
Effectiveness of Interactive Strategic Intervention Materials in Improving the Least Learned Skills of the Grade IV Pupils in English

MICHEL P. IMPAS

Teacher III

Western Leyte College

Master of Arts in Education

Major in School Administration and Supervision

michel.impas@deped.gov.ph

Abstract —The study aimed to evaluate the effectiveness of interactive strategic intervention materials in improving the least learned skills of the Grade IV pupils in English. Utilizing the quasi-experimental research design employing the pretest and posttest for an in-depth analysis of the study, the researcher utilized the researcher-made test questions in the 3rd quarter from the Most Essential Learning Competencies (MELC). Simple Percentage, Weighted Mean and t-test of mean difference were the statistical tools used. The researcher found out that the pretest performance of the Grade IV pupils in English for the online group is fair while the offline group is good. Moreover, the posttest performance of the Grade IV pupils for both groups is very good. The data also revealed that there is a significant difference in the pretest and posttest performance for online and offline groups while there is no significant difference in the pretest and posttest performances versus the two groups. Thus, this study concluded that interactive strategic intervention materials is an effective instructional tool to supplement the modules to improve the performance of the Grade IV pupils in English. It is recommended to utilize the proposed improvement plan of the study.

Keywords — *Effectiveness, Interactive Strategic Intervention Materials, Improving, Least Learned Skills, Grade IV Pupils, English*

I. Introduction

When COVID-19 hit the Philippines, the crisis in the economy happened, development assistance comes under strain, the financing of education face major challenges, and many other agencies were affected. On the other hand, this crisis has stimulated innovation within the education sector. Teachers and other school personnel think and crafted ways on how to make learning easier and accessible to all. Basic Education (BE)-Learning Continuity Plan was crafted to address this new normal way of learning. We also have seen innovative approaches in support of education and training continuity: from radio and television to take-home packages. Distance learning solutions were developed thanks to quick responses by governments and partners all over

the world supporting education continuity, including the Global Education Coalition convened by UNESCO. We have also been reminded of the essential role of teachers and that governments and other key partners have an ongoing duty of care to education personnel.

With the present pandemic, quality education is still the focus of the government. Even though pupils are learning at home using their modules, it is also expected that teachers will be able to provide quality learning materials that will enhance learning among pupils who are learning at home. Thus, quality teaching is pursued even during this time of health crisis. Quality teaching does not only depend on the teacher's knowledge and skills but also the teacher's innovations and creativity. Every teacher must continually innovate and intervention material as well as strategies to keep abreast with the trend of the students' needs and eventually enhance the quality of the teaching-learning process. Understanding the essence of instructional materials in the learning of the students is tantamount to a lesson well-delivered to most of the students. Innovative teachers expose their students to different ways of learning, thus facilitate the diverse and unique learning styles and needs of the students as well.

Some teachers crafted strategic intervention materials to supplement the learning of learners on distance learning aside from the learning activity sheets and self-learning kits. Using these strategic intervention materials, the teachers can capitalize on the strengths and improve the self-advocacy skills of the students. The function of education is to teach one to think intensively and critically. Intelligence plus character—that is the goal of real education.” (4).

Strategic Intervention Material (SIM) refers to a teaching aid introduced into the teaching methods to stimulate the activity of the students and thereby increase their level of understanding (3). It tends to reteach the lessons which are not clear to the learners and help them gain mastery of the skills (6). SIM is designed to (a) remediate the learners especially in the least learned competencies; (b) engage the learners through interesting activities; (c) capture learners' interest by making the material pleasing to the eyes; and (d) encourage the learners to think more, do more, and learn more.

Strategic Intervention Material (SIM) is an instructional material meant to re-teach concepts and topics which are considered least learned by the students who are working below national expectations but have the potential to meet national standards if given timely support and motivation (1,7). It is a teaching-learning kit devised for the benefit of both teachers and pupils. Its goals are to encourage pupils' interest; learn Mathematics concepts and skills; and apply learned skills and concepts into real life situations. SIM is believed to be an effective strategic teaching aid for teachers in carrying out objectives on least learned lessons (3).

Bunagan (2) defined Strategic Intervention Material (SIM) as meant to reteach the concepts and skills (least mastered). It is a material given to students to help them master competency-based skills which they were not able to develop during a regular classroom teaching. It consists of both learning strategies (for students) and content enhancement (for teachers). It is a multifaceted approach to help students to become independent and successful learners. This intervention

material (SIM) focuses on the skill not mastered by students during regular class. It does not involve pretest and posttest and includes fun activities.

In almost a year of adopting distance learning specifically the modular distance learning modality, it was found out that among the subjects in Grade IV, most of the pupils had a hard time in answering the English modules due to difficulty in understanding the concepts and most of the learning facilitators had little knowledge on the topics discussed in the modules.

Republic Act No. 10533 (5), otherwise known as “Enhanced Basic Education Act of 2013”, section 5 of the curriculum development states that the production and development of locally produced teaching materials shall be encouraged, and approval of these materials shall devolve to the regional and division education units.

Thus, the researcher aims to develop an interactive strategic intervention material as an instructional tool towards the improvement of the least learned skills of the Grade IV pupils in English. A proposed improvement plan was formulated based on the findings of the study.

It is in the rationale that the researcher who is currently teaching in the above-mentioned local would like to delve into worthy research undertaking that will benefit the school he is currently teaching and that of his Graduate Program.

This study determined the effectiveness of interactive strategic intervention materials in improving the least learned skills of the Grade IV pupils in English in Montebello Central School Kananga III District, Leyte Division. A proposed improvement plan was formulated based on the findings of the study.

Specifically, this study sought to answer the following questions:

1. What is the pretest performance of the Grade IV pupils in two groups (off-line and on-line) in English before the utilization of the developed interactive strategic intervention materials?
2. What is the posttest performance of the Grade IV pupils in two groups (off-line and on-line) in English after the utilization of the developed interactive strategic intervention materials?
3. Is there a significant difference on the pretest and posttest performances of the Grade IV pupils in English before and after the utilization of the developed interactive strategic intervention materials?
4. What can improvement plan be proposed based on the findings of this study?

II. Methodology

Design. This study employed the Quasi-Experimental research employing the pretest and posttest design to evaluate the effectiveness of interactive strategic intervention materials as an instructional tool towards the improvement of least learned skills among the Grade IV pupils in two groups (off-line and on-line) in English. Montebello Central School, Kananga III District, Leyte Division is the main locale of the study. The 26 Grade IV pupils enrolled in the said locale are the main respondents of the study and a 30-item researcher-made test question which covers the 3rd quarter skills in the MELC was used. This research focused on evaluating the effectiveness of interactive strategic intervention materials for off-line and on-line learners. A Proposed Improvement Plan based on the findings of the study is the output.

Sampling. There are 26 Grade IV pupils involved in this study. An researcher-made test was distributed and administered personally with consent from the Local IATF and strictly following the prescribed Health Protocol.

Research Procedure. The researcher prepared the research design and tools to be utilized in the study. Approval and recommendation from the Panel of Examiner of the Graduate Studies was sought. A letter request to conduct this study was forwarded to the Office of the Schools Division Superintendent. Upon approval, permission from the District Supervisor and School Head was secured before the actual gathering of data. Validation of the instruments through the School Head and District Supervisor was sought. Orientation of the participants and their parents was done during the conduct of home visitation of the researcher who is at the same time the teacher adviser. Permission from the Barangay was secured. After the pretest was conducted, pupils were given intervention using the interactive strategic intervention materials for the least learned skills in English. After the four-week intervention, posttest was administered. Data were tallied and submitted for statistical treatment. Analysis and Interpretation of Data. Making of Proposed Improvement Plan followed.

Ethical Issues. The right to conduct the study was strictly adhered through the approval of the Schools Division Superintendent of the Division, District Supervisor of the District, and school principal. Orientation of the respondents was done using face to face modality. In the orientation, issues and concerns were addressed, and consent to be included in the study were signed.

Treatment of Data. The Simple Percentage and Weighted Mean was employed to evaluate the pretest and posttest performance of the Grade IV pupils. T-Test of mean difference was used to determine the significant difference between the pretest and posttest.

III. Results and Discussion

Table 1
Performance of Grade IV Pupils Before Intervention (N=26)

Score Range	Description	ONLINE		OFFLINE	
		Frequency	%	Frequency	%
25-30	Excellent	0	0	0	0
19-24	Very Good	0	0	0	0
13-18	Good	0	0	7	54
7-12	Fair	13	100	6	46
1-6	Poor	0	0	0	0
Total		13	100	13	100
Weighted Mean		8.20	Fair	13.11	Good

Table 1 presents the performance of the Grade IV pupils before the intervention. The table revealed that the pretest performance of the Grade IV pupils on on-line access has a weighted mean of 8.20, which is interpreted as fair. This means that all the 13 pupils who took the test got the score of 7-12, which is interpreted as fair. This implies that these pupils need intervention to improve their performance.

Likewise, this table also presents the pretest performance for Grade IV pupils who have no access or offline. The table revealed that the pretest performance of the Grade IV pupils with no access or offline has a weighted mean of 13.11 which is interpreted as good. This means that these pupils got the scores between 7 to 18. This implies that these pupils also need intervention to improve their performance.

Table 2
Performance of Grade IV Pupils After Intervention (N=26)

Score Range	Description	ONLINE		OFFLINE	
		Frequency	%	Frequency	%
25-30	Excellent	0	0	2	15
19-24	Very Good	13	100	11	85
13-18	Good	0	0	0	0
7-12	Fair	0	0	0	0
1-6	Poor	0	0	0	0
Total		13	100	13	100
Weighted Mean		22.40	Very Good	23.17	Very Good

Table 2 presents the performance of the Grade IV pupils with online and offline interactive strategic intervention materials after the intervention. The table revealed that the pupils with online access to the interactive strategic intervention materials has a weighted mean of 22.40, which is interpreted as very good. This means that all the 13 pupils got a score of 19-24. This implies that the interactive strategic intervention materials given to them as instructional tool is effective.

Moreover, this table also shows the posttest performance after given the offline interactive strategic intervention materials. The table revealed that the posttest performance after given the offline interactive strategic intervention materials has an average mean of 23.17, which is interpreted as very good. This means that of the 13 pupils, 2 or 15% got the score of 25-30 which is excellent, while 11 or 85% got the score of 19-24, which is very good. This implies that the offline interactive strategic interventions materials provided to the pupils as instructional tools to improve their performance is also effective.

Table 3
Test of Difference (N=26)

Aspects	Test Scores		Computed T	Critical T	Decision	Interpretation
	Pre	Post				
ONLINE	8.20	22.40	2.802	0.134	Reject H _o	Significant
OFFLINE	13.11	23.17	2.812	0.134	Reject H _o	Significant
ONLINE VS OFFLINE	22.40	23.17	0.236	1.22	Fail to Reject H _o	Not Significant

Table 3 presents the test of difference between the pretest and posttest performance of the online and offline group of pupils before and after the intervention. It was revealed on the table that the computed t of 2.802 is greater than the critical value of 0.134 at .05 level of significance so, the null hypothesis is rejected. This means that there is a significant difference between the pretest and posttest performance of Grade IV pupils in the online group. The pretest weighted mean of 8.20 has increased to 22.40 in the posttest which shows a significant difference. This implies that the online interactive strategic intervention materials is an effective instructional tool to improve the performance of the pupils in English.

Moreover, this table also shows the test of difference between the pretest and posttest performances of the Grade IV pupils in the offline group. The table revealed that the computed value of t of 2.812 is greater than the critical value or t of 0.134 at .05 level of significance, so the null hypothesis is rejected. This means that there is a significant difference between the scores in the pretest and posttest among the Grade IV pupils in the offline group. The pretest weighted mean of 13.11 has increased in the posttest with a weighted mean of 23.17 in the offline group after given the interactive strategic intervention materials. This implies that the offline interactive strategic intervention materials is an effective instructional tool to improve the performance of the pupils. This implies further that during this time of pandemic where pupils are learning at home using the modules, it is very important to provide supplementary learning materials to improve their performance and to master the skills based on the MELC.

Finally, this table also shows the test of difference between the online and offline groups of pupils. The table revealed that the computed value of t of 0.236 is less than the critical value or t of 1.22 at .05 level of significance, so the null hypothesis fails to reject. This means that there is no significant relationship between the performance of the Grade IV pupils in the offline and online group. The pretest performance of 22.40 is greater than the posttest performance of 23.17, which

is not significant. This implies that regardless of the online or offline interactive strategic intervention materials used, still the learning materials presented is effective.

IV. Conclusion

The data revealed a significant difference between the pretest and posttest performance of the Grade IV pupils in online and offline groups. However, it was found out in this study that there is no significant difference between the scores of the pretest and posttest between the two groups. Therefore, this study revealed that the interactive strategic intervention materials for online and offline groups of pupils is an effective learning material to improve the performance of the pupils.

V. Recommendations

1. The Proposed Improvement Plan formulated should be utilized;
2. School Heads should encourage teachers to formulate or craft innovative materials to help improve the performance of the pupils;
3. School Heads should conduct trainings for the formulation of interactive strategic intervention materials;
4. Teachers should try themselves to formulate and craft innovative materials to supplement the modules given to the pupils;
5. School Administrators should provide appropriate technical assistance to the teachers on the formulation of interactive strategic intervention materials;
6. School Heads should encourage teachers for further learning on innovations and research; and
7. Future researchers should replicate this study to include different locale and include different variables aside from the mentioned in this study.

ACKNOWLEDGMENT

This study is in partial fulfillment of the requirements for the Degree Master of Arts in Education major in School Administration and Supervision. Special thanks are extended: To Dr. Jasmine B. Misa, thesis adviser; Dr. Bryant C. Acar, Dr. Annabelle A. Wenceslao, Dr. Elvin H. Wenceslao, panel of examiners; District and School Head and teachers of Montebello Central School; his father, siblings, relatives and friends, and To God, her deepest and sincerest gratitude.

REFERENCES

- [1] Barredo KJ, 2013. Evaluating the effectiveness of using strategic intervention material in improving the academic performance in science
- [2] Bunagan, F. (2012). Strategic Intervention Materials. Retrieved from <http://www.slideshare.net/felixbunagan/strategicicinte>.
- [3] Dy, L. (2011). Teaching Physics through strategic intervention materials.
- [4] Pasion, R. (2019). The Efficacy of Strategic Intervention Materials (SIMS) in Teaching Social Studies Among Third Year High School Students. ResearchGate.
- [5] Republic Act 10533. An Act Enhancing the Philippine Basic Education System by Strengthening its Curriculum and Increasing the Number of Years for Basic Education, Appropriating Funds Therefor and For Other Purposes. Official Gazette of the Republic of the Philippines.
- [6] Rodrigo, R., 2015. Importance of Strategic Intervention Materials
- [7] Salviejo E, Aranes F, Espinosa E., 2014. Strategic intervention material-based instruction, learning approach and students' performance in Chemistry. International Journal of Learning, Teaching and Educational Research.

AUTHOR'S PROFILE



MR. MICHEL P. IMPAS

The author is born on March 9, 1987, at Brgy. Libagong, Villaba, Leyte Philippines. He is presently residing at Brgy. Montebello, Kananga, Leyte. He finished his elementary education at Aguiting Elementary School, Brgy. Aguiting, Kananga, Leyte in the year 2000 and pursuing his journey for education and able to finish his secondary education at Kananga National High School, Brgy. Poblacion, Kananga Leyte in the year 2004. He enrolled and finished his Bachelor in Elementary Education in Visayas State University, Villaba Campus, Villaba Leyte. Recently, he enrolled his Master of Arts in Education major in School Administration and Supervision at Western Leyte College, Ormoc City.

He is currently the Grade 4 teacher in Montebello Central School, Kananga III District, Montebello Kananga Leyte, holding a position of Teacher III.

He received series of awards and recognition from the District and Division Level. He also attended series of trainings and seminars conducted in the Division and District.