 12 s. 2020, and DepEd issued DepEd Order No. 31 s. 2020 or the Interim Guidelines for the Assessment and Grading in the Light of the Basic Education Learning Continuity Plan to guide the assessment of student learning and the grading scheme. Hence, schools have stock of assessment and grading practices that meaningfully support learner development. This implies that the Science teachers are complying with the national laws, DepEd Orders, and memoranda.

Then, Mastery of Subject Matter, and Classroom Management differs among the respondents since it varies on teachers' profile and professional development. This could be attested by the study of Nipales, (2019) showing that the higher the educational attainment and numbers of seminars attended related to the K-12 curriculum, the higher the competence of a teacher in teaching Science subjects. This implies that content mastery and classroom management is subjective.

This implies that Science teachers need to continually expand their knowledge and skills to implement the best teaching practices in the classroom to obtain good learning. According to Zamri (2019), curriculum planning and implementation require mastery in thinking and learning skills to produce students who can solve life problems that are becoming more complex rationally. Much research showed that teaching quality is the most important factor in raising student achievement.

The present findings concurred with the study of Lee et al. (2018), which says, that there is no relation between teachers' subject matter knowledge and their teaching practices. That means teachers with high knowledge of the subject matter may be low performing in teaching, and teachers with a low level of knowledge of the subject matter may show higher effectiveness in teaching.

So, this implies that teachers' competencies vary due to some factors. Nevertheless, science teachers must be equipped with necessary competencies in terms of their knowledge, attitude, and skills to enhance, improve and explore their teaching practices, especially in handling today's 21st-century learners.

Zamri (2019) said that the teacher's quality rests on the competence of the teacher in determining learning success and facilitation. Competence in professionalism needs to be emphasized to produce quality teaching and learning.

This implies that professional competencies outlined in the Results-Based Performance Management System-Philippine Professional Standards for Teachers (RPMS-PPST) under DepEd Order 2, s. 2015, and Teachers' IPCRF need to be achieved by all teachers in the areas of knowledge, skills and attitudes in order to increase the value of professional practice.

The Policy Recommendations

On the policy recommendations, the following were generated based on the findings of the study:

The national government should provide proper funding and appropriate assistance for teachers' training, upskilling, and retooling of their teaching competencies.

The Department of Education (DepEd) must conduct teacher education and training programs to ensure constant upgrading of teacher skills, as well as establishing the components required to ensure the implementation of the K to 12 curriculum.

The Department of Education (DepEd) must provide learning resource that will help curriculum developers, teachers, school administrators, and policy makers to design and implement science curricula that empower students to "learn to learn" and cause them to better understand and use science in their everyday life.

Superintendents, principals, subject area coordinators, and other instructional leaders must undergo workshops and training to enhance their skills in their roles as academic, administrative, and community leaders.

School Heads must provide mentoring and technical assistance to teachers and have high expectations for all to close the achievement gap between advantaged and less advantaged students.

School Heads must encourage and enhance staff development.

School Heads must tune in to all of the pertinent issues and current events related to curriculum, effective assessment, and pedagogical strategies to improve Science teachers' level of competencies.

Teachers, in general, must perform activities according to the standards expected by drawing from their knowledge, skills, and attitudes.

Science Teachers must use appropriate instructional materials in developing the scientific literacy among learners that will prepare them to be informed and participative citizens who are able to make judgments and decisions regarding applications of scientific knowledge that may have social, health, or environmental impacts.

Science Teachers may use textbooks as the primary reference material but may employ diverse instructional materials to provide learners with a repertoire of competencies important in the world of work and in a knowledge-based society.

Science Teachers should make effort in the utilization of available instructional materials and endeavor to improvise those not available or inadequate.

Science Teachers must be always prepared to demonstrate mastery of the Subject Matter.

CONCLUSION AND RECOMMENDATION

In the light of the findings, the following conclusions were drawn (a) The extent of the Utilization of the Instructional Materials in Science 7 in the Public Secondary Schools is Much Evident. (b) There is a significant agreement on the rank orders of the extent of the Utilization of the Instructional Materials in Science 7 in the Public Secondary Schools, except on Workbooks, and Flashcards. (c) The extent of the Level of Teachers' Competencies in Teaching Science 7 is Very Much Competent. (d) There is a significant agreement on the rank orders of the extent of the Level of the Teachers' Competencies in teaching Science 7 except Mastery of Subject Matter, and Classroom Management. (e) Policy recommendations are formulated to improve the extent of the utilization of the Instructional Materials in Science 7 in the Public Secondary Schools, and the extent of the Level of the Teachers' Competencies.

Based on the above conclusions, the following were recommended (a) Teachers must select appropriate instructional materials for use in the science classroom so that learners can demonstrate an understanding of basic science concepts and application of science-inquiry skills, exhibit scientific attitudes and values to solve problems critically, enhance the integrity and wellness of people, make informed decisions, and engage in discussions of relevant issues that involve science, technology, and environment. (b) School Heads must facilitate improvements in instruction and promote practices among teachers that can lead to improved student learning outcomes. (c) Teaching is a lifelong process; hence, teachers must treat each day as a venue to learn, unlearn and relearn and be the best in their profession. (d) Teachers must pursue professional development, not only to enhance their level of competencies but to ensure the best learning outcomes for their students. (e) Policy Recommendations be considered and adopted. the quality as well as the quantity of education.

Also, it is recommended for further research (a) A replicated study can be conducted to test the validity and reliability of the gathered data. (b) Other variables that can also be considered related to science instruction may be studied. (c) The Impact of the Teachers' Competencies on the Academic Performance of the Learners in the Public and Private Secondary Schools through Science Instructional Materials may also be considered for another study. (d) The Effectiveness of Instructional Materials in the Holistic Development of Learners in the Public and Private Secondary Schools can also study. (e) The Development of Science Instructional

Materials may be performed by future researchers. (f) The impact of classroom management on student's academic achievement at the Public Secondary School level through Modified Instructional Materials in Science may also be considered for another study. (g) How Science teachers and students use instructional materials for effective teaching and learning processes can also be studied. (h) The Availability and use of Instructional Materials in teaching Science in Public and Private Schools may also be considered for another study.

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