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DEVELOPMENT AND QUALITY ASSURANCE OF WEEKLY LEARNING ACTIVITY SHEETS IN GRADE 5 SCIENCE OF CERVANTINA ELEMENTARY SCHOOL, DIVISION OF AGUSAN DEL NORTE

CLEFORD T. PARAISO

Master of Arts in Education, Faculty of the Graduate School, Saint Joseph Institute of Technology, Butuan City

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Abstract: **This study focuses on the development and quality assurance of weekly learning activity sheets (WLAS) for grade V Science in the third quarter. The research employed a descriptive developmental research design and utilized Field Testing Validation to measure the validity and usability of the crafted WLAS for both learners and teachers. Frequency and Percentage Distribution analysis were used to determine the responses of the Quality Assurance (QA) members using a standardized tool. Thematic analysis was employed to analyze qualitative data by consolidating the common responses of the QA members.**

The study followed the Analysis, Design, Development, Implementation, and Evaluation (ADDIE) model as its research design, ensuring careful quality assurance of the WLAS. The development process of the WLAS encompassed the pre-development stage, development stage, and post-development stage.

The research findings indicate that Science has the lowest Mean Percentage Score (MPS) among all subjects for grade 5 students in the academic year 2021-2022. The performance data revealed that the third quarter had the lowest MPS compared to other quarters, which served as the basis for developing WLAS for grade 5 pupils. The development of the WLAS followed the ADDIE model, considering all learning competencies in the third quarter of grade 5 Science.

The validity and usability of the developed WLAS were found to be high, as evidenced by the favorable results and discussions of the field-testing conducted with learners and teachers. The standardized tool used to measure the WLAS showed positive responses from the QA members.

The study recommends that learners utilize the crafted WLAS as additional materials to master competencies. The utilization of the ADDIE model in crafting WLAS is essential to ensure the careful development of learning activity sheets through the three phases: pre-development, development, and post-development. The developed WLAS has met the quality assurance standards and can be implemented in the entire Division of Agusan del Norte. Teachers should be informed about the availability of the quality-assured WLAS on the LRMDS portal. Furthermore, the crafting of WLAS can be continued by the district or division to contextualize and localize appropriate materials for specific groups or ethnicities. Future researchers are encouraged to create their own WLAS or learning activity sheets for different subject areas and quarters.

Keywords: **Weekly learning activity sheets, Quality assurance, ADDIE model, Field testing validation, Mean Percentage Score.**

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1. INTRODUCTION

The COVID-19 pandemic has significantly impacted the educational system in many countries, including the Philippines. To ensure the continuity of education, various learning modalities have been implemented as alternatives to face-to-face teaching. However, the fear of exposure to the virus and the limited opportunities for vulnerable students have posed challenges to the education system. In response to this crisis, education experts have developed innovative approaches to address the challenges faced by the Philippine Education System.

The Department of Education (DepEd) has implemented the Distance Learning Modalities (DLDM) for the academic year 2020-2021 as an innovative approach to ensure learning continuity. The Inter-agency Network for Education in Emergencies (INEE) emphasizes the importance of creative and adaptable education interventions to reach as many children as possible during the pandemic. It is crucial to provide learners with low-tech, no-tech, and high-tech options for distant learning.

Education in Emergencies (EiE) must be prioritized as an intervention, and world leaders have recognized the significance of education during times of crisis. The Flexible Learning Options (FLOs) for Basic Education program offers alternative modalities such as radio-based instruction and educational TV to cater to the diverse needs of students. The Basic Education Learning Continuity Plan (BE-LCP) was developed to ensure inclusive education continues in the context of COVID-19.

The development of Weekly Learning Activity Sheets (WLAS) has been initiated to facilitate learning during the pandemic. WLAS are designed to be used alongside textbooks and provide exercises and activities aligned with the weekly learning competencies. These activities promote independent learning and should be easy to understand and concise. The Agusan del Norte Schools Division has made WLAS available to meet the learners' needs and ensure quality assurance through collaboration among supervisors, master teachers, and teachers.

The researcher identified that Science had the lowest Mean Percentage Score (MPS) among all learning areas in the third quarter of SY 2021-2022. The objective of this scientific research is to craft quality-assured WLAS in Science for the third quarter. Previous studies have shown that factors such as lack of resources, language barriers, socioeconomic status, and curriculum issues contribute to poor performance in science subjects.

The Science WLAS has undergone pilot testing and quality assurance by identified members in the Division of Agusan del Norte. The Learning Resources Development and Quality Assurance of Teacher-Developed Learning Resources Division Memorandum applies to all learning resources created by teachers within the division. The crafted WLAS, which have been deemed of high quality, will be made available at the Learning Resource Management System (LRMDS) portal for future use and as a backup in the event of a natural disaster.

Education in emergencies plays a crucial role in the initial and ongoing stages of a disaster, ensuring that learning opportunities are provided even in challenging circumstances.

Keywords: COVID-19 pandemic, distance learning, education in emergencies, flexible learning options, learning continuity, weekly learning activity sheets, quality assurance, learning resources, Learning Resource Management System (LRMDS)

2. REVIEW OF LITERATURE AND STUDIES

This chapter provides an overview of the literature and related studies after a thorough search done by the researcher. This presents the conceptual and theoretical framework to understand the research work fully.

Many studies and literature somehow gave relevance to the crafting of WLAS. It is quality assurance and other components. Below are the following studies that will support the claims of developing WLAS.

According to Ajaja (2008), education experts, industry organizations, and the government have severe concerns about students' low performance in science courses in primary schools. Numerous factors have contributed to this issue, including a need for more rewards and motivation for teachers to raise their productivity and effectiveness to improve student achievement.

Tapia (2020) postulated an International Perspective on the Contextualization of Science Education; she mentioned how science learning could be more relevant for students and teachers across diverse ethnic and language backgrounds and socioeconomic statuses. The study provides a new practical approach to science education, bringing it closer to students' lives and accelerating global scientific literacy.

Osaki (2007) claims that educators have made significant strides in improving access to high-quality education over the past 20 years, learners continue to perform poorly in mathematics and Science at the primary and secondary school levels, raising questions about whether the educational system can produce graduates with the skills needed in the emerging technology sector. Science and math failure rates are still high, and primary and secondary school test results have remained relatively high over the past three years, falling from 20% to 40%, respectively.

Regarding the specific context of weekly learning activity sheets in science education, a study by Barbera and Cappuccio (2018) highlighted the importance of designing and implementing effective learning activities that align with learning goals. The authors noted that learning activities should promote active engagement, critical thinking, and problem-solving skills. Additionally, they noted that weekly learning activity sheets should be aligned with the curriculum's learning goals and should be designed to promote student learning and achievement.

Abu Bakar (2018) highlighted the assessment practices of primary school teachers in Malaysia, including weekly learning activity sheets in science subjects. The study found that teachers used the activity sheets to promote active learning and formative assessment and effectively promote student engagement and achievement.

It provides an overview of formative assessment in science education, including weekly learning activity sheets. The article emphasizes the importance of providing timely and specific feedback to students and discusses the role of formative assessment in promoting student learning and achievement Dylan Wiliam (2011).

Meanwhile, Science Activity Sheets (SAS) helped students in the following. Student Activity Sheet is one of the learning resources that can be developed by lecturers as facilitators in learning activities that can be designed and developed according to the conditions and situations of learning activities to be encountered and the objectives to be achieved (Astutik & Prahani, 2018; Dwikoranto et al., 2018).

SAS is one of the facilities to help facilitate learning activities that can form effective interactions between students and lecturers to improve student achievement (Rahardjanto et al., 2019).

Özdemir et al. (2021) focus on designing and evaluating a science worksheet for primary school students and provide insights into the use of worksheets as a tool for formative assessment. The study highlights the importance of aligning the worksheet with learning objectives, providing clear instructions and examples, and using different questions to assess different levels of understanding.

This explores teachers' perceptions of weekly planning of science learning activities in primary schools in Malaysia and provides insights into the challenges and opportunities involved in implementing a quality assurance process. This also highlights the importance of collaboration and communication among teachers and the need for ongoing professional development to improve teaching practices (Taib et al., 2020).

Ramsden (2018) emphasizes a guide for teachers to design quality learning activities, including weekly activity sheets in science subjects. The article emphasizes the importance of aligning learning activities with learning objectives, providing clear instructions and expectations, and using various assessment methods to assess student learning.

Science performance was one of the content subject areas in modular distance learning in education. Thus, it allowed struggling and working students to finish their studies.

One strategy for maintaining modular instruction is using learning activity sheets (LAS) as additional teaching tools for students. LAS has printed materials or online games that promote learning environments. Typically, an activity sheet is a piece of paper with exercises or questions that students can either submit written responses to or take part in the activity.

Lindog (2021) conducted a study of the challenges and opportunities of utilizing modular distance learning and concluded that learners engaged themselves in understanding the ideas given within the module as they developed a way of

responsibility in learning on their own and in accomplishing the tasks provided in the module, with restricted help from the teacher, these learners progress on their own.

A variety of modalities allows learners to move at their own pace. It requires students to continually complete assessments while delivering a learning experience that does not depend on face-to-face interaction with the teacher and their fellow students (Dutton & Mohapatra, 2020).

Modular distance learning involves using self-learning modules (SLMs) in print or digital format/electronic copy and various learning resources like learner's materials, textbooks, activity sheets, worksheets, study guides, and other study materials.

Today, as the country is in an emergency health crisis, these SLMs for Modular Distance Learning were the most convenient and applicable for our learners to continue learning (Lindog, 2021).

The use of modules encourages independent learning. Improving students' self-study or learning skills is one benefit of employing modules for instruction. Students actively engage in studying the concepts covered in the program. Students develop a sense of responsibility as they complete the module's tasks. The student advances on his own with little to no assistance from others. Learners are becoming independent and learning how to learn. Additional benefits of modular learning include improved flexibility of instruction, increased choice and self-pacing for students, and more diversity and flexibility for teachers and staff materials (Sumaoang, 2020).

Despite the situation with the modular modality, various studies focus on the relevance of the worksheets, according to Jannah et. Al (2020) examines the effectiveness of using worksheets in learning Science for junior high school students in Indonesia. The study found that worksheets effectively promoted students' motivation, engagement, and achievement and provided opportunities for formative assessment and feedback.

For a long time, teachers have used worksheets in their lessons. At present, worksheets have even been an effective educational force in some countries. Teachers utilize worksheets to encourage research, encouraging active learning, involving mathematical interest, and assessment. Several studies indicate that well-constructed worksheets have improved kids' grades and provided learning progress (Lee, 2014).

Ur (2013) divides the additional resources into two categories: paper and digital. She claims that paper supplemental materials include reference books, textbooks, teacher manuals, books for in-depth reading, reading, worksheets, exam papers, word cards, and pictures (posters and flashcards). Similarly, digital supplemental tools include interactive whiteboards (IWBs), data projects, websites, wikis, blogs, digital recording, production, and e-books. Worksheets have been a tradition of classroom instruction. Worksheets have even influenced several countries' curricula in the modern era (Lesley & Labbo, 2003; Martin et al., 2012).

Teachers use worksheets to enhance learning, encourage active learning, spark students' interest in Science, and conduct assessments. Several studies indicate that effectively designed worksheets have improved students' learning outcomes (Che-Di Lee, 2012). Unfortunately, researchers found that many worksheets needed to be better made and used, which prevented students from learning (Lesley & Labbo, 2003). This exploratory study looks at the connections between science proficiency in 32 different nations and the use of worksheets. According to Kisiel (2003), worksheets can serve as advance organizers in activities, assisting students in organizing their observations and information in a disorganized learning environment.

Worksheets are useful for assisting learners between the ages of 11 and 15 in learning, according to Schmidt's (2008) research. Worksheets have negative impacts on academic attainment in addition to their beneficial effects.

As the number of benefits users can get from the worksheets, these should also undergo quality assurance which was used to modify or review the worksheets to make them valid before using them with the learners.

This also provides an overview of quality assurance for Weekly Learning Activity Sheets (WLAS), program, and institutional viewpoints and reviews some of the key research related to students' assessment of what constitutes quality in modular courses to provide some plausible perspectives on how students view quality.

An additional internal quality evaluation process is created and implemented within the Internal Quality Assurance System for the Distance Learning Program of Study. The Internal Quality Committee designed an evaluation quality method in

conjunction with the Distance Learning Committee (DLC) to guarantee that specific requirements are met regarding the execution of the DL programs of study. The evaluation is conducted Based on quality indicators derived from the pedagogical framework that guides the design, development, and delivery of the distance learning programs of study.

This focused on the importance of providing feedback to students as a means of quality assurance. The authors noted that feedback can be an effective tool for promoting student learning and helping them to improve their performance in learning activities. This feedback can come from teachers or peers and can help students to identify areas where they need to improve and develop better learning strategies (Rezaul Kabir, 2016).

Brown and Abell (2007) emphasized the importance of quality assurance in science education materials. The authors noted that science education materials must be tested for effectiveness and reliability before being implemented in classrooms. This ensures that the materials are effective in promoting student learning and are reliable in providing consistent results. Therefore, quality assurance measures such as pretesting and piloting of learning activity sheets can help ensure these materials' effectiveness and reliability.

These studies suggest that quality assurance of weekly learning activity sheets in science education is important for promoting student learning outcomes. This can be achieved through various measures such as pretesting and piloting materials, providing student feedback, and designing effective learning activities that align with learning goals.

Sibel Erduran (2015) discusses the importance of quality assurance in science education and provides an overview of different approaches and strategies that can be used to ensure quality. It emphasizes the need for ongoing evaluation and improvement and highlights the importance of involving teachers, students, and other stakeholders.

The effectiveness of a professional development program for teachers in improving the quality assurance of learning activity sheets in science education in a rural area of South Africa. It found that the program effectively improved teachers' knowledge and skills in designing and implementing quality learning activities and improved student engagement and achievement (Baloyi et al., 2019).

Quality is a subjective concept, and there are many criteria for assuring quality, including assessment practices based on industry standards and accreditation requirements. Most evaluations, including quality assurance in e-learning, often occur at three levels: individual course evaluations, department or program evaluations, and institutional evaluations. Frequently, these levels cannot be clearly distinguished. Student viewpoints are only one factor in determining quality, even though they are typically included in these frameworks.

Quality assurance (QA), historically, initially became popular in the industrial and engineering sectors to make sure that high-quality products are produced. The design of curricula, their content, and delivery, as well as the process of teaching and learning, should all be covered by QA from the standpoint of DL (Pitsoe & Maila, 2014).

International researchers also gave points on the pandemic situation. As reported by United Nations Children's Fund (UNICEF), "Lost at Home: COVID-19 and Displaced Children" highlights the impact of the pandemic on education for displaced children. The report calls for urgent action to address educational inequalities and support children's learning and development during emergencies.

There were also regional memoranda stipulated in the creation of WLAS. This was following Caraga Regional Memorandum No.461, series of 2020, titled "Creation of Weekly Home Learning Plans and Learning Activity Sheets for Quarter 2," this office reiterates that the Most Essential Learning Competencies (MELC) established by the Central Office through DepEd Order No. 12, s., s. 2020 shall serve as the foundation for creating the Weekly Learning Activity Sheets (WLAS) for Quarter III. 2020 and the Regional Memorandum No. 294's Budget of Works (BOW) for the Essential Learning Competencies (MELCs).

According to Regional Memo DM-CI-2020 principles and considerations, there may be a fixed time frame to carry out a lesson or complete an activity to make learning reasonable for learners. The suggested time allotment a MELC can be learned should be used to select the time frame.

The Learning Resources Management and Development System (LRMDS) facilitates greater distribution and access to learning, teaching, and professional development resources at the DepED Region, Division, and School/Cluster levels.

Theoretical / Conceptual Framework

This study is anchored on the theory of Quality Assurance of Weekly Learning Activity Sheets postulated by Kurniawan (2016), who adopted the multiple intelligences by Howard Gardner. He stated that one of the ways to do it is for the teacher provides Student's Activity Sheet (SAS) that can be used as a guide for them to conduct various learning activities by accommodating various intelligences in students.

Constructivism is 'an approach to learning that holds that people actively construct or make their knowledge and that .'the experiences of the learner determine reality Constructivism assumes that learners must construct their knowledge individually through experiencing things. When the learners encounter something new, they must reconcile it with previous ideas and experiences, changing what they believe or discarding the new information as irrelevant. Learners are active creators of their own knowledge (Elliott et al., 2000).

Therefore, students must be active participants in the teaching-learning process. Worksheets are the materials that make students more active, and the whole students participate in the learning process (Yigit & Akdeniz, 2000)

Lee (2014) raised that the student activity sheet indicates activities for students to apply or practice the knowledge they have obtained. The sheet is very important to stimulate them to comprehend and master the knowledge that has been taught. Through working on the student activity sheet, the teacher can observe students who have understood the material provided and students who have not understood it yet. This sheet is one of the teaching materials used to enhance the teacher's role and is very important in the effectiveness of the learning process.

Therefore, it takes an ideal student activity sheet according to the standard set by the government regarding national education standards, which include content feasibility, language feasibility, graphic feasibility, and feasibility of the presentation so that students can understand the material provided during teaching and learning activities.

Activity student sheets integrated with a scientific approach, the teacher only needs to act as a facilitator, no longer as the main source of learning. This is also supported by advances in digital technology that change how individuals interact with surrounding people, such as student- to student interaction, student-to-material interaction, and student-to-teacher interaction. Teachers in the teaching and learning process in the 21st century no longer transmit knowledge to students. However, they only need to facilitate the acquisition of students' values, knowledge, and competencies by using inquiry strategies for their learning practices in the classroom.

Prastowo (2014) stated that the factor causing the saturated feeling of elementary school students in teaching and learning activities is the use of student activity sheets that still need to meet the standards set by the government--as the organizer of the education process. Learning activities using the student activity sheets only requires them to answer multiple-choice questions. As a result, they become bored and lazy immediately, mainly if the teacher uses it as homework.

Thus, the learning is limited to doing exercises or answering questions on the activity sheet. The bad impact happens when the students are at home doing homework from the student activity sheets; they may not struggle and solve the problems they face independently.

On the other hand, they seek and apply illegal ways to answer questions, such as cheating and asking their friends, parents, or tutors. The revolution of learning in the 21st century requires significant changes in developing thinking habits and learning to accomplish something that creates intellectual skills (Snape, 2012). Therefore, students' understanding of problem-solving skills toward the surrounding natural environment problems is very lacking.

Supplemental resources should teach students how to learn by including activities relevant to various learning styles. They should also serve as a resource for learning and education. The textbooks and any supplemental materials determine the technique of teaching and learning. This explains why teachers and students rely so much on them. Both options are studying or working on materials development (Tomlinson, 2011). It can refer to anything done by teachers or authors as a practical activity to provide input for learning to encourage a helpful output. By including various exercises, supplemental resources should assist students in feeling more at ease using textbooks. Also, by making connections between the work and their own culture, they should make the students feel more at ease. By striving to aid their learning rather than constantly testing them, instructional materials may help learners feel more at ease. As a result, supplements can make up for course books' flaws and shortcomings while also improving students' attitudes about their classes and participation in classroom activities.

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Figure 1 shows the research flow. The purpose for the development of weekly learning assessment sheets for the learners.

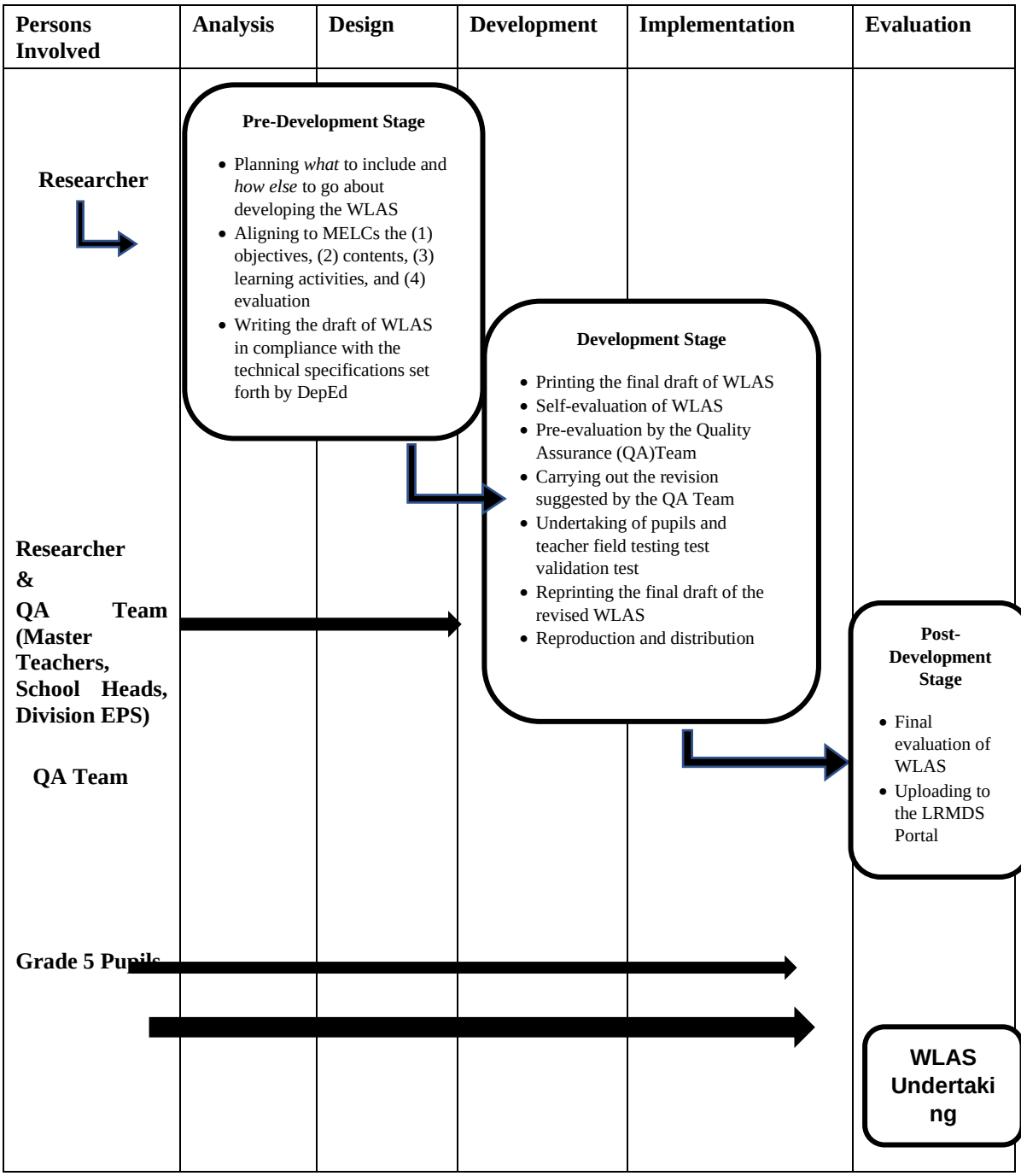

Figure 1: Research Flow

Statement of the Problem

The study investigates the development and quality assurance of weekly learning activity sheets in Grade 5 Science of Cervantina Elementary School, Division of Agusan del Norte. Specifically, the study seeks to answer the following questions:

1. What is the performance of students in the different quarters in Grade V Science?
2. How are the learning activity sheets being developed?

3. What is the level of validity and usability of the developed WLAS?
4. How can this WLAS be utilized/maximized by the schools in the division of Agusan del Norte?

Significance of the Study

Quality-assured activity sheets. To make them understand how it is being assessed to produce a good WLAS to the learners and realize the purpose for developing activity sheets.

Learners. As beneficiaries of this study, the findings of this study may help them understand why activity sheets are essential as supplementary materials for their learning through this time of the pandemic.

Future Researchers. The findings of this study may provide them with additional information on the topic being undertaken and consider other variables not included in the present study.

Definition of Terms

Alternative Delivery Mode (ADM). This is a substitute approach for the DepEd to address the challenges of formal education of special children and family protection.

Education in Emergencies (EiE). This refers to quality learning opportunities for all ages in situations of crisis. It provides physical, psychosocial, and cognitive protection that can sustain and save lives without sacrificing the goal of each learner to learn.

Development. It refers to how the Weekly Learning Activity Sheets are being developed that involve process and is aimed at increasing awareness and understanding of the educational processes.

Distance Learning. It refers to students who may only sometimes be physically present at a school. Traditionally, this involved correspondence courses wherein the student corresponded with the printed activity sheets.

Flexible learning Options (FLO). This educational setting supports students at risk or already disengaged from education. This is also provided when a student's need cannot be met in mainstream school and only be used as a short-term option. FLOs complement the work of schools to ensure that all students can access a high-quality education. They generally offer highly individualized learning plans and strongly focus on providing holistic support for a student's engagement and well-being.

Learning Resources Management and Development System (LRMDS). This is designed to support increased distribution and access to learning, teaching, and professional development resources at the Region, Division, and School/Cluster levels of DepED.

Modular Printed. This refers to learning features with individualized instruction that allows learners to use weekly learning activity sheets (WLAS) in print format, whichever applies to the learner. Learners under Modular Distance Learning can also use resources such as Learner's Materials, textbooks, activity sheets, study guides, and other materials.

Most Essential Learning Competencies (MELC). This refers to the student's need, considered indispensable, in the teaching-learning for subsequent grade levels and, subsequently, for lifelong learning. On the other hand, desirable learning competencies were defined as what may enhance education but may not be necessary for building foundational skills.

Quality Assurance. The quality assurance of Weekly Learning Activity Sheets (WLAS) undergo processes for evaluation and review prior to production and distribution. This followed tools and formatting as part of the evaluation processes.

Supplementary Learning Materials (SLM). They refer to books and other materials we can use in addition to the activity sheets. They include skills development materials, grammar, vocabulary, phonology practice materials, collections of communicative activities, and teacher resource materials.

Weekly Learning Activity Sheets (WLAS). They refer to the weekly activity sheets given to the learners as supplementary materials. It also provides context and direction to the learners to participate in activities.

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3. METHODOLOGY

This chapter presented the description of the research design, the research locale, the research respondents, the research instrument, the data gathering procedure, and the ethical considerations of the study.

Research Design

The study employed descriptive developmental research design to craft the Development and Quality Assurance of Weekly Learning Activity Sheets in Grade 5 Science of Cervantina Elementary School, Division of Agusan Del Norte.

This study was developmental since the researcher was the one to craft WLAS. It also sought to understand the interplay between social, economic, political, technological, ecological, cultural, and gendered aspects (EADI, 2017).

This descriptive study was limited to describing a problem systematically, factually, accurately, and objectively. Moreover, this method was also used to seek expert consensus to enable the researcher to make predictions or decisions based on the experts' opinions and evaluators involved in the study. It is considered the most appropriate method in crafting WLAS for ensuring quality assured weekly learning activity sheets for pupils. Closely, it looked into the process of development of the WLAS during the pre-development stage, development stage, and post-development stage. Concomitantly, this study develops a mechanism for ensuring quality assurance.

were used to determine the validity and usability of WLAS to be answered by the pilot learners and teachers in the school. of WLAS itself vis-à-vis the components of instruction and criteria.

The study included (four) 4 MELC's learning competencies in the third quarter in science grade 5. These were the following, (1) Describe the motion of an object by tracing and measuring its change in position (distance traveled) over a period of time (2) how different objects interact with light and, sound, heat; (3) the effects of heat and electricity, light and sound on people and objects (4,5,6) a simple DC circuit and the relationship between electricity and magnetism in electromagnets.

This study used the Analysis, Design, Development, Implementation, and Evaluation (ADDIE) model as its research design under the careful quality assurance of WLAS.

Pre-Development Stage. It started with a critical analysis and design of the problem's formulation, which was helpful for both the students and the institution. Since the study's scope was wider and be retrieved at the LRMDS, the design offered more remarkable development and quality assurance for both students and the school. It was a way of disseminating information.

Planning what to include and how else to go about developing the WLAS. Aligning to MELCs the (1) objectives, (2) contents, (3) learning activities, and (4) evaluation. Writing the draft of WLAS in compliance with the technical. Reviewing the least learned skills and MPS of the recipient's schools, which became the basis of the activities included in the weekly learning activity sheets.

Development Stage. The development and implementation of this stage showed the collaboration of the researcher and quality assurance team to create a suitable and pertinent WLAS for the students expertly. Here are the steps in the development stage: one (1) Printing the final draft of WLAS, two (2) self-evaluation of WLAS, three (3) pre-evaluation by the Quality Assurance (QA) Team, four (4) carrying out the revisions suggested by the QA team, five (5) undertaking of pupils and teacher field testing test validation test, (six) 6 Reprinting the final draft of the revised WLAS, and seven (7) reproduction and distribution.

It looked at the WLAS development process' pre-development, development, and post-development stages. In the meantime, this work established a tool for WLAS quality control concerning the instruction and criterion components. This study used the Analysis, Design, Development, Implementation, and Evaluation (ADDIE) model as its research design to meet the high criteria of WLAS.

The researcher ensured that the tailored WLAS meets the demands of the students. Activities that were included were student-centered, localized, and contextualized. The researcher considered the big picture and built exercises like relatable observations and experiences when developing these learning activities. Validation of this study gauged the material's formatting and content based on the correlation with the tools used for standardized Crafting of WLAS of ADM-Module for DepEd.

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The researcher thoroughly followed a process in the quality assurance of the developed WLAS.

Figure 2. Shows the quality assurance process in the study.

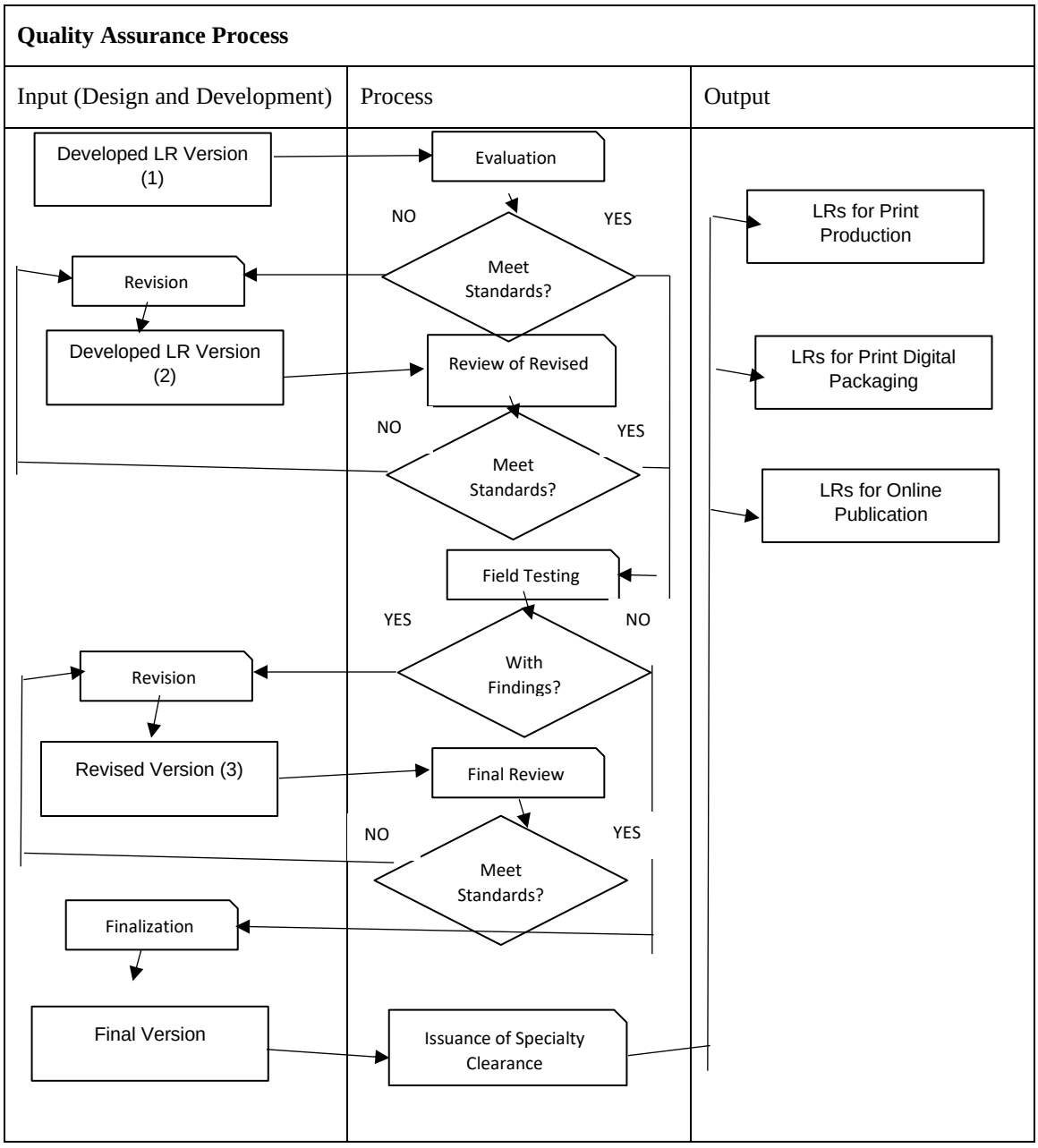

Figure 2. Quality Assurance Process Flow Chart

Post Developmental Stage. This showed the final evaluation of WLAS undertaken by the grade 5 pupils of Cervantina Elementary School SY 2022-2023. The researcher gathered all the results from taking the WLAS. The result was validated using the appropriate statistical tools.

The finished WLAS was being prepared for uploading following a thorough review by the QA team to send a letter of request to the responsible LRMDS Division Personnel.

Research Respondents

The study participants were the 41 grade V pupils taking Science Subjects at Cervantina Elementary School for validation and field tests. Meanwhile, Quality Assurance Team (QA) was composed of one (1) teacher, two (2) school heads, two (2) master teachers, and one (1) Education Program Specialist and superintendent as the approving authority.

Quality Assurance Team

The quality assurance team comprised one (1) teacher identified as the division science coordinator for three years. It currently has its teacher III position assigned at Cahayagan National High School. There were two (2) master teachers designated in the team; one (1) was from Nasipit National High School, and the other one (1) was from San Agustin Elementary School. Part of the team was two (2) school heads from San Agustin Elementary School and Cahayagan National High School and One (1) Education Program Supervisor, who was the head of the team. Lastly, it is always part of every quality assurance member who is the Schools Division Superintendent as the approving authority of the team and currently has the position of CESO VI.

Participants (Pupils)

41 Grade V pupils were identified as the research respondents, composed of 22 males and 19 females. These pupils were considered a homogeneous group since there was only one (1) section in the school.

Research Locale

This study was conducted in Cervantina Elementary School in Carmen District II, Agusan del Norte, for this current school year, 2022-2023. It was the last school in Agusan del Norte in Carmen District II since it's the boundary to Misamis Oriental. The school was a complete elementary school from kindergarten to grade 6. Currently, there were 501 enrollees for this school year 2022-2023. There were two male teachers, 13 female teachers, and 16 faculty members, including the school head. This was a DepEd-managed school in Purok 5 Vinapor, Carmen, Agusan de Norte. The school was accessible by car, motorcycle, jeep, multi-cab, and bus as modes of transportation.

Research Instrument.

The WLAS regional formatting was used in the study. The study used a descriptive developmental qualitative instrument where the researcher was the one to craft WLAS for the third quarter. The quality assurance team ensured that crafted WLAS underwent the proper quality assurance.

In addition, part I was the standardized tool, the Evaluation Tool for Content DepEd-developed ADM Modules. Part II, Summary of Content Findings for DepEd-developed ADM Modules, and the field-testing tool for both learners and teachers were used to determine the validity and usability of WLAS to be answered by the pilot learners and teachers in the school.

Part II also checked the WLAS formatting of WLAS by RM, 461, S. of 2020.

Data Gathering Procedure

The researcher started collecting the recipient's data for the study after being approved by the school where he conducted the study. He proposed the low MPS of Science to the school head, especially in the third quarter. The researcher directly suggested to the school head that he has a plan to develop WLAS as a tool to help teachers in the performance of the students.

The researcher developed six (6) WLAS, which were aligned in MELC last September to November 2022. After developing the WLAS, the researcher asked the Division Science Coordinator and one of the WLAS QA members and requested the formulation of QA members in the division that reviewed and checked the entire WLAS. The process was done from December 2022 to January 2023.

To ensure the WLAS content validity and usability, the researcher then proceeded to the field testing at Gosoon Elementary School in Carmen II District, a neighboring school with five learners who took the WLAS and answered the tool. Furthermore, the researcher also asked three (3) teachers to look for the WLAS and let them take the tool on how the WLAS has been made and developed. This was done on February 1-3, 2023.

Finally, the researcher administered the WLAS to the recipient school Cervantina Elementary School. The students were composed of 19 males and 22 females. This was already done on February 20 to April 5, 2023.

Ethical Consideration

This study on the development and quality assurance of weekly learning activity sheets in Grade 5 Science of District II Carmen, Agusan del Norte, ensured to uphold ethical considerations on the following:

The researcher followed SJIT's graduate school's ethical norms., which included going through an Ethic Review process before surveying the respondents to ensure that the methods were fair and unbiased to all parties involved. With the adviser's consent, the researcher wrote a letter requesting permission and outlining where the survey was conducted and how the data was collected.

The letter was given to the school head of Cervantina Elementary School to ask permission to conduct the study formally. After approval, the researcher conducted the WLAS as their additional activities for the entire duration of the third quarter of SY 2022-2023. As a result, it is best to work with the administration, for they showed resounding support for the entire duration of the study

Statistical Treatment

The following statistical tools were used to analyze and interpret the gathered data.

Field Testing Validation - This tool was used to measure the level of validity and usability for both learners and teachers of the crafted WLAS.

Frequency and Percentage Distribution – This tool was used to get the frequency and percentage of the Yes NO responses of the QA member in the standardized tool in the study. This answered Problem No. 3 in Annex 1.

Thematic Analysis. This was used in analyzing qualitative data that involved consolidating the common responses of the QA members. This answered Problem No. 3 in Annex 2.

REFERENCES

[1] Abell P, et. Al, (2007), "Importance of quality assurance in science education materials" accessed on April 7, 2023, retrieved from https://bit.ly/3n07vvn

[2] Abdel-Azim (2023), "Global investments in pandemic preparedness and COVID-19: development assistance and domestic spending on health between 1990 and 2026" "accessed on May 15, 2023 Retrieved from https://rb.gy/2p8s1

[3] Abu Bakar, Z., et. Al., (2018)"Assessment for Learning in Science: Practices Adopted by Primary Teachers" accessed on April 5, 2023, retrieved from https://bit.ly/3n07vvn

[4] Agmata, J. (2017), "The Performance of Science Teachers and Achievement in Science among Grade 6 pupils of Selected Schools in Butuan City, Philippines, Basis for a Development Plan", Master's Thesis: Saint Joseph Institute of Technology, Butuan City

[5] Ajaja (2008), "Low Performance in Science", Accessed on November 8, 2022, retrieved from https://files.eric.ed.gov/fulltext/EJ1135350.pdf

[6] Alberta Education, (2017), "Field Testing", accessed on May 6, 2023 Retrieved from https://rb.gy/3m15v

[7] Alsaleh and Aldail (2023), "Using Digital Learning Platforms to Enhance the Instructional Design Competencies and Learning Engagement of Preservice Teachers", accessed on May 15, 2023 Retrieved from https://rb.gy/01scp

[8] Astutik (2020), "The Effectiveness of the Student Activity Sheet (SAS) on Teaching-Learning and Creativity (TLC) Model to Increase Creativity Competence", Accessed on December 2, 2022, retrieved from https://rb.gy/qe1r7

[9] Awang (2019), "Challenges of service learning practices: Student and faculty perspectives from Malaysia" accessed on May 6, 2023 Retrieved from https://rb.gy/jpzr2

[10] Bakker & Bal, (2010), "Weekly work engagement and performance: A study among starting teachers" accessed on May 15, 2023 Retrieved from https://rb.gy/9fv4b

[11] Baloyi, et al., 2019), "Exploring Grade R teachers' mathematics curriculum practices and strategies for improvement: Implications for physics teaching", Accessed on November 29, 2022, retrieved from https://rb.gy/i6xtz

[12] Butler & Shibaz, (2008), "Achievement goals for teaching as predictors of students' perceptions of instructional practices and students' help seeking and cheating." accessed on May 16, 2023 Retrieved from https://rb.gy/dft0c

[13] Brown and Abell (2007), "Why the learning cycle?" Accessed on November 28, 2022, retrieved from https://rb.gy/6h6pz

[14] Calo, Et.al, (2022), "Perception on Blended Learning Among Criminology Student of Saint Joseph Institute of Technology", Undergraduate Thesis Saint Joseph Institute of Technology, Butuan City

[15] Che-Di Lee, 2012, "Worksheet Usage, Reading Achievement, Classes' Lack of Readiness, and Science Achievement: A Cross-Country Comparison", Accessed on November 25, 2022, retrieved from" https://rb.gy/14kzy

[16] Chung, (2009), "Readability Of Modules And Its Relationship With Student Performance In Open And Distance Learning (ODL)", Accessed on May 13, 2022, retrieved from https://shorturl.at/dhKPX

[17] DepEd Order No. 12, s. 2020 "Adoption of the Basic Education Learning Continuity Plan for School Year 2020-2021 in the Light of the COVID-19 Public Health Emergency" Accessed on November 30, 2022, retrieved from https://rb.gy/nesnq

[18] DepEd 96, s. (2019), "DepEd Flexible Learning Options: ADMs and ALS", Accessed on December 20, 2022, retrieved from https://rb.gy/si261

[19] DepEd Order No. 8, s. 2015, "Policy Guidelines on Classroom Assessment for the K to 12 Basic Education Program", accessed on May 15, 2023 Retrieved from https://rb.gy/x2m33

[20] Diliduzgun (2013), "Review of Literature on Coherence and Cohesion in Text Quality among ESL Students", accessed on May 14, 2023 retrieve from https://shorturl.at/cyNU9

[21] Dutton & Mohapatra, 2020, "Learning at home: Parents' lived experiences on distance learning during COVID-19 pandemic in the Philippines Accessed on November 21, 2022, retrieved from https://rb.gy/sad54

[22] DM-CI-2020, "July 21, 2020 DM-CI-2020-00162 – Suggested Strategies in Implementing Distance Learning Delivery Modalities (DLDM) for School Year 2020-2021", Accessed on November 30, 2022, retrieved from https://rb.gy/ejxjw

[23] D.O. #18. S. (2020)., "Policy Guidelines for the Provision of Learning Resources in the Implementation of the Basic Education Continuity Plan", Accessed on December 20, 2022, retrieved from https://rb.gy/lmd8t

[24] Dylan Wiliam (2011), "What is assessment for learning?" Accessed on November 15, 2022, retrieved from https://rb.gy/ldym4

[25] EADI, (2017), "Development Studies and Development Geography in the

[26] System of Earth sciences" Accessed on December 20, 2022, retrieved from https://shorturl.at/cfEF7 Elliott et al., (2000), "Constructivism Learning Theory & Educational

[27] Philosophy", Accessed on December 20, 2022, retrieved from https://rb.gy/798ib Fruggiero et. al, (2006), "Integrating Block Layout Design and Location of Input and Output Points in Facility Layout Problems" Accessed on December 20, 2022, retrieved from https://shorturl.at/cjOZ6

[28] Heilman et al., (2007), "Combining Lexical and Grammatical Features to Improve Readability Measures for First and Second Language Texts", accessed on May 16, 2023 Retrieved from https://rb.gy/oi2sz

[29] INEE (2020), "INEE 2020 Annual Report", Accessed on December 20, 2022, retrieved from https://rb.gy/ptzcn Jalop, G. (2018), "Contextualized Instruction and the Performance in Science of Grade 9 Students of Santiago National High School". Master's Thesis: Saint Joseph Institute of Technology, Butuan City

[30] Jannah, et. Al, (2020), "Effectiveness of Utilizing Learning Activity Sheets to Improve the Solving Skills involving Sampling Distribution of Grade 11 Students" Accessed on November 22, 2022, retrieved from" https://rb.gy/1ll4i

[31] Krug, B. (2018), "The Efficacy of Integrative Strategy in Teaching Science of Grade Six Pupils of Pareja Elementary School" Master's Thesis: Saint Joseph Institute of Technology, Butuan City

[32] Kurniawan (2016), "The Development of Student's Activity Sheets (SAS) Based on Multiple Intelligences and Problem-Solving Skills Using Simple Science Tools," Accessed on December 20, 2022, retrieved from https://rb.gy/ycahd

[33] Lee, (2014). "Worksheet Usage, Reading Achievement, Classes' Lack of Readiness, and Science Achievement: A Cross-Country Comparison", Accessed on November 23, 2022, retrieved from" https://rb.gy/14kzy

[34] Lindog (2021), "The Implementation of Modular Distance Learning in the Philippine Secondary Public Schools," Accessed on November 20, 2022, retrieved from https://rb.gy/deu89

[35] Malbacias, L. (2017), "Level of Skills in Science of Selected Grade VI Pupils in Magallanes District: Basis for Development of Contextualize Instructional Materials" Master's Thesis: Saint Joseph Institute of Technology

[36] Magsambol, (2020), "The New Normal in Education: A Challenge To The Private Basic Education Institutions in The Philippines?", Accessed on December 20, 2022, retrieved from https://rb.gy/w3sja

[37] Mordeno, K. (2022), "The Delivery of Online Laboratory Classes During Pandemic" Master's Thesis: Saint Joseph Institute of Technology, Butuan City

[38] Mohd Hanafi, et. Al, (2019)," Blended Learning Adoption and Implementation in Higher Education: A Theoretical and Systematic Review", accessed on May 15, 2023 Retrieved from https://rb.gy/pfhz2

[39] Osaki (2007), "School Performance" Accessed on November 12, 2022, retrieved from https://files.eric.ed.gov/fulltext/EJ1135350.pdf

[40] Özdemir, et. al (2021), "Assessment Conceptions and Practices: Perspectives of Primary School Teachers and Students", Accessed on November 16, 2022, retrieved from https://shorturl.at/irw47

[41] Prastowo (2014), "The Development Of Student Activity Sheets Integrated With Scientific Approach To Increase Students' Skills In Completing Natural Environment Problems", Accessed on December 20, 2022, retrieved from https://rb.gy/nnh9h Pitsoe and Maila, 2014), "Quality and Quality Assurance in Open Distance

[42] Learning (ODL) Discourse: Trends, Challenges and Perspectives", Accessed on November 30, 2022, retrieved from https://rb.gy/yohoh

[43] Ramsden (2018), "A Review on the School – Based Learning Activity Sheet Towards Improvement of Instructional Material" Accessed on November 17, 2022, retrieved from https://rb.gy/hexl1 2022, retrieved from" https://rb.gy/deu89

[44] Rezaul Kabir 2016., "The Value and Effectiveness of Feedback in Improving Students' Learning and Professionalizing Teaching in Higher Education" Accessed on November 20, 2022, retrieved from https://rb.gy/he0z0

[45] Schmidt (2008), "Effect of worksheet scaffolds on student learning in problem- based learning" Accessed on November 26, 2022, retrieved from https://rb.gy/he0z0

[46] Sibel Erduran (2015), "Research trends on argumentation in science education: A journal content analysis from 1998–2014", Accessed on November 28, 2022, retrieved from https://rb.gy/pcaja

[47] Snape, (2012), ""The Development Of Student Activity Sheets Integrated With Scientific Approach To Increase Students' Skills In Completing Natural Environment Problems", Accessed on December 20, 2022, retrieved from https://rb.gy/nnh9h

[48] Sumaoang (2020), "The Implementation of Modular Distance Learning in the Philippine Secondary Public Schools", Accessed on November 21,

[49] Taib, et al., 2020, "Faculty's and Students' Perceptions of Online Learning During COVID-19" Accessed on November 17, 2022, retrieved from https://rb.gy/02t2z

[50] Tapia (2020), "International Perspectives on the Contextualization of Science Education" Accessed on November 12, 2022, retrieved from https://rb.gy/rocfu

[51] Ur (2013), "Improving Students' Learning With Effective Learning Techniques: Promising Directions From Cognitive and Educational Psychology" Accessed on November 24, 2022, retrieved from" https://rb.gy/5f2kv

[52] Rahardjanto et al., 2019, "The Effectiveness of the Student Activity Sheet (SAS) on Teaching-Learning and Creativity (TLC) Model to Increase Creativity Competence", Accessed on December 2, 2022, retrieved from https://rb.gy/qe1r7 Yigit & Akdeniz, 2000), "The Effect Of The Worksheets On Students'

[53] Achievement In Chemical Equilibrium", Accessed on December 20, 2022, retrieved from https://rb.gy/kyaw1 Tomlinson, (2011), "Materials Development in Language Teaching" Accessed on December 20, 2022, retrieved from https://rb.gy/mtgfo

[54] Topping (2016), "The Effectiveness of Online and Blended Learning from Schools" accessed on April 5, 2023, retrieved from https://rb.gy/aogcj

[55] UNESCO, 2010), "Achievements and Challenges in Education in Emergencies", Accessed on December 20, 2022, retrieved from https://rb.gy/ptzcn

[56] UNICEF, (2020), "Learning Opportunities Shall Be Available", Accessed on December 20, 2022, retrieved from https://rb.gy/v18k5

[57] Rashid and S. A. Awang (2019), "Assessing the effects of service quality on customer satisfaction", accessed on May 15, 2023 Retrieved from https://rb.gy/bbpby

[58] Osueke et al., (2018), "Clearly Communicating the Learning Objective Matters!" accessed on May 14, 2023 Retrieved from https://rb.gy/h9vql

[59] Regional Memo No. 461 s. of 2020, Development of Weekly Learning Activity Sheets (LASs) for Quarter 2, Modules Accessed on November 25, 2021, retrieved from https://bit.ly/3FhSpW5

[60] Regional Memo No. 372 s. of 2020, Padayon ang Edukasyon sa Caraga, The Learning Continuity Plan for Basic Education in Caraga (August Edition), Accessed on November 25, 2021, retrieved from https://bit.ly/3yKzWix

[61] RM no. 630, S. 2021 – Issuance of Sub-Allotment Release Order for Flexible Learning Options (FLO) Continuing Fund, accessed on December 15, 2021, retrieved from https://bit.ly/3yKzWix

[62] Simbolon N, et al., The Development of Students' Activities Sheet With A Scientific Approach in Elementary School, accessed on November 3, 2021, retrieved from https://bit.ly/3sLdZie

[63] Wiratman, A. et al (2019) The effect of activity sheet based on outdoor learning on student's science process skills Accessed on December 26, 2021, retrieved from https://bit.ly/3eRBVIN

[64] Yuni Pantiwati, et al. (2023), "The Effect of Assessment Strategy on Students' Character and Creative Thinking Ability in Designing Learning Media" accessed on May 6, 2023 Retrieved from https://rb.gy/6qshf

[65] Zabidi, N.et. al., Quality assurance in learning material development at OUM, , Accessed on December 26, 2021, retrieved from https://bit.ly/3eRBVIN