

Development of Least Learned Competencies-Based Intervention Materials for Elementary

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Abstract: This study aimed to develop intervention materials (IMs) for 12 elementary schools in Surigao City Division. Specifically, it sought to determine the least learned competencies in every elementary grade level, evaluate the quality of IMs which was done by both teachers and experts. The study employed descriptive-developmental research design. Data were collated, tallied, analyzed and interpreted using appropriate statistical treatments, to include descriptive, nonparametric and inferential analyses. *Mean Frequency Count and Percentage distribution* were used to determine the least learned competencies. *Mean and Standard Deviation* were utilized for evaluation of the material by the teachers and experts. *Mann-Whitney U Test* was utilized to determine the significant difference on the material's quality. The materials were qualitatively described as very satisfactory. There is no significant difference on presentation and organization and accuracy and up-to-datedness/timeliness. However, there is a significant difference in terms of content and format with the p-value less than 0.05. The Intervention material could be utilized to improve learning competencies of elementary students and a quasi- experimental study to investigate the effectiveness of the developed material is highly recommended.

Keywords: Least Learned Competencies, Intervention Material, Expert, Teachers, Development.

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I. INTRODUCTION

The Department of Education (DepEd) has regularly highlighted quality instruction to boost the education of Filipino learners one of which is instructional material development. In this modern teaching and learning process, instructional materials plays a vital role [1]. These materials have impacted problem on low academic performance of students [2]. This study aimed to develop intervention materials (IMs) for the elementary grade levels, specifically, it determine the least learned competencies, measure the quality of IMs in terms of content, format, presentation and organization, accuracy and up-to-dateness/timeliness , and lastly, examine the difference in terms of the evaluation results/ratings between the teachers and expert-respondents

Despite the department's efforts, international assessment such that of Programme for International Student Assessment (PISA) revealed low student scores in reading, math, and science [3]. Given the complex and multifaceted nature of factors to students' learning, as seen in their low scores, experts have proposed the PPC model—Process, Personal Characteristics, and Context—as key predictors of

student performance [4]. This model aligns with the solutions recommended by the OECD to help improve the academic performance of students in low- and middle-income economies. In concordance, socioeconomic status of students would also affect as a factor on their low scores [5].

In response, DepEd continues to explore strategies to address classroom challenges, particularly in providing textbooks and instructional materials [6] across various subjects. As outlined in DepEd Memo No. 117, series of 2005, titled "Training Workshop on Strategic Intervention Material (SIMs) for Successful Learning," science secondary teachers were trained in using SIMs to bridge learning gaps [7]and overcome student challenges [8]. To further scaffold learning, DepEd developed modular distance learning materials such as Self-Learning Modules (SLMs) and Learning Activity Sheets (LAS) for all grade levels, aligned with the "Most Essential Learning Competencies" [9]. Additionally, the department has promoted the creation and development of Strategic Intervention Materials (SIMs) to address competencies with low mastery levels.

The implementation of SIMs has been reinforced not only through workshops, seminars, and teacher training but various competitions at school where intervention materials were integrated in science fairs at division, regional, and national levels. Research features the importance of innovative teaching materials to enhancing students' academic performance [10], [11]. A holistic approach to a quality teaching and learning process encompass educational improvement, curriculum evaluation, teacher development, and policy formulation [12].

Despite efforts and initiatives, academic performance remains a matter to reflect. This study was conceived to assess the progress of elementary schools in the Surigao City Division, aiming to maximize teachers' potential and refine intervention materials. Via expert evaluation of these materials, the research seeks to improve students' competency-based skills [12], [13]. Also, concentrating to instructional gaps and book dearth in elementary schools requires the cyclic development and assessment of least-learned-competency-based instructional materials.

II. METHOD

The study employed descriptive-developmental research design. Generally, the study consisted of two stages, namely: first, the identification of the least learned competencies and secondly, the development of the Intervention Materials (IM) which would be done through evaluation by both teachers and experts/ area coordinators. The data collection was done through a permission letter to the Schools Division Superintendent of Surigao City division so that school principals would allow the conduct and collection of data. Upon approval of the request, the identified least learned competencies accounted from the identified schools were evaluated by teacher and expert respondents aimed at developing the intervention material. The development of the materials follow an ADDIE model modified by of Saclao [14] and Eviota & Boyles such as analysis, development and evaluation as seen in figure 1 below.

The data was treated on the following objectives: determining the least learned competencies, evaluation of the material by the teachers and experts, and determining the significant difference on the material's quality using. The analysis utilized *Frequency Count and Percentage distribution, Mean and Standard Deviation, Mann-Whitney U Test*, respectively.

The modified ADE [15] following analysis, development and evaluation. After a series of evaluation, the developed materials are being made. The IM would be used as an intervention material to address the needs of students to scaffold their difficulties in learning from the identified least learned skills and competencies. This is also designed to realize the appropriate pedagogical theories in education on how students learn. This study ensured that the content and competencies were aligned with the Curriculum Guide (CG) and that the activities were within their levels of understanding. The learning competencies were reflected in the IM so that the teacher and students would be guided

accordingly. Comments and suggestions from the experts were highly regarded, appreciated and incorporated for the improvement of SIM.

III. RESULT AND DISCUSSION

➤ Least Learned Competencies

Table 1 depicts the least learned competencies in the select elementary schools in Surigao City. The learning competencies were as follow: 2 competencies in grade 3 (S3FE-IIIa-B-1 & S3FE-IIIa-B-2); 4 competencies in grade 4(S4-FE-IIIa-1, S4-FE-IIIg-4, S4-FE-IIIe-3, & S4-FE-IIIh-5); 6 competencies in grade 5(S5-FE-IIIa-1, S5-FE-IIIc-3, S5-FE-IIIe-5, S5-FE-IIId-6, S5-FE-IIIj-9,& S5-FE-IIIg-7); Lastly, 3 competencies in grade 6 (S6-FE-IIIa-C-1, S6-FE-IIIe-F-2, & S6-FE-IIIg-i-3). The competencies that ranked 1st as being chosen by the elementary schools in different grade levels were as follows: for grade 6 (S6-FE-IIIg-i-3) which "Manipulate simple machines to describe their characteristics & uses" with 100 %(f=15); for grade 5 (S5-FE-IIId-6) which "Infer the conditions necessary to make bulb light" with 93.33% (f=14); for grade 4(S4-FE-IIIh-5) which "Investigate the properties & characteristics of light & sound"; for grade 3(S3FE-IIIa-B-1) which "Describe the position of a person/an object in relation to a reference point" with 100 %(f=15).

However, the competencies that ranked last as being chosen by the elementary schools in different grade levels were as follows: for grade 6(S6-FE-IIIe-F-2) which "Demonstrate how sound, heat, light & electricity can be transformed" with 33.33% (f=5) ; for grade 5(S5-FE-IIIj-9) which "Design an experiment to determine the factors that affect the strength of an electromagnet" with 20.00 % (f=3); for grade 4(S4-FE-IIIe-3) which "Characterize magnetic force" with 20.00 % (f=3); for grade 3(S3FE-IIIa-B-2) which "Describe the different uses of light, sound, heat and electricity in everyday life" with 26.67% (f=4).

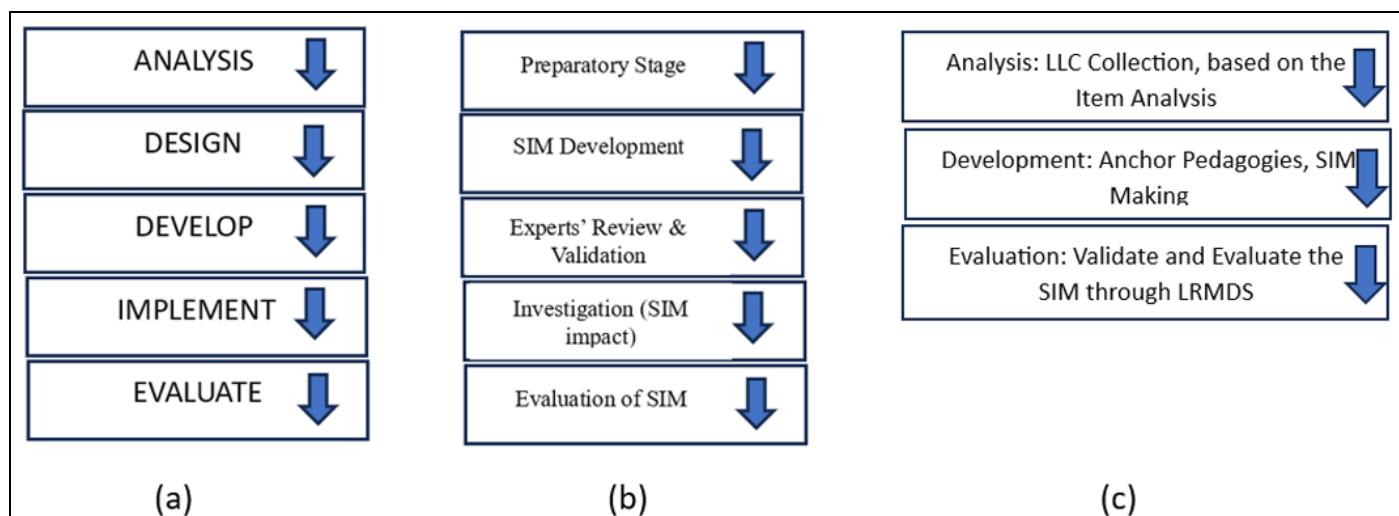


Fig 1 Modified ADE Model (c) Based on the Original ADDIE (a) as Modified by Saclao (b)

Table 1 Least Learned Science Competencies in Selected Elementary Schools in Surigao City

Table 1: Least Learned Science Competencies in Selected Elementary Schools in Surigao City				
Level	Code	Competency	f(n=15)	Percent
Grade 3	(S3FE-IIIa-B-1)	Describe the position of a person/an object in relation to a reference point	13	86.67
	(S3FE-IIIa-B-2)	Describe the different uses of light, sound, heat and electricity in everyday life	4	26.67
Grade 4	(S4-FE-IIIa-1)	Explain the effects of force when applied to an object	4	26.67
	(S4-FE-IIIc-g-4)	Describe how light, sound & heat travel	13	86.67
	(S4-FE-IIIc-e-3)	Characterize magnetic force	3	20.00
	(S4-FE-IIIh-5)	Investigate the properties & characteristics of light & sound	15	100.00
Grade 5	(S5-FE-IIIa-1)	Describe the motion of an object by tracing & measuring its change in position	13	86.67
	(S5-FE-IIIc-3)	Discuss why some materials are good conductors of heat & electricity	5	33.33
	(S5-FE-IIIe-5)	Relate the ability of a material to block, absorb or transmit light to its use	4	26.67
	(S5-FE-IIId-6)	Infer the conditions necessary to make bulb light	14	93.33
	(S5-FE-IIIj-9)	Design an experiment to determine the factors that affect the strength of an electromagnet	3	20.00
	(S5-FE-IIIG-7)	Determine the effects of changing the number or type of components in a circuit	13	86.67
Grade 6	(S6-FE-IIIa-C-1)	Infer how friction & gravity affect movements of different objects	12	80.00
	(S6-FE-IIIc-F-2)	Demonstrate how sound, heat, light & electricity can be transformed	5	33.33
	(S6-FE-IIIg-i-3)	Manipulate simple machines to describe their characteristics & uses	15	100.00

➤ *Quality of Instructional Materials*

➤ *Quality of Instructional Materials*
Teacher-respondents rated the quality of instructional materials in terms of its content as shown in Table 2 with indicators' average mean of 3.75 is qualitatively described as

very satisfactory, , however, indicators received with the least mean were “pride of being a Filipino” and “ love of country” with a qualitative description of “poor”($m=1.64$) and “not satisfactory” ($m=1.00$), respectively.

Table 2 Content Quality of Science Instructional Materials as Rated by Teachers

Table 2 Content Quality of Science Instructional Materials as Rated by Teachers			
Indicator	Mean	SD	Description
1. Content is suitable to the students' level of development	4.00	0.00	Very Satisfactory
2. Material contributes to the achievement of specific objectives of the subject area and grade/year level for which is intended	4.00	0.00	Very Satisfactory
3. Material provides for the development of higher cognitive skills such as critical thinking, creativity, learning by doing, inquiry, problem solving, etc.	3.88	0.33	Very Satisfactory
4. Material is free of ideological, cultural, religious, racial, and gender biases and prejudices.	4.00	0.00	Very Satisfactory
5. Material enhances the development of desirable values and traits such			
5.1 pride in being a Filipino	1.64	1.28	Poor
5.2 Scientific attitude and reasoning	4.00	0.00	Very Satisfactory
5.3 Desire for excellence	4.00	0.00	Very Satisfactory

5.4 Love of Country	1.00	0.00	Not Satisfactory
5.5 Helpfulness/Teamwork/Cooperation	4.00	0.00	Very Satisfactory
5.6 Unity	4.00	0.00	Very Satisfactory
5.7 Desire to learn new things	4.00	0.00	Very Satisfactory
5.8 Honesty and trustworthiness	4.00	0.00	Very Satisfactory
5.9 Ability to know right from wrong	4.00	0.00	Very Satisfactory
5.10 Respect	4.00	0.00	Very Satisfactory
5.11 Critical and Creative thinking	4.00	0.00	Very Satisfactory
5.12 Productive work	4.00	0.00	Very Satisfactory
5.13 others: pls specify	4.00	0.00	Very Satisfactory
6. material has the potential to arouse interest of target reader	4.00	0.00	Very Satisfactory
7. Adequate warning/cautionary notes are provided in topics and activities where safety and health are of concern	3.82	0.39	Very Satisfactory
Average	3.75	0.13	Very Satisfactory

The expert-respondents rated the quality of instructional materials in terms of its content as shown in Table 3. Indicators' average mean of 3.91 is qualitatively described as very satisfactory, however, indicators that received the least mean were “pride of being a Filipino” and “love of country”

with a qualitative description of satisfactory which both received a mean of 3.0.

Experts rated higher than the science teachers in terms of average mean nevertheless both received the same qualitative description of very satisfactory.

Table 3 Content Quality of Science Instructional Materials as Rated by Experts

Indicator	Mean	SD	Description
1. Content is suitable to the students' level of development	4.00	0.00	Very Satisfactory
2. Material contributes to the achievement of specific objectives of the subject area and grade/year level for which is intended	4.00	0.00	Very Satisfactory
3. material provides for the development of higher cognitive skills such as critical thinking, creativity, learning by doing, inquiry, problem solving, etc.	4.00	0.00	Very Satisfactory
4. material is free of ideological, cultural, religious, racial, and gender biases and prejudices.	4.00	0.00	Very Satisfactory
5. material enhances the development of desirable values and traits such			
5.1 Pride in being a Filipino	3.00	0.00	Satisfactory
5.2 Scientific attitude and reasoning	4.00	0.00	Very Satisfactory
5.3 Desire for excellence	4.00	0.00	Very Satisfactory
5.4 Love of Country	3.00	0.00	Satisfactory
5.5 Helpfulness/Teamwork/Cooperation	4.00	0.00	Very Satisfactory
5.6 Unity	4.00	0.00	Very Satisfactory
5.7 Desire to learn new things	4.00	0.00	Very Satisfactory
5.8 Honesty and trustworthiness	4.00	0.00	Very Satisfactory
5.9 Ability to know right from wrong	4.00	0.00	Very Satisfactory
5.10 Respect	4.00	0.00	Very Satisfactory
5.11 Critical and Creative thinking	4.00	0.00	Very Satisfactory
5.12 Productive work	4.00	0.00	Very Satisfactory
5.13 others: pls specify	4.00	0.00	Very Satisfactory
6. material has the potential to arouse interest of target reader	4.00	0.00	Very Satisfactory
7. Adequate warning/cautionary notes are provided in topics and activities where safety and health are of concern	4.00	0.00	Very Satisfactory
Average	3.91	0.05	Very Satisfactory

On the other hand, in terms of the format quality as rated by teachers on science Instructional Material (IM), six (6) of the total indicators received a qualitative description of “satisfactory” and these were: “*Spaces between letters and words facilitate reading*”; “*Printing is of good quality no broken letters, even density, correct alignment, properly placed screen registration; properly labeled or captioned*”;

“*Simple and easily recognizable*”; “*culturally relevant*”; and “*paper used contributes to easy reading*”.

Furthermore, two-thirds (2/3) or 12 of the indicators received a qualitative description of “very satisfactory”. The mean average ($m=3.67$) of format quality received a qualitative description of “very satisfactory” as depicted in table 4.

Table 4 Format Quality of Science Instructional Materials as Rated by Teachers

Indicator	Mean	SD	Description
1. Prints			
1.1 size of letters is appropriate to the intended user	3.88	0.33	Very Satisfactory
1.2 spaces between letters and words facilitate reading	3.24	0.44	Satisfactory
1.3 font is easy to read	3.88	0.33	Very Satisfactory
1.4 printing is of good quality no broken letters, even density, correct alignment, properly placed screen registration	3.18	0.39	Satisfactory
2. Illustrations			
2.1 simple and easy recognizable	3.24	0.44	Satisfactory
2.2 clarity and supplement the text	3.88	0.33	Very Satisfactory
2.3 properly labeled or captioned(if applicable)	3.35	0.49	Satisfactory
2.4 realistic/appropriate colors	3.94	0.24	Very Satisfactory
2.5 attractive and Appealing	3.88	0.33	Very Satisfactory
2.6 culturally relevant	3.18	0.39	Satisfactory
3. Design and Layout			
3.1 attractive and pleasing to look at	3.88	0.33	Very Satisfactory
3.2 simple(i.e., does not distract the attention of the reader	3.88	0.33	Very Satisfactory
3.3 adequate illustration in relation to text	3.88	0.33	Very Satisfactory
3.4 harmonious blending of elements 9e.g., illustrations and text)	3.88	0.33	Very Satisfactory
4. Paper and Binding			
4.1 paper used contributes to easy reading	3.29	0.47	Satisfactory
4.2 durable binding to withstand frequent use	3.88	0.33	Very Satisfactory
5. Size and Weight of Resource			
5.1 easy to handle	3.88	0.33	Very Satisfactory
5.2 relatively light	3.88	0.33	Very Satisfactory
Average	3.67	0.23	Very Satisfactory

Table 5 displayed experts rated the Instructional Material (IM) in terms of format which received a qualitative description of “very satisfactory” with a mean average of 3.87.

It is important to note that only two indicators “Simple (i.e., does not distract the attention of the reader)”, and “easy to handle” received a qualitative description of “satisfactory”.

Table 5 Format Quality of Science Instructional Materials as Rated by Experts

Indicator	Mean	SD	Description
1. Prints			
1.1 size of letters is appropriate to the intended user	4.00	0.00	Very Satisfactory
1.2 spaces between letters and words facilitate reading	4.00	0.00	Very Satisfactory
1.3 font is easy to read	4.00	0.00	Very Satisfactory
1.4 printing is of good quality 9 no broken letters, even density, correct alignment, properly placed screen registration	4.00	0.00	Very Satisfactory
2. Illustrations			
2.1 simple and easy recognizable	4.00	0.00	Very Satisfactory
2.2 clarity and supplement the text	4.00	0.00	Very Satisfactory
2.3 properly labeled or captioned(if applicable)	4.00	0.00	Very Satisfactory
2.4 realistic/appropriate colors	4.00	0.00	Very Satisfactory
2.5 attractive and Appealing	4.00	0.00	Very Satisfactory
2.6 culturally relevant	4.00	0.00	Very Satisfactory
3. Design and Layout			
3.1 attractive and pleasing to look at	4.00	0.00	Very Satisfactory
3.2 simple(i.e., does not distract the attention of the reader	3.40	0.55	Satisfactory
3.3 adequate illustration in relation to text	3.60	0.55	Very Satisfactory
3.4 harmonious blending of elements 9e.g., illustrations and text)	3.60	0.55	Very Satisfactory
4. Paper and Binding			
4.1 paper used contributes to easy reading	4.00	0.00	Very Satisfactory
4.2 durable binding to withstand frequent use	4.00	0.00	Very Satisfactory
5. Size and Weight of Resource			
5.1 easy to handle	3.40	0.55	Satisfactory
5.2 relatively light	3.60	0.55	Very Satisfactory
Average	3.87	0.13	Very Satisfactory

Meanwhile, teachers rated the Instructional Material (IM) in terms of “Presentation and Organization” in table 6 which garnered a mean average of 3.88 with a qualitative description of “ very satisfactory”.

In the same way, the experts rated the material as depicted in table 7. All of the indicators received the same/uniform rating of 4.00.

Table 6 Quality of Science Instructional Materials in Terms of Presentation and Organization as Rated by Teachers

Indicator	Mean	SD	Description
1. Presentation is engaging, interesting, and understandable	3.88	0.33	Very Satisfactory
2. There is logical and smooth flow of ideas	3.88	0.33	Very Satisfactory
3. Vocabulary level is adapted to target reader's likely experience and level of understanding	3.88	0.33	Very Satisfactory
4. Length of sentences is suited to the comprehension level of the target reader	3.88	0.33	Very Satisfactory
5. Sentences and paragraphs structures are varied and interesting to the target reader	3.88	0.33	Very Satisfactory
Average	3.88	0.33	Very Satisfactory

Table 7 Quality of Science Instructional Materials in Terms of Presentation and Organization as Rated by Experts

Indicator	Mean	SD	Description
1. Presentation is engaging, interesting, and understandable	4.00	0.00	Very Satisfactory
2. There is logical and smooth flow of ideas	4.00	0.00	Very Satisfactory
3. Vocabulary level is adapted to target reader's likely experience and level of understanding	4.00	0.00	Very Satisfactory
4. Length of sentences is suited to the comprehension level of the target reader	4.00	0.00	Very Satisfactory
5. Sentences and paragraphs structures are varied and interesting to the target reader	4.00	0.00	Very Satisfactory
Average	4.00	0.00	Very Satisfactory

In terms of Up-to-dateness, both teachers and experts rated the material “ not satisfactory”, on the following indicators: Conceptual errors, Factual errors, Grammatical

errors, Computational errors, Obsolete information, and Typographical and other minor errors with a mean averages of 1.10(table 8) and 1.00(table 9), respectively.

Table 8 Quality of Science Instructional Materials in Terms of Up-to-Datedness as Rated by Teachers

Indicator	Mean	SD	Description
1. Conceptual errors	1.12	0.33	Not Satisfactory
2. Factual errors	1.12	0.33	Not Satisfactory
3. Grammatical errors	1.00	0.00	Not Satisfactory
4. Computational errors	1.12	0.33	Not Satisfactory
5. Obsolete information	1.12	0.33	Not Satisfactory
6. Typographical and other minor errors(e.g., inappropriate or unclear illustrations, missing labels, wrong captions, etc.)	1.12	0.33	Not Satisfactory
Average	1.10	0.28	Not Satisfactory

Table 9 Quality of Science Instructional Materials in Terms of Up-to-Datedness as Rated by Experts

Indicator	Mean	SD	Description
1. Conceptual errors	1.00	0.00	Not Satisfactory
2. Factual errors	1.00	0.00	Not Satisfactory
3. Grammatical errors	1.00	0.00	Not Satisfactory
4. Computational errors	1.00	0.00	Not Satisfactory
5. Obsolete information	1.00	0.00	Not Satisfactory
6. Typographical and other minor errors(e.g., inappropriate or unclear illustrations, missing labels, wrong captions, etc.)	1.00	0.00	Not Satisfactory
Average	1.00	0.00	Not Satisfactory

The not satisfactory rating means that the material considerably has minimal errors with respect to conceptual errors, factual errors, grammatical errors, computational errors, and obsolete information as rated by both teachers and experts.

➤ Comparison of Quality of Instructional Materials

Table 10 shows that for both the content and format factors, the null hypothesis (H_0) is rejected with p-values of 0.015 and 0.014, respectively. The result is less than the p-value 0.05 which indicates a significant difference in the ratings as evaluated by teachers and experts. This suggests that experts rated the content and format of the instructional materials more critically than teachers. The mean ranks from

Table 12 support this, with experts giving significantly higher ranks (17.30) compared to teachers (9.79) for both content

and format.

Table 10 Comparison of Quality of Science Instructional Materials Ratings Between Teachers and Experts

Factor	U	p	Decision on Ho	Interpretation
Content	13.5	0.015	Rejected	Significant
Format	13.5	0.014	Rejected	Significant
Presentation and Organization	37.5	0.432	Not Rejected	Not Significant
Accuracy and Up-to-dateness	37.5	0.432	Not Rejected	Not Significant

However, for the factors of presentation and organization, as well as accuracy and up-to-datedness, the null hypothesis was not rejected, with p-values of 0.432 for both factors. This indicates no significant difference in the ratings between teachers and experts, suggesting a consensus on the adequacy of these aspects of the instructional materials. Teachers are concerned with the use of up-to-date instructional material [8] as well as the experts. Nevertheless, it is in concordance with the study [15] which said that experts validated the rating of teachers on the quality of the material in terms of up-to-datedness and presentation and organization. Teachers and experts are decision makers in quality material for interventions to improve the learning process [16] to integrate appropriate instructional materials so

that students can actively engage when they manipulate or interact the lesson.

In general sense, these findings highlight discrepancies between the perspectives of teachers and subject matter experts. Teachers, who are more attuned to the practical applicability and day-to-day usage of materials in the classroom, may rate materials based on usability and immediate educational value. Experts, on the other hand, may focus on theoretical rigor, alignment with current scientific standards, and overall quality, leading to more stringent evaluations. According to [17] skilled teachers or considered experts play an essential role in assessing educational quality, since instructional material considerably improve students' performance level.

Table 11 Mean Ranks of Quality of Science Instructional Materials Ratings between Teachers and Experts

Factor	Mean Rank	
	Teacher	Expert
Content	9.79	17.30
Format	9.79	17.30

Such differences underscore the importance of incorporating diverse perspectives in the development and evaluation process of educational materials. By balancing the practical insights of teachers with the critical standards of experts, instructional materials can be designed to meet both the pedagogical needs of the classroom and the educational standards of the field. This collaborative approach ensures that materials are not only effective in engaging students but also accurate and up to date, providing a robust learning experience.

IV. CONCLUSION

This study aimed to develop intervention materials (IMs) for the elementary grade levels, specifically, it determine the least learned competencies, measure the quality of IMs in terms of content, format, presentation and organization, accuracy and up-to-dateness/timeliness, and lastly, examine the difference in terms of the evaluation results/ratings between the teachers and expert-respondents. The least learned competencies that ranked top are as follows: for grade 6 (S6-FE-IIIg-i-3) which "Manipulate simple machines to describe their characteristics & uses" with 100 % (f=15); for grade 5 (S5-FE-IIId-6) which "Infer the conditions necessary to make bulb light" with 93.33% (f=14); for grade 4 (S4-FE-IIIh-5) which "Investigate the properties & characteristics of light & sound"; for grade 3 (S3FE-IIIa-B-1) which "Describe the position of a

person/an object in relation to a reference point" with 100 % (f=15). The materials were both rated by teachers and experts which qualitatively described as very satisfactory in terms of the content, format, presentation and organization, accuracy and up-to-dateness/timeliness. There is no significant difference on factors such as presentation and organization, as well as in accuracy and up-to-dateness/timeliness. But there is a significant difference in content and format

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