

Strategic Intervention Material: A Tool in Improving TLE Performance of Grade 7 Students

Abby Shyne M. Exconde¹, Edna O. Briones, Ed.D.²

<https://orcid.org/0000-0002-8583-9862>¹, <https://orcid.org/0000-0002-2619-0450>²

abbyshyne.exconde@deped.gov.ph¹, edna.briones@lspu.edu.ph²

Alaminos Integrated National High School, Department of Education, Philippines¹

Laguna State Polytechnic University, San Pablo City Campus, Philippines²

DOI: <https://doi.org/10.54476/apjaet/73699>

Abstract

The study sought to develop a Strategic Intervention Material in Cookery 7 to determine its relationship to TLE performance of thirty (30) Grade 7 students from Alaminos Integrated National High School, Alaminos, Laguna enrolled during school year 2021 – 2022. This study utilized a pretest and posttest to assess the level of performance of the students in Cookery before and after utilizing the SIM. Frequency count, mean, and percentage were used to determine the profile of the respondents. Mean and standard deviation was used to determine the student's perception of the SIM in Cookery 7. Study shows that the overall perception and evaluation of the SIM is very satisfactory. Moreover, findings revealed that there is a significant difference in the pretest and posttest scores of the students before and after using the SIM in Cookery and there is no significant relationship between the perception of the student on SIM related variables and their performance in Cookery except for Affective Skill. Based on these findings, it is concluded that the hypothesis posited earlier in this study stating that there is no significant difference between the pretest and posttest of the respondents is not sustained. However, the hypothesis signifying non-existence of the relationship between the respondent's perception of the SIM related variables and their performance in cookery is sustained except for their affective skill which was found significant.

Keywords: Strategic Intervention Material, SIM Components, SIM Characteristics, Students Performance

Introduction

One of the biggest challenges in teaching is selecting methods that would be effective, especially with a large number of students in the class. Educators face a lot of problems teaching in large classes but these problems can be worked out with a sincere desire to overcome these difficulties with appropriate strategies, teaching aids, and approaches.

The Covid- 19 epidemic has resulted in a number of undesirable problems that people are currently experiencing. During these tough times, the higher-ups are looking for alternatives and answers to aid us in overcoming our difficulties. The Department of Education proposes that classes be continued using technology or in a modular format. It may be difficult, given that T.L.E. requires demonstration. Teachers are coming up with new ideas, such as providing video presentations to students during demonstrations so that they may understand how things should be done step by step. To reduce the pupils' misunderstanding, the teacher can additionally provide modules with step-by-step directions for each activity.

According to G.M. Bodner, to achieve effective instruction, the teacher must “disturb” the student's environment – that is, provide a stimulus. How students make sense of this stimulus is the path to knowledge rather than simply learning facts. Knowledge is constructed by the learner. Integration of new knowledge is the main focus of constructivism theory.

Moore 2012, stated that students often need help in learning how to learn. There are 3 types of students in a class: students who can learn on their own, students who need some help in learning, and students who need a lot of help in learning.

Benjamin Bloom (1968) in his proposed mastery learning explains that the students are helped to master each learning unit before proceeding to more advanced learning. It is a method that suggests that the focus of instruction should be the time required for different students to learn the same material and achieve the same level of mastery.

One of the strategies used by the Department of Education to improve the academic achievement of students performing poorly in the field of TLE is SIM, an instructional material for remediation purposes. Secondary teachers received instruction in the production of SIMs through DepEd Memo No. 117, series of 2005, titled "Training Workshop on SIMs for Successful Learning". Teaching quality is determined not only by the teacher's knowledge and skills but also by his or her inventions and originality. The purpose of education is to teach people how to think critically and thoroughly. The purpose of true education is to combine intelligence with character.” 1947 (King).

Objectives of the Study

This research paper focused on improving TLE Performance of Grade 7 learners. The purpose of this study is to 1) determine the students perceptions of the components of SIM and to evaluate the characteristics of SIM in Cookery 7; 2) determine the mean pretest and post-test scores of the students before and after using the SIM; 3) determine the significant difference between the mean pretest and post-test scores of the students using the SIM; and 4) determine if the perceptions of the respondents on SIM related variables significantly related to their performance in Cookery 7. The research limits itself to an assessment of the respondent's answers and performances in Cookery 7. Respondents of the study were one section out of eleven sections in Grade 7 of AINHS composed of thirty students in S.Y. 2021-2022.

Methodology

This research made use of developmental and experimental research in order to have the data needed for the analysis and computations of results and findings. The researcher developed a SIM based on the MELCs of TLE in Cookery 7. The researcher used the quasi-experimental type of research specifically pretest and posttest design to measure the effect of the integration of SIM in teaching Grade Seven. The researcher developed a 40-item test that served as the pretest and posttest to Grade 7 students. The SIM was evaluated by the expert TLE teachers of AINHS. The pretest was given to the respondents before utilizing the developed SIM in the Third Quarter. The respondents utilized the SIM in Cookery 7 as their remediation; they answered all the activities and finished the remediation. And lastly, the posttest was given after using the SIM in Cookery 7.

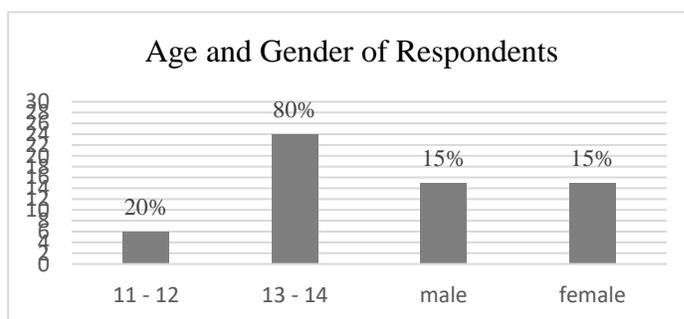
The following statistical tools were used to answer the problem raised in the study. Frequency count, mean, and percentage were used to determine the profile of the respondents in terms of age, gender, parents' educational attainment, and family monthly income. Mean and standard deviation was used to determine the student's perception on the SIM in Cookery 7. Paired sample t-test were used to determine

the significant difference in the pretest and posttest scores, (mean gain score and in the respondents' perception of the SIM in Cookery 7 at 0.01 and 0.05 level of significance). On the other hand Pearson-Product-Moment-Correlation-Coefficient was employed to test the relationship of the perception of respondents on the developed SIM and their performance in Cookery 7.

Results and Discussions

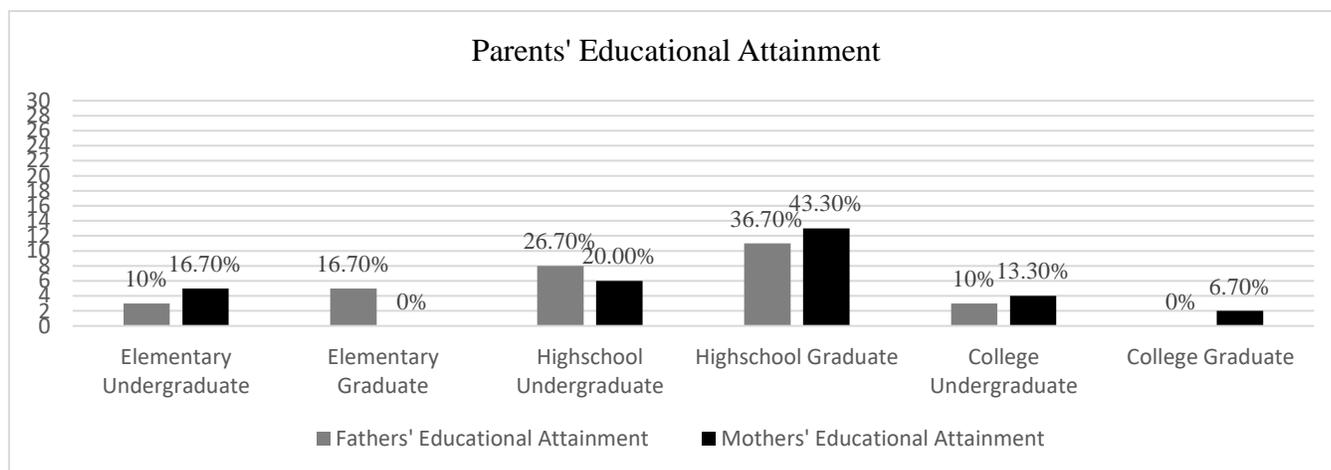
1. Profile of the respondents according to their Age and Gender

The graph shows the distribution of the respondents according to age group. It presents that the greatest number of the respondents is 13-14 years old with about 24 or 80% of the total number of respondents (30) while 11-12 years old is about only 6 or 20%. It also shows the distribution of the respondents according to their gender. It shows that 15 are male respondents and 15 are female respondents and with the same percentage of 50%.



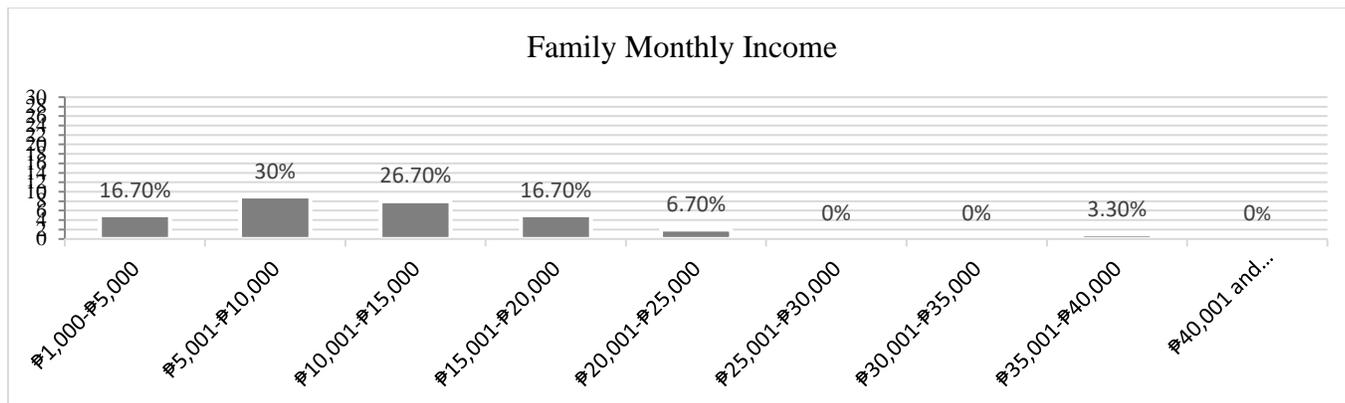
2. Distribution of Respondents' Parents' Educational Attainment

The graph shows the percent distribution of the respondents' Fathers' Educational Attainment. It shows that Highschool graduate has the highest frequency of 11 with 36.70% and the College Graduate has the lowest frequency of 0 with 0%. It also shows the percent distribution of the respondents' Mothers' Educational Attainment. It shows that Highschool Graduate has the highest frequency of 13 with 43.30% and the Elementary Graduate has the lowest frequency of 0 with 0%.



3. Distribution of Respondents' Family Monthly Income

The graph shows the percent distribution of the respondents' Family Monthly Income. It shows that ₱5,001-₱10,000 has the highest frequency of 9 with 30% and ₱35,001-₱40,000 has the lowest frequency of 1 with 3.30%. None of the respondents got a family monthly income of ₱25,001-₱30,000, ₱30,001-₱35,000, and ₱40,001 above.



4. Perception of the Students on SIM in terms of Content

The table 1 presents the results of the perception of the student on the SIM in terms of Content. Results show that provide clear idea about the topic has the highest mean of 3.87 and a standard deviation of 0.63 with a very satisfactory rating. However, the lowest mean is present sequential topic orderly with 3.77 and a standard deviation of 0.63 very satisfactory ratings. The overall mean is 3.82 and a standard deviation of 0.45 with a very satisfactory rating.

Table 1
 Perception of the Students on SIM in terms of Content

Indicators	Mean	Std. Deviation	Verbal Interpretation
The learning contents of the SIM..			
1. provide clear idea about the topic.	3.87	0.63	Very Satisfactory
2. are within the reading ability of the students.	3.83	0.59	Very Satisfactory
3. use language that are clear and easy to understand.	3.80	0.66	Very Satisfactory
4. show illustrations/pictures for ease to follow directions.	3.83	0.65	Very Satisfactory
5. present sequential topic orderly.	3.77	0.63	Very Satisfactory
Overall	3.82	0.45	Very Satisfactory

Legend: 3.50-4.00: Very Satisfactory; 2.50-3.49: Satisfactory; 1.50- 2.49: Poor; 1.00-1.49: Not Satisfactory

5. Perception of the Students on SIM in terms of Activities

Table 2 presents the results of the perception of the student on the SIM in terms of Activities. Results show that allow to discover and explore skills and talents has the highest mean of 3.97 and a standard deviation of 0.67 with a very satisfactory rating. There are two indicators with the lowest mean. First, allow to explore and manipulate exercises with a mean of 3.83 and a standard deviation of 0.70 with a very satisfactory rating. Second is enhanced creativity and work values with a mean of 3.83 and a

standard deviation of 0.59 with a very satisfactory rating. The overall mean is 3.90 and a standard deviation of 0.41 with a very satisfactory rating.

Table 2
Perception of the Students on SIM in terms of Activities

Indicators	Mean	Std. Deviation	Verbal Interpretation
The activities of the SIM..			
1. give opportunity to apply what the students learned.	3.93	0.52	Very Satisfactory
2. allow to explore and manipulate exercises provided.	3.83	0.70	Very Satisfactory
3. allow to discover and explore skills and talents.	3.97	0.67	Very Satisfactory
4. enhance creativity and work values.	3.83	0.59	Very Satisfactory
5. are arranged in step by step process which is easy to follow.	3.93	0.52	Very Satisfactory
Overall	3.90	0.41	Very Satisfactory

Legend: 3.50-4.00: Very Satisfactory; 2.50-3.49: Satisfactory; 1.50- 2.49: Poor; 1.00-1.49: Not Satisfactory

6. Perception of the Students on SIM in terms of Assessment

Table 3
Perception of the Students on SIM in terms of Assessment

Indicators	Mean	Std. Deviation	Verbal Interpretation
The assessment of the SIM..			
1. is on the level of the ability of the students.	3.93	0.52	Very Satisfactory
2. is match to the learning content of the workbook.	3.83	0.70	Very Satisfactory
3. measures level of achievement.	3.83	0.65	Very Satisfactory
4. is congruent to the learning objectives or outcomes.	3.77	0.68	Very Satisfactory
5. provide instruction that is clear and easy to understand.	3.70	0.79	Very Satisfactory
Overall	3.81	0.43	Very Satisfactory

Legend: 3.50-4.00: Very Satisfactory; 2.50-3.49: Satisfactory; 1.50- 2.49: Poor; 1.00-1.49: Not Satisfactory

Table 3 presents the results of the perception of the student on the SIM in terms of Assessment. Results show that the SIM is on the level of the ability of the students and has the highest mean of 3.93 and a standard deviation of 0.52 with a very satisfactory rating. However, the lowest mean is provided instruction that is clear and easy to understand with 3.70 and a standard deviation of 0.79 with a very satisfactory rating. The overall mean is 3.81 and the standard deviation of 0.43 with a very satisfactory rating.

7. Perception of the Students on SIM in terms of Feedback/Monitoring

Table 4
Perception of the Students on SIM in terms of Feedback/Monitoring

Indicators	Mean	Std. Deviation	Verbal Interpretation
The SIM tool..			
1. is interesting to use.	3.93	0.52	Very Satisfactory
2. develops positive attitude.	3.80	0.66	Very Satisfactory
3. enhances effective learning of Cookery concepts.	3.70	0.60	Very Satisfactory
4. motivates to master the topics in Cookery.	3.83	0.53	Very Satisfactory
5. is inspiring and encouraging to learn.	3.83	0.59	Very Satisfactory
Overall	3.82	0.37	Very Satisfactory

Legend: 3.50-4.00: Very Satisfactory; 2.50-3.49: Satisfactory; 1.50- 2.49: Poor; 1.00-1.49: Not Satisfactory

Table 4 presents the results of the perception of the student on the SIM in terms of Feedback/Monitoring. Results show that SIM tool is interesting to use and has the highest mean of 3.93 and a standard deviation of 0.52 with a very satisfactory rating. However, the lowest mean enhances effective learning of Cookery concepts with 3.70 and a standard deviation of 0.60 with a very satisfactory rating. The overall mean is 3.82 and a standard deviation of 0.37 with a very satisfactory rating.

8. Evaluation of SIM in terms of Presentation

Table 5
Evaluation of SIM in terms of Presentation

Indicators	Mean	Std. Deviation	Verbal Interpretation
1. The material is interactive and provides high quality sensory experience to all users.	4.00	0.26	Very Satisfactory
2. Structure and formats of the worksheet have enough order and clarity.	3.80	0.55	Very Satisfactory
3. The color, size of the print, spacing, quality and type of visuals are suitable for the abilities and needs of students.	3.83	0.59	Very Satisfactory
4. The appearance of the material facilitates learning and has engaging layout.	3.67	0.66	Very Satisfactory
5. It contains clear and understandable instruction.	3.83	0.70	Very Satisfactory
Overall	3.83	0.37	Very Satisfactory

The table presents the results of the evaluation of the SIM in terms of Presentation. Results show that the material is interactive and provides a high-quality sensory experience to all users has highest mean of 4.00 and a standard deviation of 0.26 with a very satisfactory rating. However, the appearance of the material facilitates learning and has an engaging layout has the lowest mean of 3.67 and a standard deviation of 0.66 with a very satisfactory rating. The overall mean is 3.83 and a standard deviation of 0.37 with a very satisfactory rating.

9. Evaluation of SIM in terms of Relevance

Table 6
Evaluation of SIM in terms of Relevance

Indicators	Mean	Std. Deviation	Verbal Interpretation
The SIM..			
1. encourages personal responsibility for learning.	4.00	0.45	Very Satisfactory
2. provides meaningful activities for the lessons.	3.83	0.53	Very Satisfactory
3. promotes higher-order thinking skills.	3.80	0.61	Very Satisfactory
4. enhances the conceptual understanding of the lesson.	3.77	0.73	Very Satisfactory
5. caters to the skills and level of intelligence.	3.77	0.68	Very Satisfactory
Overall	3.83	0.36	Very Satisfactory

Legend: 3.50-4.00: Very Satisfactory; 2.50-3.49: Satisfactory; 1.50- 2.49: Poor; 1.00-1.49: Not Satisfactory

Table 6 presents the results of the evaluation of the SIM in terms of Relevance. Results show that encourages personal responsibility for learning has the highest mean of 4.00 and a standard deviation of 0.45 with a very satisfactory rating. There are two indicators for the lowest mean. First, enhances the conceptual understanding of the lesson with a mean of 3.77 and a standard deviation of 0.73 with a very satisfactory rating. Second, caters to the skills and level of intelligence with a mean of 3.77 and a standard

deviation of 0.68 with a very satisfactory rating. The overall mean is 3.83 and a standard deviation of 0.36 with a very satisfactory rating.

10. Evaluation of SIM in terms of Adequacy

Table 7
Evaluation of SIM in terms of Adequacy

Indicators	Mean	Std. Deviation	Verbal Interpretation
1. The materials are available and enough for all of us.	4.00	0.53	Very Satisfactory
2. It provides various activities that develop us holistically.	3.87	0.51	Very Satisfactory
3. It uses different assessment tools that enhance our potentials.	3.77	0.68	Very Satisfactory
4. It provides timely feedbacks and monitor our progress from time to time.	3.93	0.64	Very Satisfactory
5. It uses plenty and meaningful ways of presenting topics to arouse our interest in doing our task.	3.97	0.61	Very Satisfactory
Overall	3.91	0.40	Very Satisfactory

Legend: 3.50-4.00: Very Satisfactory; 2.50-3.49: Satisfactory; 1.50- 2.49: Poor; 1.00-1.49: Not Satisfactory

Table 7 presents the results of the evaluation of the SIM in terms of Adequacy. Results show that the materials are available and enough has the highest mean of 4.00 and a standard deviation of 0.53 with a very satisfactory rating. However, uses different assessment tools that enhance our potential has the lowest mean with 3.77 and a standard deviation of 0.68 with a very satisfactory rating. The overall mean is 3.91 and a standard deviation of 0.40 with a very satisfactory rating.

11. Evaluation of SIM in terms of Economy

Table 8
Evaluation of SIM in terms of Economy

Indicators	Mean	Std. Deviation	Verbal Interpretation
1. There is practicability of the developed SIM as an Intervention Materials.	3.90	0.55	Very Satisfactory
2. The SIM can be easily reproduced with a low cost.	3.93	0.58	Very Satisfactory
3. It inspires and encourages students to learn more topics in Cookery.	3.83	0.65	Very Satisfactory
4. The SIM is an effective learning material.	3.90	0.71	Very Satisfactory
5. This can be used in a regular classroom teaching.	3.93	0.64	Very Satisfactory
Overall	3.90	0.39	Very Satisfactory

Legend: 3.50-4.00: Very Satisfactory; 2.50-3.49: Satisfactory; 1.50- 2.49: Poor; 1.00-1.49: Not Satisfactory

Table 8 presents the results of the evaluation of the SIM in terms of Economy. Results show that there are two indicators that have the highest mean. First, is the SIM can be easily reproduced with a low cost with a mean of 3.93 and a standard deviation of 0.58 with a very satisfactory rating. Second the SIM can be used in regular classroom teaching with a mean of 3.93 and a standard deviation of 0.64 with very satisfactory rating. However, it inspires and encourages students to learn more topics Cookery has the lowest mean with 3.83 and a standard deviation of 0.65 with a very satisfactory rating. The overall mean is 3.90 and a standard deviation of 0.39 with a very satisfactory rating.

12. Performance of the Students as to their Cognitive Skill

Table 9 presents the pretest and post-test performance of the students as to Cognitive Skills before and after using the SIM. The pretest results show that the highest percent grades have a frequency of 15

that is 50% from 75 – 79 with a Fairly Satisfactory rating and the lowest percent grade has a frequency of 2 that is 6.7% from 80 – 84 with Satisfactory rating. However, the post-test results show that the highest percent grades have a frequency of 12 which is 40% from 85 – 89 with a Very Satisfactory rating and the lowest percent grade has frequency of 8 which is 26.7% from 80 – 84 with a Satisfactory rating. It is noticeable that after using the SIM none of the students got grades of 75 – 79 and 74 below.

Table 9
 Performance of the Students as to their Cognitive Skill

Grades	Pretest			Posttest		
	Frequency	Percent	Interpretation	Frequency	Percent	Interpretation
74 below	5	16.7	Did Not Meet Expectations	0	0.0	Did Not Meet Expectations
75 – 79	15	50.0	Fairly Satisfactory	0	0.0	Fairly Satisfactory
80 – 84	2	6.7	Satisfactory	8	26.7	Satisfactory
85 – 89	5	16.7	Very Satisfactory	12	40.0	Very Satisfactory
90 – 100	3	10.0	Outstanding	10	33.3	Outstanding
Overall	30	100.0		30	100.0	

Legend: 90 - 100: Outstanding; 85 – 89: Very Satisfactory; 80 – 84: Satisfactory; 75 – 79: Fairly Satisfactory; 74 below: Did Not Meet Expectations

This just implies that the utilization of the SIM enables the student to enhance their Cognitive Skill. The result is similar to the finding of Togonon (2011), where she stressed that the students exposed to SIM perform better on the posttest than the pretest. The result of the study was also in line with the study of Soberano (2010), where the posttest of the experimental group increased evidently after the use of SIM.

13. Performance of the Students as to their Psychomotor Skill

Table 10
 Performance of the Students as to their Psychomotor Skill

Grades	Pretest			Posttest		
	Frequency	Percent	Interpretation	Frequency	Percent	Interpretation
74 below	7	23.3	Did Not Meet Expectations	0	0.0	Did Not Meet Expectations
75 – 79	11	36.7	Fairly Satisfactory	0	0.0	Fairly Satisfactory
80 – 84	6	20.0	Satisfactory	7	23.3	Satisfactory
85 – 89	5	16.7	Very Satisfactory	10	33.4	Very Satisfactory
90 – 100	1	3.3	Outstanding	13	43.4	Outstanding
Overall	30	100.0		30	100.0	

Legend: 90 - 100: Outstanding; 85 – 89: Very Satisfactory; 80 – 84: Satisfactory; 75 – 79: Fairly Satisfactory; 74 below: Did Not Meet Expectations

The table presents the pretest and post-test scores of the students to Psychomotor skills before and after using the SIM. The pretest results show that the highest percent grades have a frequency of 11 which is 36.7% from 75 – 79 with Fairly Satisfactory rating and the lowest percent grade have a frequency of 1 which is 3.3% from 90 – 100 with an Outstanding rating. However, the post-test results show that the highest percent grades have a frequency of 13 which is 43.4% from 90 – 100 with an Outstanding rating and the lowest percent grade have a frequency of 7 which is 23.3% from 80 – 84 with a Satisfactory rating. It is noticeable that after using the SIM none of the students got grade of 75 – 79 and 74 below. This just

implies that the utilization of the SIM enables the student to enhance their Psychomotor skill. The result of the study was in line with the findings of Hogan and Woodward who found out that intervention materials contributed to better learning among the students. (Cited by Soberano 2010)

14. Performance of the Students as to their Affective Skill

Table 11
Performance of the Students as to their Affective Skill

Grades	Pretest			Posttest		
	Frequency	Percent	Interpretation	Frequency	Percent	Interpretation
74 below	9	30.0	Did Not Meet Expectations	1	3.3	Did Not Meet Expectations
75 – 79	14	46.7	Fairly Satisfactory	9	30.0	Fairly Satisfactory
80 – 84	6	20.0	Satisfactory	9	30.0	Satisfactory
85 – 89	1	3.3	Very Satisfactory	8	26.7	Very Satisfactory
90 – 100	0	0.0	Outstanding	3	10.0	Outstanding
Overall	30	100.0		30	100.0	

Legend: 90 - 100: Outstanding; 85 – 89: Very Satisfactory; 80 – 84: Satisfactory; 75 – 79: Fairly Satisfactory; 74 below: Did Not Meet Expectations

Table 11 presents the pretest and post-test scores of the students' to Affective Skills before and after using the SIM. The pretest results show that the highest percent grades have a frequency of 14 which is 46.7% from 75 – 79 with a Fairly Satisfactory rating and the lowest percent grade has a frequency of 0 which is 0% from 90 – 100 with an Outstanding rating. However, the post-test results show that the highest percent grades have a frequency of 9 which is 30% from 75 – 79 with a Fairly Satisfactory rating and also 30% from 80 – 84 with a Satisfactory rating. The lowest percent grade has a frequency of 1 is 3.3% from 74 below with Did not meet expectations rating. It is noticeable that there is an increase in the grades of the students after using the SIM.

This just implies that the utilization of the SIM enables the student to enhance their Affective Skill. As stated in DepEd Order 39 s. 2012, the result of the pre-assessment will guide the teacher in determining whether the prerequisite knowledge and skills critical to understanding the new lesson have been developed.

15. Significant Difference between the Mean Pretest and Posttest Performance of Respondents in Cookery 7

Table 12
Pretest and Posttest Performance of Respondents in Cookery 7

Students Performance	Pretest		Posttest		t	df	Sig. (2-tailed)
	Mean	Std. Deviation	Mean	Std. Deviation			
Cognitive Skill	6.60	3.67	11.17	2.20	-8.496	29	.000
Psychomotor	3.97	2.70	8.03	1.85	-6.665	29	.000
Affective	4.83	2.31	8.10	2.82	-4.513	29	.000

Table 12 presents the significant difference between the pretest and posttest scores of the students using the SIM in Cookery. These results indicate that the performance of the respondents improves significantly after using the SIM in Cookery. The SIM can be also used as instructional materials in remediating slow-performing pupils. These also suggest that the development of learning materials such as SIM is an effective supplemental material to make the students clearly understand the lessons. This result is supported by the study conducted by Sinco (2018) that there was a considerable difference between the pupils' pre-test and post-test performance. The study concluded that SIMs were an effective intervention that resulted in pupils receiving higher scores on the posttest.

16. Relationship between the Perception of the Respondents on SIM-Related Variables and their Performance in Cookery 7

Table 13

Perception of the Respondents on SIM Related Variables and their Performance in Cookery 7

SIM Related Variables		Students Performance		
		Cognitive Skill	Psychomotor	Affective
Components	contents	.088	-.034	.403*
	activities	.004	-.041	.451*
	assessment	.056	.138	.278
	feedback/monitoring	-.047	.272	.382*
	presentation	.277	-.134	.131
Characteristics	relevance	.125	-.201	.415*
	adequacy	.081	-.164	.486**
	economy	.028	-.005	.500**

** . Correlation is significant at the 0.01 level (2-tailed).

* . Correlation is significant at the 0.05 level (2-tailed).

The table presents the perception of the respondents on SIM-related variables. The results show that there is no significant relationship between the perception of the student on Strategic Intervention Material related variables and their performance in Cookery particularly assessment and presentation in case of components and characteristics of SIM. It is noticeable that there is a significant relationship between the perception of the students on SIM in the rest of the Affective Skills in the components and characteristics of the SIM except for assessment and presentation.

This result indicates that the Affective Skill or the students' feelings, emotions, and attitudes towards the variables of the SIM in terms of content, activity, feedback/monitoring, relevance, adequacy, and economy has an impact on their performance in Cookery. Also, the student's perception on SIM assessment and presentation does not affect their level of understanding and performance in Cookery.

This result is supported by the study conducted by Padilla (2021), in the result of the study, it was revealed that the parts of the interactive learning module as perceived by the TLE teachers were interpreted as very high while its Characteristics were interpreted by the respondents as highly acceptable.

Conclusions

Based on the result of this study, this conclusion has been drawn:

1. It was found that there is a significant difference in the pretest and posttest scores of the students using the SIM in Cookery. Therefore hypothesis 1 is not accepted.

2. There is no significant relationship between the perception of the students on SIM related variables and their performance in Cookery in terms of cognitive, psychomotor, and affective skills particularly assessment and presentation in the case of components and characteristics of SIM respectively, hence the null hypothesis in this regard is sustained. However, the rest of the Affective Skill of the respondents is significantly related to the components and characteristics of the SIM, thus the null hypothesis in this respect is not sustained.

Recommendations

From the conclusion drawn, the following are the researchers' recommendations:

1. The DepEd may consider conducting training and seminar workshops intended for proper development, orientation, and the use of the SIM among teachers.
2. The teacher may use the SIM in Cookery made by the researcher to improve and help the students to master the MELCs in Cookery 7.
3. SIM in Cookery 7 may be reviewed and improved.
4. The teacher may improve or develop more SIM in other areas of T.L.E. to address the needs of the low-performing students and their least mastered skills.
5. For future researchers, they may conduct a similar study covering a larger number of respondents and in different schools.

References

- Abuda, Ben Fermin Q. (2019). Self-paced instructional approach using paper-engineered strategic intervention material (sim): mathvengers, war against rational equations in developing mathematics proficiency among Grade 11 Students. *Ascendens Asia Journal of Multidisciplinary Research Abstract*, 3(1), 40. ISSN: 2591-7064
- Alboruto, Venus M. (2017). Beating the numbers through strategic intervention materials (SIMs): Innovative Science Teaching for Large Classes. *AIP Conference Proceedings*. <https://doi.org/10.1063/1.4983982>
- Aranda, Yolly Ann E., Diaz, Renz Aena A., & Sombilon, Melbin I., (2019). Integrating strategic intervention materials (SIM) in Science to Low Achieving Learners. *Journal of Science Techers and Educators*. 2(1).
- Asio, John Mark R. & Jimenez, Edward C. (2020). Effect of remediation activities on grade 5 pupils' academic performance in technology and livelihood education (TLE). *Pedagogical Research*, 5(4), 1-6. <https://doi.org/10.29333/pr/8464>
- Bonitez, Aurea G. (2021). Effectiveness of science strategic intervention material in elevating the performance level of grade seven students. *International Journal of Advance Research in Education and Society*, 3(2), 18-31, ISSN 2682-8138.
- Contreras, Sheryl J. (2018). Utilization of manipulative and interactive strategic intervention material (Mi-Sim) In Chemistry 9. *International Peer Reviewed Journal*, 2, 1-65.
- Diaz, Ernaly D. & Dio, Ryan V. (2017). Effectiveness of tri-in-1 strategic intervention materials for Grade 9 students through solomon four-group design. *Asia Pacific Journal of Education, Arts and Sciences*, 4(1), 79-86.

- Dumigsi, Myrell P. & Cabrella, Jem Boy B. (2019). Effectiveness of strategic intervention material in mathematics as remediation for Grade 9 students in solving problems involving quadratic functions. *Asian Journal of Education and Social Studies*, 5(1), 1-10, Article no.AJESS.50794 DOI: 10.9734/AJESS/2019/v5i130137
- Herrera, Fernando T. & Soriano, Abraham T. (2016). The efficacy of the strategic intervention materials (SIM) to the achievement in Physics of a selected group of public-school students. *Annals of Studies in Science and Humanities*, 2(2), 22-33.
- Jamandron, Helen E. (2020). Teacher-made science strategic intervention materials a tool for remediation. *Journal of Educational Research*, 5(8), 1-15. ISSN: 2456-2947
- Jimenea, Jessa V. (2021). Least mastered competencies of cooker: bases for strategic intervention material development. *IOER International Multidisciplinary Research Journal*
- Padilla, Rose Ann P. (2021). Validation And Effectiveness of Interactive Learning Module In Cookery 9 For Self-Regulated Learning. *EPRA International Journal of Environmental Economics, Commerce and Educational Management Journal*, 8(7), 21-34. <https://doi.org/10.36713/epra0414>
- Pasion, Rodelio B. (2019). The efficacy of strategic intervention materials (SIMs) in teaching social studies among third year high school students. *SMCC Higher Education Research Journal*, 6, 175-187. <http://dx.doi.org/10.18868/sherj6j.06.010119.11>
- Salviejo, Edwin I., Aranes, Fidela Q., & Espinosa, Allen A., (2014). Strategic intervention material-based instruction, learning approach and students' performance in chemistry. *International Journal of Learning, Teaching and Educational Research*, 2(1), 91-123.
- Santiago, Gemmalyn L. & Cuenca, Zenaida M. (2021). Authentic learning activities in technology and livelihood education for an enhanced students performance in cookery. *IOER International Multidisciplinary Research Journal*
- Suarez, Michael G. & Casinillo, Leomarich F. (2020). Effect Of Strategic Intervention Material (Sim) On Academic Performance: Evidence from Students of Science VI. Review of Socio-Economic Research and Development Studies, 4(1), 20-32.
- Verano, Febbie C. & Comighud, Sheena Mae T. (2020). Level of science achievement: basis for the production of strategic intervention materials (SIMS). *Journal of Biological Science*, 6(5), 1-22.
- Villonez, Glen L. (2018). Use of strategic intervention material (SIM) as strategy and the academic achievement of Grade Seven (7) students in selected topic in earth science. *International Journal of Teaching, Education and Learning*, 2(3), 78-88. <https://dx.doi.org/10.20319/pijtel.2018.23.7888>
- Yabut, Lili N. (2020). The challenges of TLE Teachers in this new normal of education. <https://www.pressreader.com/philippines/sunstar-pampanga/20201112/281646782667411>

Copyrights

Copyright of this article is retained by the author/s, with first publication rights granted to APJAET. This is an open-access article distributed under the terms and conditions of the Creative Commons Attribution-Noncommercial 4.0 International License (<http://creativecommons.org/licenses/by/4>).