

# Exploring the Issues and Challenges on the Implementation of Science Strategic Intervention Material (SIM): A Qualitative Inquiry

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## Abstract

This qualitative-phenomenological study determined the experiences of teachers in Kapalong East District, Davao del Norte on the deteriorating academic performance of students in the field of Science. As stipulated in the DepEd Order No. 39, s. 2012, interventions have to be made in order to address the learning gaps. The use of Strategic Intervention Material (SIM) has been one of the suggested intervention materials. The purpose of this study was to explore and understand the experiences of Science teachers who implemented SIM and how they coped with the issues and challenges. This study was gleaned through the Lev Vygotsky's Sociocultural Theory (1935) and Keller's Personalized System of Instruction (1968). Fourteen (14) teachers participated in the in-depth interview and focus group discussion. They were selected through purposive sampling technique. There were issues emerged in the problem namely; time and budget constraints; lack of teachers' competence; students' responses and support from administration; suitability; replicability and durability of materials. To address the issues and challenges they mentioned ways: time-management; optimism; support from experts; motivating one's self and proper planning. They also cited insights they could share to others: SIM is way of coping least learned competency; useful and helpful; and develops teachers' satisfaction. With the results, they implied that the teachers need to become passionate in teaching as well as having a huge responsibility in the school to help students and to provide materials to uplift academically the at risk learners. The results were deemed significant to public school teachers I, II, III, master teachers, school heads, and other stakeholders to create programs and conduct trainings and seminars that would develop the skills of teachers in implementing strategic intervention material.

Keywords: education, intervention, material, public school teachers, qualitative-phenomenological research, strategic, Kapalong East District, Davao del Norte, Philippines

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## INTRODUCTION

The learners are the center of the educative process and the primary goal of teaching must be to provide appropriate and effective instruction to students. In this technological age, the impact of Science and Technology on people's lives will persist to exist and increase in the coming years. However, learners perceive Science as a difficult subject regardless of its importance thus, student achievement in this field is relatively low. Teachers are responsible to make remedial and intervention to address the problem and provide the necessary materials for use in teaching.

The Department of Education (DepEd) had employed a solution for the deteriorating academic performance of students in the field of Science and Technology. As stipulated in the DepEd Order No. 39, s. 2012, interventions have to be made in order to address the learning gaps. The use of Strategic Intervention Material (SIM), is identified as one of the suggested various intervention form that can bridge the learning gaps. However, the implementation of SIM as intervention material in teaching Science has led to much issues. These includes the preparations, time constraints, support from administration and teachers' competence.

In South Africa, the release of the 2015 Trends in International Mathematics and Science Study (TIMSS) reported that learners have poor performance in Mathematics and Science. The poor performance was linked to outdated teaching practices and lack of basic content knowledge by teachers resulting to low proficiency of students. Thus, teachers needed to implement strategic intervention material and reteach the content to enable student grasp the subject matter.

In Calamba City, Philippines, a study conducted by Villareal (2014) revealed that the Science skills and competencies that were expected to the students were not on highest level. Students found it hard to organize and understand each topic due to learning gap. Intervention materials that used scaffolding technique was an effective way of improving students' competence. However, many teachers viewed that making intervention materials were quite expensive and required much time in the process.

In many schools of Kapalong East District, Science competency is the least managed area. Least learned competencies in Science curriculum are increasing. That is for this reasons, teachers made different interventions to address least learned competency problem. The use of strategic intervention material is badly needed. The implementation of strategic intervention material can significantly help the students in their least learned competency and skill. However, despite these advantages, teachers encounter barriers during preparation and implementation proper of the SIM which leads to much issues nowadays.

With this my interest urged me to conduct this study which focused on the lived experiences, issues and challenges and perceptions of Science teachers on the implementation of SIM. I have read several studies that dealt with this topic but, I have not come across a study which is qualitative phenomenological research. Also, there were many studies conducted related to this topic but mostly the results obtained are limited to its effectiveness.

Moreover, the findings of this study are important to educational stakeholders and may provide insights to elementary educators specifically Science educators, educational administrators and educational researchers regarding the lived experiences and issues and challenges of Science teacher on the implementation of SIM.

### Purpose of the Study

The purpose of this phenomenological study was to explore and understand teachers' experiences and perspectives particularly issues and challenges on the implementation of strategic intervention material (SIM).

At this stage of research, SIM was generally defined as instructional devices devised by the teacher as prescribed by the Department of Education to increase the knowledge and skills of students.

### Research Question

This study sought to answer the following questions:

1. What are the issues and challenges on the implementation of Science SIM?

2. How do teachers cope with the different issues and challenges in the implementation of SIM?
3. What are insights of the teachers on the implementation of SIM that can be shared to others?

### Theoretical Lens

This study was gleaned on Lev Vygotsky's sociocultural theory (1934) and his concept of the zone of proximal development (ZPD). The zone of proximal development is the distance between what children can do by themselves and the next learning that they can achieve with competent assistance.

The researcher affixed this theory because the zone of proximal development is an area between what a learner can do independently (mastery level) and what can be accomplished with the assistance of a competent adult or peer (instructional level) through teacher made intervention material.

Moreover, this study was viewed on Keller's Personalized System of Instruction – PCI (1968). It stated that PCI is a small self-paced modularized units of instruction were study guides direct learners through the modules. Mastery learning requires that the desired student performance be stated precisely using learning objectives.

This was related to what the investigation was focused into, SIM is a student-paced modularized instruction where student could learn by their own based on the learning objectives that has been prescribed and set by the teacher.

Furthermore, this study was hinged on the lens of Novak's Theory of Human Constructivism (1977) stated that a meaningful learning underlies the constructive integration of thinking, feeling, and acting, leading to human empowerment for commitment and responsibility. Students must not only read concepts, but must also design and carry out experiments.

In this theory, the teacher must design a learning experiences which would attend to three domains and would need an equally important obligation to inform themselves of what their students already know, so that they could teach accordingly.

This study was also fastened on DepEd Order No. 39, s. 2012, interventions have to be made in order to address the learning gaps. The use of Strategic Intervention Material (SIM), has been identified as one of the suggested various intervention form that can bridge the learning gaps. The use of intervention materials has been highly regarded as tools for remediating poor achievements of the learner.

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## METHODOLOGY

This part offers the methodology used in this qualitative study. The methods and procedures that were used in the conduct of the study are presented in this section. These include research design, research participants, ethical consideration, role of the researcher, data collection, data analysis, trustworthiness of the study, and ethical consideration.

### Research Design

This research was qualitative in nature specifically phenomenological study for it explored the structures of consciousness in human experiences, their coping mechanisms, and insights. Qualitative research is referred to as naturalistic research because the researcher views the world of the participant(s) to gather information on the research topic (Anthony, 2014).

The study employed qualitative approach where 14 public elementary Science teachers from Kapalong East District participated through interviews and group discussions design for both male and female teachers. Since it was essential that all participants experienced the phenomenon being studied, criterion sampling should work well to show all individuals in my study had experienced the same phenomenon (Creswell, 2015).

Furthermore, Creswell (2013) defined phenomenological research as inquiry into a phenomenon by studying a group of individuals who have lived this experiences. This type of research design focuses on common experiences with the phenomenon. Therefore, a phenomenological research design is used to collect the data and address the research questions develop for this study.

In this research study, the phenomenological design was the most appropriate in which the researcher identified the essence of human experiences about a phenomenon as described by participants (Creswell, 2007). I employed phenomenological research in this study because I gathered the different experiences of some teachers in schools in Kapalong East District regarding issues and challenges on the implementation of SIM.

In order to achieve comprehensive descriptions of the study, I employed in-depth interview which focused on three research questions and interview guide regarding the issues and challenges on the implementation of SIM. I also used focus group discussion in generating broad overviews of issues and challenges of the participants' concern to the cultural groups of subgroups represented (Lochmiller & Lester, 2016).

### Research Participants

Creswell (2013) advised that a phenomenological study conducted with a heterogeneous group should have a minimum of 3 to a maximum of 15 individuals.

In this study, there were 14 participants teaching in different schools of Kapalong East District. Out of 14 teachers, seven (7) teacher participants for the in-depth interview and another seven (7) teachers for focus group discussion shared their experiences on the implementation of SIM. I explained to them the objectives as well as the methodology of this study for them to be guided in answering the interview guide question.

The participants were identified through purposive sampling. Creswell (2007) defined purposive sampling as selecting participants who meet certain criteria or experiencing the phenomenon under study. The researcher selected the participants who are Science teachers who implement SIM (both male-female in the said district. Participants were selected by the researcher and asked for a voluntary participation.

The criteria of the selection of teachers from different schools of Kapalong East District were made based on the following dimensions. The teacher participants were both male or female public elementary Science teacher I, II, III and master teachers. Also, the teacher participant shared experience at least two - year of implementation and utilization of SIM in Science subject.

The participants were informed through personal contact with the interviewer. In qualitative research, the participants were informed of the said interview (Boyce & Neale, 2012), the time and place of the interview (Lochmiller & Lester, 2016), and the time that the participants suggested from their own convenience (Hancock, 2013).

### Data Analysis

The results of the gathered data were the bases for the conclusions, the implication for practice and recommendations for further research. Creswell (2013) developed four steps in data analysis.

Analysis of the data initially began after the collection period. The data collected were reviewed, synthesized, and transcribed in order to keep careful and detailed notes. The analysis began after the formal data collection period was completed. The qualitative data were analyzed and scrutinized collectively to provide a holistic picture.

The study employed thematic analysis in analyzing the collected and gathered data. It is a method of analyzing and reporting the pattern of themes with the data. It involves focusing on identifying and describing both implicit and explicit ideas within the data which is the theme. Mack et al. (2005) added that thematic analysis is considered as the most commonly used method of analysis in qualitative research.

The answers of the participants were analyzed. Using thematic analysis on this study was very helpful because it was flexible and it was a useful research tool that granted a substantial, complex, and rich account of the data.

The data from the result of the interview were transcribed. The responses of the participants were transcribed. I formulated the core ideas as well as major themes that emerged from the three main questions and sub-questions that were asked to the participants. The entire transcripts and the transcription reference used as bases in formulating, deriving on the core ideas as well as major themes and grouping them with other similar themes that have been emerged out from the experiences, issues and challenges and coping mechanisms of public elementary Science teacher under this study.

I also translated the responses and statements of the participants which answered through vernacular language. The translated data were encoded and analyzed for proper coding of the essential themes and thematic statement.

Drawing conclusion and verification was the last step of analyzing the data. It was essential to review and revisit the data many times to double check and verify the existing conclusions. These conclusions were generated from the descriptive themes that came out from the interview of the participants, these were woven together to make it a useful material for results and discussions.

### **Trustworthiness of the Study**

In qualitative research, trustworthiness had become an important concept because it allowed researchers to describe the virtues of qualitative terms outside of the parameter that were typically applied in quantitative research. It was easy for a qualitative research to be questioned or discredited due to the amount of bias as the researcher worked to analyze the data.

Lincoln and Guba (1985) as cited by Pandey and Patnaik (2014) posited that trustworthiness of a research study was important to evaluating its worth. Trustworthiness involved establishing credibility, transferability, dependability and confirmability. According to Andrew K. Shenton's framework on the "Strategies for Ensuring Trustworthiness in Qualitative Research Projects", the four components should be considered by qualitative researchers in pursuit of a trustworthy study. By addressing similar issues, the components or constructs corresponded to the criteria employed by the positivist investigator (Shenton, 2004).

**Credibility** is defined as the confidence that can be placed in the truth of the research findings (Holloway & Wheeler, 2002 as cited by Anney 2014). It involves in establishing that the results are believable. It deals with the question on how congruent are the findings with reality. It refers to the confidence in the truth of the findings. Lincoln & Guba (1985) as cited by Shenton (2005) argue that ensuring credibility is one of most important factors in establishing trustworthiness. They proposed series of techniques that can be used for establishing credibility. These techniques are prolonged engagement, triangulation, iterative questioning, and member checking.

Prolonged Engagement as suggested by Lincoln and Guba (1985) between the researcher and the participants would help gain an adequate understanding of an organization and establish trust between them. This helps the researcher to gain an insight into the context of the study, which minimizes the distortions of information that might arise due to the presence of the researcher in the field.

In this study, I spent adequate time and built rapport with the Science teacher participants. I set the time and day prior to the said interview and extended more time in the setting or field of interview to improve the trust of the participants and provide greater understanding on their culture and context.

Triangulation, as suggested, may involve the use of many methods. In this study the researcher used individual interviews, which form the major data collection strategies for qualitative research and correlates to the field notes from direct observations of participants to the answers of in-depth interview and documents. While individual interviews suffer from some common methodological shortcomings since both are interviews of a kind, their distinct characteristics also result in individual strengths (Brewer & Hunter, 1989).

In this study, I had 14 participants who were Science teachers for in-depth interview. Persistent observation before and during the in-depth interview was done. The gathered data were triangulated to support the main method of this study. I made sure that the participants' answers from the in-depth interview correlated to the direct observations of the researcher.

To further address credibility, iterative questioning was also used in this study as suggested by Lincoln and Guba (1985) that in order to elicit detailed data, iterative questioning is important in which the researcher returned to matters previously raised by the participants and extracted related data through rephrased questions.

Iterative questioning was used in this study in order to elicit detailed data. The researcher returned to matters previously raised by the participants who were Science teachers who shared their experiences about the study and extracted related data through rephrased questions.

Furthermore, member checking also was done as suggested by Lincoln and Guba (1985). It is the single most important provision that could be made to bolster a study's credibility. Checks relating to the accuracy of the data may take place "on the spot" in the course, and at the end, of the data collection dialogues.

In this study, the Science teacher participants were asked to read the transcripts of dialogues in which they participated. Here the emphasis should be on whether the participants considered that their words match what they actually intended, since, if a tape recorder had been used, the articulations themselves should at least had been accurately captured. This allowed them to clarify what their intentions were, correct errors, and provide additional information if necessary. This also confirmed the truthfulness of the summary that these are all their experiences (Streubert & Carpenter, 1995).

Furthermore, in order to ensure credibility, participants were allowed to set, verify, evaluate, disapprove or check the transcripts, records and the summary of results. I applied different techniques to ensure that the participants honestly gave the information needed for the study. To achieve it, I developed a good rapport with the teacher participants so that accurate information was gathered. These methods were suggested by Shenton (2004) saying that these methods are useful to saturate data.

**Transferability** as stated by Lincoln and Guba (1985) cited by Pandey and Patnaik (2014) refers to the degree to which the results of qualitative research can be generalized or transferred to other contexts or settings (Trochim, 2006). Bassey (1981) proposes that, if researchers believe their situations to be similar to that described in the study, they may relate the findings to their own positions. This was supported by Lincoln and Guba (1989) and Firestone (1993) as cited by Pandey and Patnaik (2014) who suggest that it is the responsibility of the researcher to ensure that sufficient contextual information about the fieldwork sites is provided to enable the reader to make such a transfer.

Thus, Guba (1999) suggested having provision of background data to establish context of study and detailed description of the phenomenon in question to allow comparisons to be made. Detailed description of the method and phenomenon can be an important provision for promoting credibility as it helps to convey the actual situations that have been conducted and, to an extent, the contexts that surround them. Without this insight, it is difficult for the reader of the final account to determine the extent to which the overall findings “ring true” (Shenton, 2005).

In order to address transferability, I had detailed and thick description of the methodology and the phenomenon studied and assured that the data were on file to make this study more credible and transferrable. Also, the Science teacher participants’ documents, answered transcripts and data analysis were included in the appendices and served as reference for future researcher. All the copies of documents in the entire study were kept by the researcher.

**Dependability** is important to trustworthiness because it establishes the research study’s findings as consistent and repeatable (Patton, 2005). Lincoln and Guba (1995) stressed the close ties between credibility and dependability, arguing that, in practice, a demonstration of the former goes some distance in ensuring the latter. This may be achieved by “overlapping methods”, such as the focus group and individual interview.

In order to ensure dependability in my study, I used “overlapping methods” such as focus group discussion and in-depth interview during the conduct of this study. Voice recorder was used to assess my study especially in retrieving information out from the Science teachers. Dependability issue would be addressed more directly if the processes within the study should be reported in detailed account, thereby enabling a future researcher to repeat the result work if not necessarily to gain the same result. The result design was viewed as prototype model. It was supported by Siegle (2006) who explained dependability must provide its audience with evidence that if it were replicated with the same or similar participants in the same context, its findings would be repeated.

**Confirmability** refers to a degree of neutrality or the extent to which the findings of a study are shaped by the respondents and not researcher’s bias, motivation, or interest (Guba, 1985) cited by Anney (2014). To ensure the issue of confirmability, Anney (2014) suggested the following provisions made by researchers: triangulation to reduce effect of investigator bias, admission of researcher’s beliefs and assumptions, in-depth methodological description to allow integrity of research results to be scrutinized, and the creation of audit trail.

Moreover, detailed methodological description enables the reader to determine how far the data and constructs emerging from it may be accepted. Critical to this process is the “audit trail”, which allows any observer to trace the course of the research step-by-step via the decisions made and procedures described as suggested by Guba and Lincoln (1995). An audit trail is a transparent description of the research steps taken from the start of a research project to the development and reporting of findings.

In this study, I kept all the records regarding what had been done in the conduct of the study so other personnel such as the research panel and adviser be able to check and see if the interpretations and conclusions can be traced to legitimate sources.

To further address the issues of dependability and confirmability. I relied on an independent audit of my research methods by a competent adviser (Lincoln & Guba, 1985). My adviser was Dr. Exelsis Deo Deloy, an expert in this field with his wisdom and experience in qualitative research. Everything in my qualitative research was viewed, checked, assessed, and evaluated by my adviser thoroughly including all the data analysis and the tools and documents that I used.

All concrete measures in the trustworthiness were addressed in order to value the transparency of the conduct of the study and integrity of the findings.

### **Ethical Consideration**

In having an ethical consideration in research studies, Belmont Report (1979), as cited by Podgurski (2016) summarized three basic principles involving human subjects. First, respect for persons; individuals should be treated as autonomous agents. It also emphasized that the investigator should ensure that the subject has received a full disclosure of the nature of the study, the risks, benefits and alternatives, with an extended opportunity to ask questions.

Belmont Report (1979) stressed that it is necessary to maximize possible benefits and minimize possible harms, and that the investigator should give forethought to the maximization of benefits and the reduction of risk that might occur from the research. And lastly justice, fairness in distribution should be considered and also the equitable selection of participants.

The first principle, respect for persons, asserts that research participants should be treated as autonomous individuals- that means they are independent, self-governing, capable of making decisions for themselves as long as they are given sufficient information to make those decisions. This principle forms the basis of informed consent (Creswell, 2007).

In this study, I provided written consent letter to Science teacher participants and explained to them the full information about the research, both risks and benefits, and allowed them making the decision for them as they participate. As part of the consent, I included the participant’s right to withdraw from the study, the focus of the study and methods to be employed, statements surrounding confidentiality, the right to check and modify the transcripts and a signature of both the researcher and the participant. I asked permission from the participant to record all necessary information during the conduct of the study. Furthermore, I ensured that my research participants participated voluntarily or without coercion.

The second principle, the principle of beneficence, refers to making efforts to secure the well-being of research participants, or to maximize the possible benefits of the research and minimize its possible harm. The key to this principle is, since all research has both risks and benefits, to make sure they balance. Benefits to research might develop friendship with the researcher or other

participants, knowledge or education gleaned from participation or the opportunity to do well for society or receive the esteem of others (Creswell, 2007).

In this study, I used coding for In-depth – interview (IDI) and Focus-Group Discussion (FGD) to ensure the confidentiality of the responses and the identity of my research participants. In addition, I ensured that the outcome of the research was positive and beneficial to my research participants. Through this study, the Science teacher participants were benefited in the sense that their voices could be heard especially those teachers who experienced difficulty on the implementation of SIM. I made necessary arrangements in order to not disrupt the regular flow of the classes. Moreover, participants did not spend any amount during the interview. Sensible tokens were given to them as a sign of recognition to their efforts on the study.

The last tenet of Belmont Report is the principle of justice. All classifications of people (race, gender, ethnicity, age, etc.) should be equally subjected to the risks and benefits of research, and people should be included or excluded only for reasons that have to do with research questions or hypothesis (Adams, 2008).

To ensure justice, I made sure that the participants who were the Science teachers knew the results regarding this study. All the findings and results were disseminated to the participants after all the data analyzed. Hence, they were given opportunity to validate and modify their answers by giving them a copy of their responses. I also ensured to protect the rights of the participants and accommodated them properly.

To ensure that the personal preferences of the participants, I ensured that the true identities of the Science teacher participants were hidden. They were assigned with an alias and rest assured that the information that they shared would not be identifiable to ensure confidentiality and privacy. The data gathered and findings of the study were kept in strict confidentiality by the researcher, put into written and checked by the participants. Data were retained until the completion of the study and the final defense.

More so, according to Bryman and Bell (2007), research participants should not be subjected to harm in any possible way. To address this, informed consent were given to the participants to ensure that they only participate voluntarily and not forced. The use of offensive, discriminatory or other unacceptable language were strictly avoided in the formulation of questionnaire or interview guide questions.

Furthermore, ample level of confidentiality of the research data should be ensured. To address this, I assigned code names to all the participants to secure the privacy and anonymity. Acknowledgements of works of other authors in the study were properly observed and recognized.

The researcher used APA format for referencing system in giving merit for the work of authors cited in the study. Any treachery about the aims and objectives of the research, was avoided; maintenance of the highest level of objectivity in discussions, and analysis during the research were observed. Any type of ambiguous information as well as representation of primary findings in a biased way was avoided.

Moreover, Bryman and Bell (2007) cites the RA 10173 or the Data Privacy Act 2012 which states that, the state shall protect the fundamental human right of privacy, of communication while ensuring free flow of information to promote innovation and growth. The state recognizes the vital role of information and communication technology in nation building and its inherent obligation to ensure that personal information in information and communication system in the government and in the private sector are secured and protected.

To address concerns in Data Privacy Act of 2012, the researcher informed the participants on the purpose of the research, which perception or data were collected, how the data were stored and used, and who could have only access the data. I secured privacy and anonymity to all the participants by assigning code names. I hoped that through this study, we were able to shed light and answers to questions pertaining to the issues and challenges on the implementation of SIM.

All concrete measures in the ethical considerations of this study were addressed to safeguard respect for persons, beneficence, and justice.

## RESULTS

Presented in this part are the issues and challenges as experiences of Science teachers, their coping mechanism, as well as their insights on the implementation of Strategic Intervention Material which emerged from the information gleaned through in-depth interviews and focus group discussion. This chapter showcases the relevant points and important results of the study.

### Issues and Challenges of Science Teachers on the Implementation of SIM

After analyzing the sentiments of the participants about the issues and challenges on the implementation of Science Strategic Intervention Material (SIM), six (6) major themes emerged: (1) time constraints; (2) budget constraints; (3) lack of teachers' competence; (4) lack of students' response; (5) suitability of materials and (6) replicability and duplicability of materials.

#### Time Constraints

Time is very important in our lives and plays a significant role. Our whole life revolves around time. Time is measured by the hours, days, years and so on. Time helps us to make a good habit of organizing and structuring our daily activities. No one can escape the passing of time. Time would be a constraint since we do not own the time in the world. Sometime the time given to accomplish certain task would not be enough.

For the participants, time constraint has been one of the issues and challenges on the implementation of SIM. For them, SIM would be difficult to prepare for the implementation because of the time, it would take much to make one, it can be tedious, time-consuming during planning for the implementation and their self-time would be compromised.

This concept is linked to the responses of IDI\_03 who expressed her experiences:

*"It is not a walking in the park, we don't have it overnight, so ang atuang time because daghan kaayu tag gina himo sa classroom, daghan tag gina huna-huna, maghuna-huna paka ug SIM, why not ordinary material nalang, follow-up nlang, enhancement activity nlang. So thinking about SIM, kailangan jod nimo ug time and effort. So isa to siya ka problema kai for me nga naa sa bukid my whole weekdays is intended para sa mga bata and my weekend naa pay skwela and family. So kailangan jod nimo siya pangitaan ug time, kailangan jod nimo mag*

effort that is why for me it is really an endeavor nga dpat tahason. So kailangan jod nimo to *put your time*”

(It is not like walking in the park; it is not easy because we have a lot of things to do in the classroom added to that is thinking of SIM. Thinking about SIM, it requires time and effort. It is difficult for me to find time making the material since my whole weekdays are intended for school and my weekends are for my study and family. It is like an endeavor for me that I needed to surpass. Therefore, I need to budget my time, plan everything and exert more effort to make the material.)

In line with this, IDI\_04 states that,

*“So ang issue naku ani maam, mabahin jod imuhang time. Naay usahay nga dugay jod ka maka tulog sympre kay imuha mang himuon labaw nag mo apil kag ug contest kana.”*

(The issue is my time would be divided. There are times that I slept late at night to make SIM especially if I would join contest.)

It is supported by FGD\_03 says that,

*“Maka require jod ug dugay2 nga time to plan maam. Sympre in planning murag mao na siya imuha blueprint. Need siya ug taas pd nga panahon mag himo maam. Dili siya as easy as 1,2,3. Balik-balikan jod nimo siya kay dili man siya madala ug isa ka lingkuran kai dili lang mn ang pag himo ug intervention ang imuhang trabaho. If na plano siya ug maayu, na prepare pd ciag maayu maam, nice jd ang implementation.”*

(It requires long time to plan and prepare since planning is your blueprint for the implementation. It is not easy as 1,2,3. You need to do it over and over again because it would never be done in one setting. If it was planned and prepared well, the implementation would be better.)

Furthermore, IDI\_06 also states that,

*“Kung sa planning palang it requires much time to think for a better SIM to produce and to make best title.”*

(It requires much time to think of a better material to produce. It took long time to plan especially thinking of the best title for SIM.)

Other participants shared the same experiences as to others,

*“So far na implement mm sad naku. Pero maka compare jod q sa output lahi rajod tung output nga gi pangandaman jod ug maayu in terms sa time.” (FGD\_02)*

(I implemented it so far. I can compare the output. The output would be better if it is done with enough time.)

*“If ang SIM nga gihimu maam kay gi hatagan siya ug longer time sapag plan, pag prepare, better jod ang implementation, compare sa kadtung short lang ang time” (FGD\_05)*

(The implementation is better if the materials prepared and planned in a longer time than a shorter time.)

In addition, IDI\_02 affirmed that,

*“I have said earlier is ang planning and it takes time dili pwede nga prepare lang ng prepare kay gusto nimo. Sometime pressure kay conscious ta sa time.”*

(It is not like you would prepare because you want to make SIM. It takes time to plan for implementation. Sometimes, I feel pressure because of the time.)

Lastly, IDI\_05 also stated that,

*“SIM is a very intricate endeavor so every part is essential. As to the time and effort it affected on my implementation because I do not have all the time in the world. As a teacher daghan kug ginahuna-huna, I have my students during the class hour. At night naa koy ihuna-huna nga iklase para ugma. It takes a lot of time and effort as well. You cannot have it overnight. So kailangan you need to address those problem and issues kay para maka provide ka ug quality nga SIM.”*

(SIM is a very intricate endeavor, so every part is essential. As to the time and effort it affected my implementation because I do not have all the time in the world. As a teacher, I have a lot to consider like I have my student during class hour and at night I would plan for the class tomorrow. It takes a lot of time and effort as well. You cannot have it overnight. So you need to address those problems and issue to provide a quality SIM)

### Budget Constraints

Budget is important because having budget or enough money means that life is not a constant effort at keeping your head above the water. It is essential commodity that helps us run our lives. It enables us to give back help to people and support them.

The participants included budget constraints as one of the themes on their experiences since during implementation of SIM, they would spend own money for the material and not all the time they have money. The materials are at high cost and the budget from the administration is not enough.

In line with this, FGD\_02 shared that,

*“Implementing SIM need budget ofcourse kai mangita mn kag material nga catchy to the eyes sa bata”*

(In implementing SIM I need budget because I need to find materials that can catch the attention of the student.)

Moreover, IDI\_02 and FGD\_07 shared their common thoughts,

*“When it comes to budget, though personal budget man jod siya basta mo ingon kag strategic intervention material. Sa tinuod lang ug mo ingon kag supplies from admin dili jod enough kay ang imo divided man to how many expenses. Ang apekto ani is mahutdan jod ug budget.”*  
(IDI\_02)

(When it comes to budget, it is personal. The supplies from the administration is not enough since it is divided to other expenses in school.)

*“Sa pag budget maam, is maka kuot jod ka sa sariling bulsa kai personal mn. Dili man jod enough ang gina supply.”* (FGD\_07)

(In terms of budget, the supply from the administration is not enough that is why I need to get money from my own pocket.)

Furthermore, IDI\_05 said that,

*“Challenging siya in the sense nga kailangan nimo mag exert ug extra effort, kwarta at the same time.”*

(Challenging, in the sense that I need to exert extra effort and money as well.)

In addition, IDI\_01 expressed that,

*“Sometimes money. We are not all the time we have the budget kay naa mn tuod usahay nga dili man ta maka kwarta jod.”*

(Money, because not all the time I have budget for SIM.)

Hence, FGD\_03 added that,

*“If costly cia maam murag attractive or manipulative jod ang material unya the better pd cia. Murag the more expensive the better, unya less expensive kai medyu okey lang.”*

(If the material is attractive and manipulative, therefore it is costly. For me, the more expensive, the better.)

Meanwhile, IDI\_07 shared that,

*“Ug daku ang budget sapag implement maam, makahimo jod ko ug nindot nga material ug effective pud.”*

(If the budget is high, I can make a material that is effective.)

More so, IDI\_03 emphasized that,

*“Dpat before starting imuhang i,foresee nga hala maka gasto baya. So that’s why sa planning palang, you need also to plan your material. Sa planning palang naana kay budget nga kaya rapud nimo i.reach and if daku-daku man, kaya nimo maghimo ug way to cope with those budget.”*

(Before starting SIM, you need to foresee that it is expensive. Plan for a material that you can afford and if not, make a way to cope those budgets.)

### Lack of Teachers' Competence

Teachers competence is the ability to perform and carry out task in a particular context, at high level of excellence. It includes competence of knowledge, skills, attitude, experiences and whole being. Effective teachers are able to envision instructional goals for their students, especially those who need special attention in their learning.

However, as mentioned by the participants many teachers have poor knowledge on the planning and preparation for the implementation of SIM that is effective for their students. Teachers have a lagging knowledge on how to make SIM creatively and effectively since seminars and workshop are not provided on a regular basis.

In line with this, IDI\_05 expressed that,

*"Akong feeling pag implement is maka pressure jod siya. Ang pag plano ug pag prepare kay kailangan mn jod nga creative jd ka. Since ako dili man ko ing.ana ka creative maong mag lisod jod q sa implementation. Naka apekto jod siya since dili man ko train ani."*

(My feeling toward implementation of SIM is pressure. You must be creative in planning and preparing. It is difficult in my implementation since I am not so creative. It affected my implementation since I am not trained.)

It is supported by IDI\_02 stated that,

*"Based on the experience I had is preparation and pagiging creative kay challenging. Kasi I am not really that kind of teacher nga awas-awas ang pagka creative, so dapat hawod ka mo form ug concept kay para makakuha dayun ang mga bata."*

(The challenges are in preparation and being creative. You must be creative in forming a concept for the student to get it easily and for me I am not so creative.)

You need to come up with the title which is catchy sa bata para pag basa palang interesting na. Mitikuluso ang pag prepare again dapat creative jod ka."

(You need to have a good title that could easily catch the attention of the students. The preparation for implementation is meticulous therefore it is difficult for me, I need to be creative.)

Also, IDI\_03 claimed that,

*"Naglisod ko kay daghan ka ug dapat iconsider like how will I plan all of these, asa mn ko mag sugod. Wala kay idea it quite exhaustive since it is not a regular material daghan kag dapat i.consider like the attachments so it's really exhaustive."*

(It is difficult since you have a lot to consider like how will I plan and where will I start, I do not have the idea. It is quite exhaustive since it is not a regular material; you need to consider the attachments.)

IDI\_03 added that,

*"The very thing that challenged me most is the making of action research since not everyone is gifted of the background in the action research. I do not have the vast background for making action research."*

Furthermore, IDI\_06 and FGD\_03 shared common experiences,

*"In implementing SIM, it requires creativity man jod to catch the attention kung ganahan baa ng bata and dili ko creative." (IDI\_06)*

(In implementation of SIM it requires creativity to catch the attention of the students, but I am not creative.)

*"Pagiging creative akoa maam. Kay dili man q kaayu ingon nga creative jod." – FGD\_03*

(The challenge is how to be creative because I am not so creative.)

Hence, IDI\_07 acclaimed that,

*"Sa akoang pag prepare unsaon naku ni sya pag buhat nga kanang ma manipulate sa mga bata usahay kay mag lisod ko"*

(I do not know how to prepare manipulative material. It is difficult.)

Moreover, FGD\_05 asserted that,

*"Maka challenge pd ang pag huna2 maam unsay better nga material ang himuon para sa imuhang implementation"*

(It is quite challenging for me to think for a better SIM to make for my implementation.)

Lastly, FGD\_01 affirmed that,

*“Naglisod jod ko maam ug akoang kaubanan labi natong mga bag-ohan kay dili mi kabalo unya selected rapud ang maka attend ug trainings and seminars”*

(It is difficult for us since we do not have knowledge on constructing the material. Only selected teachers who can able to attend on trainings and seminars.)

### Lack of Students' Responses

SIM as a whole encourages the students to formulate or generate ideas in order that learning would be faster and easier. But in order to serve that purpose, it should arouse the interest of the students. This theme revolves around the student responses. According to the participants in this study some students were not cooperating properly in accomplishing SIM, some would not appreciate the material and some took it for granted.

This concept is linked to the responses of IDI\_03 who expressed her experiences:

*“Having that SIM murag ang mga bata pud mismo nanibago sila like unsa akoang himuon sa material maam? hala kami lang baya ani, unsaon namo ni maam? So pagsugod palang sa bata, pag implement palang nimo kailangan ang bata themselves fully known sila kung unsay naa didtu. So dili ka pwede nga ihatag lang nimo ang material sa ilaha kay ang mga bata they are inquisitive mangutaa ug mangutana jod na sila.”*

(In implementation, students tend to ask like what and how to do the material since it is new to them and they are not familiar with it. They are very inquisitive. Therefore, from the very beginning the students must be fully known to the material.)

In addition, IDI\_07 shared that,

*“During implementation lisod siya at first nga presentation sa mga bata kay dili sila kaayu kasabot kay comprehensive way mn siya.”*

(At first it was difficult during presentation because the students could not comprehend it well.)

Hence, FGD\_05 said that,

*“Ang uban maam kai malingaw ra sa mga pictures, tan.aw2.won lang nila, unya dili na nila ifollow ang instruction ug mga activities.”*

(Some of them are just enjoying looking at the material like the pictures, the colors then, they would not follow the instructions and activities.)

In addition, FGD\_04, FGD\_05 and FGD\_06 have common experience they asserted that,

*“Problema naku maam is some student dili kabalo mo balik ug mo amping after using it.”* (FGD\_06)

(My problem is some of the students do not know how to return it back to its proper place. Some of them are careless.)

*“Ang uban maam nga wala naka appreciate kai murag ilaha lang labyan2 ang material or gara2.an. Ma hurt nalang pd ta”* (FGD\_04)

(Some student takes it for granted and do it for fun. It hurts me.)

Usahay maam, mawala na ang purpose sa SIM, kai gina take for granted sa uban. – FGD\_05

(The purpose would not be realized since they do not appreciate it.)

Furthermore, IDI\_05 expressed that,

*“Dili tanan bata naka appreciate sa material kay sama sa akoo gi.ingon lahi-lahi sila ug way of learning. Para sa ilaha attractive para pud sa uban kay dili.”*

(Not all of the student appreciate the material since they have different learning styles. Some may like it, some may not.)

### Suitability of Material

Instructional materials should be appropriate for the age, emotional and social development, and ability level of the students for whom the materials are selected. It should be designed to motivate students to examine their own attitudes and behaviors and to comprehend their own duties, responsibilities, rights and privileges as participating citizens in a pluralistic society.

SIM is a material that addresses the learners who failed the said competencies. It must consider the individual differences and enriching different kinds of materials, methods and techniques will increase student achievement. However, most of participants responded that their problem on the implementation of SIM is the knowledge on how to make it suitable to all kind learners.

This concept is linked to the responses of IDI\_07 who recalled his experience:

*“Ang pinaka challenges jod ato kay ang pag gamit sa material kay dili man same ang learning ability sa bata labi na sa mag gamit sa SIM.”*

(The most challenging is how the material would be used by the students with different learning abilities.)

In addition, IDI\_05 claimed that,

*“Sa implementation pd maam, kay mag lisod pud kag pasabot sa mga bata maam ba, unya dili pud ka sure if kanang imuhang nahimo nga SIM is na fit ba jod sa mga bata. Ang mga bata mn jod maam kay lahi-lahi siya ug way of learning. Dili ka sure if kana imuhang gi design is suitable siya sa tanan nimo nga studyante.”*

(In implementation, it is difficult to explain and I am not sure if the SIM I prepared really fitted to my students. Considering their different learning styles, I am not sure if the design is suitable to all kinds of learners especially slow learners.)

In line with this, IDI\_04 stressed that,

*“Sa pag himo sa plano jod. Kanang mga activities. Kay daghan kaayu kag nakita nga activities, pero huna-huna mn nimo ba ang kakayahan sa imuhang bata kung makaya ba to nila.”*

(In planning, I have a lot of activities, but I need to consider the capacity of the learner.)

Furthermore, IDI\_01 and IDI\_02 have common point of view they asserted that,

*“Ang material nga ma haom sa mga bata na naa sa ilahang place kay localization mn jod dapat kay para mas masabtan sa mga bata sa eskwelahan” (IDI\_01)*

(The material must be fitted to the student and must be localized in order to learn easily.)

*“Dapat mn jod contextualized. It is somehow difficult kay in terms of communication kay Manobo dili ko kasabot.” (IDI\_02)*

(The material must be contextualized. It is somehow difficult for me in terms of the dialect.)

Also, FGD\_02 expressed that,

*“During planning daghan mn kag iconsider maam added pjod ang contextualization and indigenization dapat ang material para relatable jod.”*

(There are many things that must be considered during planning, added to it is the contextualization and indigenization of material. The material must be relatable.)

Lastly, FGD\_05 stated that,

*“Kinahanglan lang jod maam nga klaro imuhang instruction kai ang SIM kai self-paced or child center jod baya. So ang mga bata lang mag pakli sa material.”*

(It is necessary that the instruction must be clear to the students since SIM is a self-paced or child – centered. They are the ones who would use the material.)

### **Replicability and Durability of Materials**

The participants had less rest on the implementation of SIM. According to them the materials must be replicated since there are many students in the classroom who failed the competencies. Also the packaging of the material must be durable. Many of the participants viewed this theme as one of the issues and challenges on the implementation of SIM.

A participant stated his experience in this manner,

*“Ang pag duplicate sa material is challenging maam, since kay dili lang man isa imuhang student, daghan mn. So dili lang pd isa imuha buhaton kay mag away nman pd sila. So problema and duplicability sa material unya ug mo duplicate ka it requires additional budget and effort.”(FGD\_06)*

(The duplication is the most challenging part since I have many students. I need to replicate the material. The only problem during replication is that it requires additional effort and budget as well.)

In line with this, IDI\_03 expressed that,

*“Dili lang mn isa kabata ang mahimuan ug SIM, so kinahanglan ma replicate naku to siya nga material kinahanglan naku ug time, money and effort for that.”*

(I need to replicate the material therefore, I needed more time, money, and effort for that.)

Hence, IDI\_04 stated that,

*“I need to consider the packaging, dapat mn jod durable, attractive, lig.on ug dali lang ma duplicate.”*

(The material must be attractive, durable and easy to replicate.)

Moreover, FGD\_07 claimed that,

*“In making maam, dpat jod I make sure nga dili dali maguba ang material. Kay gamiton man siya sa lahi2 nga bata ang uban bata careless pd. So kay nag himo nalang mn kag material, dapat lig-on nng pd.”*

(In making I make sure that the materials are durable since it would be used by many students. Some of the students are careless.)

In addition, IDI\_06 and FGD\_03 have common experiences they asserted that,

*“Ang tendency ani if isa lang imuhang himuon mag ilog-ilog jod na sila unya mag-away.”*  
(IDI\_06)

(If the material is only one, the student would get it from one another.)

*“Ug daghan ang material maam dili mag lisod ang bata, dili pd mahimong away kung kinsa ang mag-una ug gamit kai daghan naman ang material. Na replicate man.”* (FGD\_03)

(When the materials are replicated, the students would not be in a fight because they can use the material anytime they want.)

The verbatim statements above were lifted from the verbatim transcripts of the individual in-depth interview and focus group discussion administered. Those were the answers of the participants in relation to the themes which emerged on the experiences of Science teachers on the issues and challenges on the implementation of Science SIM.

#### **Coping Mechanism of Science Teachers on the Implementation of SIM**

This portion focused on the way of coping mechanism of Science teachers who experienced issues and challenges on the implementation of Science SIM. The participants conveyed their responses on how they faced the issues and challenges they have encountered. As I had examined the participants' responses, five (5) major themes were manifested: (1) time-management; (2) optimism; (3) motivating one's self for a higher purpose; (4) support from expert and colleagues; and (5) proper planning.

##### **Time-management**

Time management is one of the most important parts of managing multiple works in single time. It is crucial to set specific goals and then to work towards it to live a meaning full life. When one has set a goal for himself, he should work in that direction to accomplish it. To reach one goal and to fulfill the task, managing time properly is quite significant.

Time management is about managing own self. One theme emerged as coping mechanism of Science teachers is time-management. The participants responded that their way to cope up with the challenges is to have time schedule and manage their time well.

IDI\_02 pointed out the ways to manage time:

*“Time-management imuha jod huna-hunaon, timbangon when to prepare, what time ka mo prepare ani”*

(Time management. Plan what time and when to prepare SIM.)

FGD\_01 did the same thing and added,

*“Dapat pd naa jod kai schedule para ma manage ug maayu ang time ug naa dpat pasensya.”*

(You must have a schedule to manage your time well and be patient.)

In addition, IDI\_07 stated that,

*“When I prepared my SIM, I needed much time in the evening until maabtan ko usahay ug 12 – 1o'clock in the evening para lang maka provide, set pud kag oras nga matulog kay mag klase mn ka sa”*

(When I prepared my SIM, I made it in the evening until midnight and I set a time when to sleep.)

Moreover, IDI\_06 shared that,

*“Make every time as precious. Dapat stick to the purpose nga tabangan ang bata. Prioritize pd ug mag himo nkg SIM and schedule.”*

(Make every time precious and stick to the purpose which is to help the students. Have time schedule and prioritized making SIM.)

### Optimism

Optimism is an attitude that can positively affect a person’s mental and physical health. Optimism could also help reduce a person’s stress and increase longevity. It is likely to see the causes of failure or negative experiences as temporary rather than permanent, specific rather than global, and external rather than internal.

Teachers are very resilient when it comes to struggles and hardships in life. One thing that contributes to this is their optimistic mindset. Hence, participants’ responses conveyed optimism as one of the major themes in the coping mechanisms.

In connection with this, IDI\_03 expressed that,

*“My way of recovering is really to look back at the purpose, that is for my student. So as a teacher I know that I needed to go through all the challenges for me to know and acknowledge my lapses, mga kulang. So that next time, I could make a much better material para sa akoang mga bata.”*

(My way of recovering was really to look back at my purpose. As a teacher, I needed to go through all the challenges for me to acknowledge my lapses so that next time I could a make much better material for my students.)

In addition, IDI\_01 shared that,

*“Ano lang maam padayun lang gihapon ko kay kabalo man ko nga ang SIM is very useful sa mga bata so I still made my objective nga magamit ko talaga ang SIM sa mga bata.”*

(I continued despite all the challenges and issues because I know that SIM is useful to my students. I still made my objective to help them.)

Hence, IDI\_02 and FGD\_07 acclaimed the same experience they said that,

*“Laban lang maam, para sa mga kabataan. Dapat pd naa kai plan B, kai para if ma failed ang A, naa kai back up.” (FGD\_07)*

(I continued to fight for my students. I always had my plan B if plan A failed.)

*“Kung naay mga problema, sa materials naa jod dpat plan B, to fix the problem right away.” (IDI\_02)*

(If there were problems with the material, there should be a plan B to fix the problem right away.)

Furthermore, FGD\_03 asserted that,

*“Maging goal-oriented lang jod maam, ug yes, maging stick to the plan. Nga maskin daghan mga issues ug challenges kinahanglan mo go gihapon ta sa atoa goal.”*

(Stick to the plan and be goal-oriented. Despite of the issues and challenges, we needed to continue to reach our goal.)

Lastly, IDI\_07 claimed that,

*“Walang urungan at walang sukuan. Kana man jod atuang trabaho nga ma tabang ta sa bata. It was implemented and it turns to great kay positive man. This SIM is a way of preparing nga mas tabanagan pjod ang mga bata. it is not for us nga naa tay achievement though naa tay mga reward but the goal of this thing is makatabang jod sa bata.”*

(No to surrender and there was no turning back. This is our job to help the students. It was done and implemented, it turned to great because I was positive. SIM is a way to help the students. It is not for us to have achievement but this thing is really to help the learners)

### Motivating One’s Self for a Higher Purpose

Motivation is what pushes individual to achieve their goals, feel more fulfilled and improve their overall quality of life.

Self-motivation is what pushes teachers to achieve their goals, to feel more fulfilled and to improve quality of life. It is important skills that drive them to keep going and to show commitment to what they want to achieve. Hence, self-motivation is one of the themes emerged as coping mechanism of Science teacher.

In line with this, FGD\_02 said that,

*“Huna-hunaon lang maam ang purpose nganong kinahanglan mn jod mag himo ka ug SIM, then make it as your motivation para maka stick ka sa imuha goal.”*

(I always thought of my purpose why I needed to make SIM and I would make it as my motivation.)

In addition, IDI\_03 asserted that,

*“What motivates me to continue in the implementation, is really for my student. The very first thing and very reason nga ako ning gihimo is really for my student. Of course kinsa ba naman gusto mo produce ka ug bata nga naghuman nling ang tuig wala gihapon kasabot sa topic. So its get me motivated to help them learn.”*

(What motivates me to continue in the implementation was really for my students. The very thing and the very reason why I make SIM was really for them. I did not want to produce quantity, rather quality students. So it got me motivated to help them learn.)

Moreover, IDI\_01 shared that,

*“It motivates me lalo na kapag nakikita ko ang mga grades ng mga bata. Yung mga slow learner medyu matataas na ang grado nila. Nakikita ko na ang SIM ay nakatuon talaga sila, nakaapas sila mga fast learners”*

(It motivated me seeing high grades of my slow learners. SIM really helped them learn.)

Furthermore, IDI\_04 claimed that,

*“Sympre mag implement nalang jod ta ani kay maestra man ta gusto pud nato ang best sa atuang mga bata nga maka kat-on sila.”*

(I am a teacher and I wanted to give the best for my students)

IDI\_07 asserted that,

*“I believe that we teacher should face it because it is something that very good and useful.”*

(We should face it because it is very good and useful.)

IDI\_05 also stated that,

*“Ang una maam kay ang mga studyante gusto man jod ko nga kadtung mga lisod nga topic is mapasabut jod naku sa ilaha. Bahalag daghan issues and challenges maagian we should bear in minds that our intentions are bigger than those issues.*

(I got motivated from my students, especially slow learners. Though it has many issues and challenges but we should bear in minds that our intentions are bigger than those issues and challenges.)

More so, FGD\_03 shared that,

*“My way of recovering is really to look back at the purpose, that is for my student kay para man jod ni sa ilaha nga makatabang ta.”*

(My way of recovering was to look back at the purpose and that was to help out students.)

Likely, FGD\_01 expressed that,

*“I feel my students kung nag lisod ba sila or wala. I know them very well. I love them and I want to help them.”*

(I knew my students well. I loved them and I wanted to help them.)

Lastly, FGD\_06 firmly stated that,

*“Ang mga kaubanan sa school maam, kai iyahay raman silag panghimo maong ma motivate pd ka nga mag himo pd. Most importantly sa mga bata para maka tabang, I stick to that purpose”*

(My colleagues in school have been doing their own SIM, it got me motivated to do my own too. The purpose was to help my students and I stuck with my purpose.)

### **Support from Expert and Colleagues**

Every person needs someone whom can he lean on in times of struggles and hardships. One of the coping mechanisms that appeases the situation of Science teachers was the support and collaboration among people in school from expert and other colleagues.

In connection to this, IDI-03 conveyed that,

*“To face those challenges in the implementation, I seek advice and ask the expert unsa tung mga right thing nga pwede naku himuon. So it really more on to seeking advice to the expert.”*

(To face those challenges in the implementation, I sought advice and asked the expert on the right thing to do. So it was really more on seeking advice of the expert.)

*“When everything seems daunting I hold on to my support system. Like when you encounter problems, it is good to know that there are people who believe in you, who believe that you can do it So having them around kanang maka benefit ko to keep going in my SIM because I know that kung magka problema mn ko there are those expert nga pwede naku mapangutan.an kung unsa mn akooa-ang problema. They are really helpful kaning ma benefit naku nga I have this company with me nga very supportive in this endeavor.”*

(When everything seemed daunting, I held on to my support system. It was good to know that there were people who believed in you and who believed that you could do it. Having them around it benefit me to keep going on my implementation because I knew that they have been always there to support me in this endeavor.)

In line with this, IDI-01 also stressed that,

*“Mangutana ko sa mga kaila naku, mangayu ko ug tabang sa ilaha kung unsa may pamaagi ani para mas masayun. Mangita kog other resources.”*

(I asked advises and help from others and I looked for other resources.)

In addition, IDI\_05 asserted that,

*“Naga seek kug advice sa mga naa nay experience kay wala mn koy laing mapangutan.an kundili sila lang. Ginatuman pud naku ilahang advice kay andam man sad sila mo guide.”*

(I seek advices for those who already experienced SIM. They were always there to support me. I followed their advice as a guide for my implementation.)

Moreover, IDI\_04 shared that,

*“Sa kaubanan nga expert, naka experience na naa pd koy nakuha nga support sa ilha. Mag interview ko sa ilaha kung okey ba, unsa nga lesson akong pwede gamiton. Muhatag pud sila ug unsay nindot nga activities.”*

(I got support from my co-teachers who are expert. I gathered suggestions and recommendation. They also gave better activities for my SIM)

Furthermore, IDI\_06 claimed that,

*“Kadtung moral support and suggestions from gikan sa akong kaubanan ug school head. They are there in the making, magtabang pud. Some also provide instructional material some kai maghatag ug pledge.”*

(I got moral support and suggestion from my school head and co-teachers. They were there in the making. Some of them provided instructional material and some give some pledges.)

More so, FGD\_04 asserted that,

*“Dili jod naku mahimo ug walay motabang. Naa koy gina asahan like maghimo ug powerpoint.”*

(I could not accomplish it without the help of others. I had someone whom I could lean on to make powerpoint.)

Lastly, some responses during focus group discussion shared the same sentiments:

*“Nakakuha kug support sa akooa kauban maam through gina hatagan q nilag advise ug gina tabangan pd q nila especially if mag himo najod for implementation.” (FGD\_01)*

(I got support from my co-teachers. They gave me advises and helped me, especially in making SIM.)

*“In case naay problema maam, andam jod mo tabang akooa mga kauban, labi natung mga kauban nga nahimo na nimo ug close friend. Sila tung mga gunting ug pilit buddies nimo.” (FGD\_06)*

(If any problem occurred, my co-teachers were ready to help me, especially those teachers who became my close friends. They were my buddies.)

### Proper Planning

Proper planning is the best antidote for the nerves that many teachers feel when teaching. It is also the only way to ensure that their educational objectives are achieved. Planning begins with thinking about how one would like his students to approach their learning in your subject, and what you would like them to understand, know or be able to do by the end of the session. From the responses of the participants on their coping mechanism, proper planning emerged as one of the themes.

In connection to this, IDI\_02 expressed that,

*“Prepare all the needed material para makit-an nimo unsay kulang, kung naa may kulang atleast maka balo ka kay naka han-ay naman siya.”*

(I prepared all the needed material in order to know and notice the lacking material.)

*“In dealing with the challenges maam, I andam ang tnan, planohon ang tnan, kabalo ka ug when to intervene using the science SIM aron maatubang nimo ang possible nga mga challenges ni ini.”*

(In dealing with the challenges, you should plan everything. Know when to intervene using SIM.)

In addition, IDI\_05 conveyed that,

*“Gina prepare naku tanan needed material, gina planohan naku ug maayu para ma hit jod naku akoang goal ana nga material”*

(I prepared all the needed materials. I planned everything to hit my goal and implemented SIM.)

Furthermore, IDI\_06 said that,

*“E. manage jod dapat tnan, then utilize the things nga dali lang Makita sa palibot, contextualized everything.”*

(I managed everything and utilized things that could be used from the surroundings.)

The above-mentioned statements were the responses of the participants in relation to the themes which emerged in the coping mechanisms of Science teachers on implementing SIM.

### Insights of Teachers on Implementing SIM

This part focused on the insights of Science teachers on the implementation of strategic intervention material that can be shared to others. As I have reviewed the participants' responses three (3) major themes manifested: (1) SIM is way of coping least learned competencies; (2) SIM is useful and helpful; and (3) SIM develops teachers' satisfaction in teaching.

#### SIM is a Way of Coping the Least Learned Competencies

Competency-based learning refers to systems of instruction, assessment, grading, and academic reporting that are based on students demonstrating that they have learned the knowledge and skills they are expected to learn as they progress through their education. If students fail to meet expected learning standards, they typically receive additional instruction, practice time, and academic support to help them achieve competency or meet the expected standards.

As believed by the participants, that SIM is one way of coping the least learned competencies thus, this theme emerged as one of the insights of teachers on implementing SIM.

It is in line with IDI\_02 who said that,

*“This strategic intervention material is a material nga kinahanglan buhaton aron hatagan ug pagtulun-an ang mga bata nga naglisod to a certain competency lalo na yung least learned competencies. So this is one way of coping the least learned competency.”*

(SIM is a material that we need to make because it provides learning to the students who failed in certain competencies. So this is one way of addressing/coping the least learned competency.)

It is supported by IDI\_05 who claimed that,

*“For me maam ang SIM is lisod siya but beneficial and helpful sa mga bata kay designed man siya sa competencies nga lisod masabtan.”*

(SIM is difficult, but it is beneficial and useful because it is designed based on the competencies that are difficult for the student.)

In addition, IDI\_06 share that,

*“If you have many least learned competencies mag himo jod dapat ka ug SIM kay makatabang ni siya para mo lambo ang mga bata labaw natong failed sa competency.”*

(If you have many least learned competencies you must make SIM to help your student grow especially those who failed on the certain competency.)

Hence, FGD\_07 asserted that,

Every teacher should have SIM in their class to address all least learned competencies and to help those students who experienced difficulties.

### **SIM is Useful and Helpful**

Teaching materials are an integral component in any classroom. It has many benefits including helping learners improve reading comprehension skills, illustrating or reinforcing a skill or concept, differentiating instruction, and relieving anxiety or boredom by presenting information in a new and exciting way. Teaching materials also engage students' other senses since there are no limits in what aids can be utilized when supplementing a lesson.

SIM is material given to the students to help them master the competency which they were not able to develop during regular classroom teaching. From the responses of the participants on their insights that can be shared to others, they found out that SIM is useful and helpful. This emerged as one of the themes.

In line with this, IDI\_05 shared his thought saying that,

*"For me maam, SIM is helpful in the sense nga masabtan jod tung mga competencies nga wala nasabtan sa mga bata."*

(For me, SIM is helpful because the student will understand the competencies that they failed)

In addition, IDI\_03 stated that,

*"Ang SIM daku siya ug tabang sa mga slow nga bata. Maka learn sila on their own unya ma apas pud nila ang topic."*

(SIM is a big help to the students. They can learn from it.)

Moreover, IDI\_06 claimed that,

*"Ang SIM is very useful if na plan lang jod siya ug maayu, mahimong successful jod ang imuhang implementation."*

(SIM is very helpful. The implementation would be successful if it is planned well.)

Furthermore, IDI\_04 stated that,

*"Ang SIM mn jod dili lang siya makatabang for science, pwede pd siya sa ubang subject like aral.pan, fil, MTB. Daku jod siya ug tabang sa mga bata nga hina sa klase."*

(SIM is not only for Science subject, but it is necessary and helpful for all subjects. It is a big help to the slow learners in the class.)

### **SIM Develops Teachers' Satisfaction in Teaching**

Every teacher must have potential and clear intention to discharge their duty with utmost devotion to derive satisfaction from their work. As one of the themes emerged, participants responded that any work cannot be effectively done without satisfaction. They get interested to teach their students effectively when they are satisfied.

In connection to this, IDI\_02 firmly stated that,

*"Honestly I appreciate more myself now. I discovered how far I can do from my students as to my ability and proficiency as a teacher."*

(I appreciate more myself now. I discovered how far I can do for my students as to my ability and proficiency as a teacher.)

In addition, IDI\_03 asserted that,

*"I improved a lot I know and I can attest that I improved a lot. I enhance my creativity and able to adopt to possible challenges, possible changes brought by the implementation of SIM"*

(I improved a lot. I enhanced my creativity and was able to adopt possible changes brought by the implementation of SIM.)

In addition, IDI\_07 said that,

*"Passion to teach children. You need to develop your love for them. Dili ka mag alang-alang ug unsay itabang nimo sa ilaha."*

(You need to develop your love and passion to teach children. You must not hesitate to help them)

*“The insight is dpat ihatag nimo imuhang best ability in everything even in a small scenario or in class imuha ihatag ang best to teach them ‘ so dpat magbuhat kag SIM from heart para nindot ang product nimo dili lang kay for compliance kay napugos ka.”*

(The insight that can be shared is that, you need to give your best ability even in small scenario. You need to make SIM from the heart.)

Moreover, IDI\_05 shared that,

*“Dili siya sayun, pero after nimo siya mahimo, diha namn jod nimo ma feel ang kalipay unya ma proud ka sa imuhang kaugalingon na nahimo nimo.”*

(It is not easy, but in the end, you will feel happy and proud because you have implemented it)

Furthermore, IDI\_04 claimed that,

*“Feeling naku nga na fulfill naku akua self nga naka-teach jod ko. Naka tabang jod ko sa ako-ang mga bata. na fulfill jod nku akua profession. So all in all SIM really made me a better teacher, better implementer and maka proud lang jod siya.”*

(I felt the self-fulfillment because I helped my students. I fulfilled my profession. All in all, SIM made me a better implementer and I am proud of it.)

All the sentiments stated above reflected the views and experiences of the participants in relation to the themes which emerged in the insights of Science teachers on the implementation of SIM that can be shared to others.

## DISCUSSIONS

The purpose of this phenomenological study was to explore and understand the teachers' experiences and perspectives, particularly issues and challenges in the implementation of strategic intervention material (SIM), how they coped with the situation and their insights that could be shared to others. To gather substantial data, in-depth interview, and focus group discussions were used using the validated questions given by the validators. All the questions formulated had been answered by the participants who expressed significant data for analysis.

### Issues and Challenges of Science Teachers

The teachers who were chosen as the participants shared their issues and challenges on the implementation of SIM. From their honest answers, six (6) themes emerged, namely: (1) time constraints; (2) budget constraints; (3) lack of teachers' competence; (4) lack of students' response; (5) suitability of materials and (6) replicability and duplicability of materials.

#### Time Constraints

The data collected based on the question regarding the issues and challenges encountered by the teachers revealed that time has been a factor in implementing SIM. Some teachers stated that the creation of SIM took careful thought therefore time would be a factor. In other words, planning an effective and well-thought instructional tool particularly for non-performing learners could be very time-consuming. Hence, they foremost faced with time constraints toward achieving the goals of the curriculum and students' needs, especially during the preparation period.

A related study conducted by Belzile (2015) cited that it took teachers two years to develop a set of interactive materials for students. The development posed a challenge on time due to problems encountered on collaboration and testing of the material for the students. The time needed to craft SIM that is effective towards students' skill and knowledge enhancement becomes a constraint for many teachers hence, demotivating teachers to develop one for their students.

Furthermore, the notion supported by Cubillas (2018) stated the different phases of SIM that include; planning phase, development phase and validation phase. In planning phase, the item analyses periodical tests were examined. This was made in order to identify the least learned. In the development phase, the actual making of the intervention materials which include the identification of the skills or topics specified in curriculum, the selection of the activities and the adoption of the format, theories, and approaches. These statement requires dedication of time to properly conceptualized the different phases of material to effectively serve its purpose.

#### Budget Constraints

It has been too much for teachers to plan and prepare for an effective material for remediation. The provision of funds and resources for the preparation of an effective and strategically designed SIM to level - up the declining proficiency of science learners is a big factor. Majority of the participants said that one constraint in the implementation of SIM was the availability of fund sources. In fact, during the implementation, the participants spent their own money for the material. The materials were at high cost and the budget from the administration was not enough.

In a study cited by Dacumus (2016) featured that the role of administration, i.e. principal, school heads, and so on, is a big factor in the instructional process through provision of funds and resources for the preparation of an effective and strategically designed SIM to address the deteriorating problem of least mastered skill in Science. The administrations' assistance in providing instructional resources to teachers is a manifestation of the level of school's achievement.

Furthermore, Dacumus (2016) said that allocating resources and materials should be of great effort from the administration to provide basic instructional needs to the teachers. This is possibly missing in the current educational system, especially in the public sector. Many educators complain about the limited support of the administration in terms of local funding. Hence, many opt not to prepare such material as this may be costly especially in its reproduction.

### **Lack of Teachers' Competence**

Quality teaching does not only depend on the teacher's knowledge and skills but also the teacher's innovations and creativity. Every teacher has to continually innovate an intervention material as well as strategies to keep abreast with the trend of the students' needs and eventually enhance the quality of teaching-learning process. Effective and competent teachers are able to envision instructional goals for their students, especially those who need special attention in their learning.

A study conducted by Brubaker (2016) emphasized that teaching effectively requires teachers to have the skills and knowledge based to engage their students in active and authentic learning experiences and to manage classrooms that function well where students work productively. Teachers who understand child learning and development and those who have had professional training in the developmental stages of students are more capable and prepared in guiding and developing the learning process, maintaining children's motivation to learn, and managing a classroom and, thus, are more likely to implement intervention.

As claimed by Selahattin & Ilknur (2010), cited by Villareal (2015), highlighted that teacher's competence in preparing materials is a major requirement to meet educational goals. There is a need for teachers to receive profound training focusing on effective planning, preparation and implementation of SIMs for students undergoing remedial sessions. These needs advance educators to effectively implement their lesson through instructional and intervention materials to every student especially to those who are lagging behind in normal classroom instruction.

### **Lack of Students' Response**

The use of Strategic Intervention Material (SIM) as prescribed by the Department of Education has been one of the treatments to improve students' achievement and reduce least mastered skills in science subjects. But, materials only involve theoretical knowledge, which means that the use of SIM is confined, mainly, on concept acquisition, rather than skill development or practical knowledge this keep some students demotivated.

In relation to this, Mueller (2014) distinguished traditional assessment from authentic assessment. He said, on traditional assessments, students are typically given several choices in selecting a response, it is contrived, recalling, and recognition of knowledge unlike authentic assessment in which constructivism approach is highly observed.

It was supported by Bradley (2012) who posited that practical knowledge can often lead to a deeper understanding of a concept through the act of doing and personal experience. It is very well encouraged that SIMs have to be aligned to a constructivist approach in which learners perform task rather than merely selecting responses, real-life rather than contrived, and construction and application rather than recalling or recognition of knowledge.

Furthermore, Romano (2015) pointed - out that SIM as a whole takes the students to formulate or generate ideas in order that learning would be faster and easier. But in order to serve that purpose, it should arouse the interest of the students. Manipulation is one thing that learners would love to do in order to learn the difficult concepts in science education. Hence, teachers are expected to become as creative as possible to yield an effective SIM to level up the proficiency level of students in science education.

### **Suitability of Materials**

Teaching material is a generic term used to describe the resources teachers use to deliver instruction. Teaching materials can support student learning and increase student success. Ideally, the teaching materials should be tailored to the content in which they are being used by the students. The teacher should consider the learning style, interests, strengths, and weaknesses of each pupil who undergo remediation throughout the SIM. Teaching materials come in many shapes and sizes, but they all have one thing in common the ability to support student learning.

As reported by Hizon (2018), the importance of teaching material is to improve students' knowledge, abilities and skills to monitor their assimilation of information, and to contribute to their overall development and upbringing. It also clarifies important concept to arouse and sustain student's interest, give all students in a class the opportunity to share experiences necessary for new learning and help learning more permanent. There are some elements of materials to know in preparation to make it. The content must be aligned in the curriculum and standards, current, valid and reliable with real world of examples. Design to meet the interest of individual learners from various skill levels, enhance conceptual understanding and engages higher order thinking skills. Free from bias.

Correspondingly, as cited by Rahmawati (2017), Tomlinson (2012) classified the learning materials in terms of instructional purposes as follows: informative (informing the learning about the target); instructional (guiding the learner in practicing the target learning); experiential (providing the learner with experience); eliciting (encouraging the learner to use); and exploratory (helping the learner to make discoveries). The teacher should give materials with variety of activity to cater diverse learning styles. He should also assure the activities were aligned to the tasks/ objectives. The activities should be planned well to distinguish which can be done independently, in pairs or in groups.

### **Replicability and Duplicability of Material**

Science teaching is more productive when there are available and sufficient instructional materials. In order to cater large number of students in class and provide effective teaching, materials must be available and enough to all learners. It must have enough ratio of materials to the students. Materials must also be durable, easily stored, transported and universally accessible. It must be adaptable and customizable to match the resources of the school.

Hence, the shortage of equipment and facilities can affect the quality of teaching and learning, quality diminishes when the facilities required for imparting and learning are inadequate or at times not available. One of the things that were discussed was the development of the student on an individual level. The students were not getting the experience in knowing how to act in a correct classroom setting. They were getting bored to get down to the depths of it. The students need these materials individually in order to enrich their learning experience, but also in order to make sure they are getting the right learning experience. (Johnson, 2013)

Umameiye (2016) claimed on his article entitled "Availability and Utilization of Tools and Equipment for Teaching and Learning," that many factors affect the teaching and learning of practical subjects. One of such factors is the availability and utilization of tools and equipment. Tools and equipment for teaching are the educational resources that are available in schools that can be used to achieve educational goals and objective.

### **Coping Mechanism of Science Teachers on the Implementation of SIM**

Everyone who happened to personally experienced issues and challenges had different ways to cope with these struggles. Teachers as participants of this research study shared their coping mechanisms when issues and challenges occurred in implementing SIM. From their answers, five (5) themes emerged namely: (1) time-management; (2) optimism; (3) motivating one's self for a higher purpose; (4) support from expert and colleagues; and (5) proper planning.

#### **Time-management**

Time is the most precious thing in the world. Learning about how to effectively manage time is an important skill that someone will need to acquire to be successful in his life. Every single occurrence depends upon time and each event accomplished effectively is measured from the total utilized time. Time management is one of the most effective way of managing multiple works in single time. When one has set a goal for himself, he should work in that direction to accomplish it.

In relation to this, Khan (2017), claimed that time management could guide towards useful and efficient learning development in the demanding period of teachers' economic fate. Theoretically, it is a number of habits or learnable actions which can be learned by improved knowledge, tutoring or deliberate exercise. In addition, time management behavior is at attaining an efficient usage of time during accomplishing and implementing material for certain goal-directed task.

Furthermore, Hellsten (2012), as cited by Tahir (2017), stressed that teachers' time management strategies containing: analysis of time, planning, goal-setting, prioritizing, scheduling, organizing, and creating new and improved time-habits are believed indispensable for good time management. Also, time management records tasks such as constructing lists, listing goals, and using calendars have been recognized as essential for successful time management.

#### **Optimism**

Optimism is likely to see the causes of failure or negative experiences as temporary rather than permanent, specific rather than global and external rather than internal. Being optimistic is one way to cope with the hardships and struggles in life. This can positively affect a person's mental and physical health. This can also reduce a person's stress and increase longevity. Hence, the participants of this study believed that once a person has a positive outlook in life despite all things happened; their future would become brighter and a memorable one.

In relation to this, Bartlett (2014) cited that being optimistic and having an acceptance of the situations has lightened the feelings of the teachers who implement SIM. They also believed that teaching is a mission. Despite of the issues and challenges on the implementation of SIM, they have to fulfil their obligations as a teacher.

Likewise, Coloroso (2013) emphasized that a positive attitude is a guide to leading a positive life in times of problems and issues. Being positive in everything you do in life will lead you out of the darkest of times. Positive outlook will guide you towards great success despite the challenges you meet along the way.

#### **Motivating One's Self for a Higher Purpose**

A motivated teacher is crucial to a successful classroom. They would look at teaching through a different lens, and, in doing so, motivate their students in their learning too. Motivation helps to energize, direct, and sustain positive behavior over a long period of time. It involves working towards goals and tailoring activities to achieving their purpose. It also helps to drive creativity and curiosity, sparking the desire needed for students to want to learn more.

Herrera (2016), said that SIM would be effectively serves its purpose to reteach or remediate learners if teachers will add love into it. The love for pupils and dedication for work is their inspiration to explore or try other different strategies for them to develop at their fullest potential and for them to become responsible and productive teacher.

It was supported by Muola (2018) who claimed that motivation is a drive that influences teachers' efforts towards performing a task. The basic principle of motivation is based on individual's ability. According to this principle any task cannot be performed successfully unless the person, who has chosen to do it, has enough ability to act. Similarly, in order for Science teacher to achieve a high excellent performance he/she should also be eager to achieve such a high level of performance. It is seen as person's effort to accomplish his duties, dedicating the needed effort and continuing it.

#### **Support from Expert and Colleagues**

Teachers link together students, other teachers, school administrators, families, and community members to foster the learning success, and healthy development of their students. The nature of these interactions among different stakeholders vary depending on the teachers' intent and the needs of their students. Students, particularly those at risk of school failure, could benefit from certain protective supports provided by teachers.

According to Rosales (2015), teachers' interaction could improve awareness of others, foster positive emotions such as empathy and compassion, and increase the likelihood of trusting, respectful engagement between individuals.

Hence, teachers who are appreciated by colleagues connected with them would have psychological meaningfulness in the workplace. They indicated the availability of her if they know that co-workers and supervisors cared about him. When individuals are treated with dignity, respected, and valued contribution not only as executor of his role, they will feel a meaningful of interaction. Support with colleagues will develop a sense of belonging, strengthening the social identity, and bring a feeling of meaningful. (Rothmann & Welsh, 2013).

#### **Proper Planning**

Proper planning is the best antidote for the nerves that many teachers feel when teaching. This begins with thinking about how would one like his students to approach their learning in his subject and what would he likes them to understand, know or able to do by the end of the session. Planning for the classroom is an important part of educating and behavior management. Proper classroom planning would keep him organized and on track while teaching, thus allowing him to teach more and manage less.

Meads (2016) asserted that proper planning can prevent poor performance. If you do not have plan, you would not have focus. You will go in numerous different directions trying to figure out what to do next. You will get caught up in demands from your clients and you won't know what to do or what action to take.

Hence, Sindelar (2015) emphasized that effective teachers use many different tools to assess how their students learn as well as what the students know. They use this information to help all students advance from where they are to where they need to be. They carefully organize activities, materials, and instruction based on students' prior knowledge and level of development so

that all students can be successful. They know what conceptions students bring with them about the subject and what misconceptions are likely to cause them confusion—and they design their lessons to overcome these misinterpretations.

### **Insights of Teachers on Implementing SIM**

After the relay of the participants' experiences and coping mechanism, then here comes, insights on implementing SIM that can be shared to others. From their views and experiences, participants' responses emerged in three (3) major themes namely: (1) SIM is way of coping least learned competencies; (2) SIM is useful and helpful; and (3) SIM develops teachers' satisfaction in teaching.

#### **SIM is Way of Coping Least Learned Competencies**

Students who failed to meet expected learning standards, typically receive additional instruction, practice time and academic support to help them achieve competency or meet the expected standards. The use of SIM is identified by Department of Education as one of the suggested various intervention materials that can bridge learning gaps. SIM is a remediation aid for the students at the level of their understanding and thereby increasing their academic achievement.

As cited by Villareal (2014), SIM was defined by Bunagan (2012) as meant to re-teach the concepts of least mastered skills, and the science concepts and skills. It is a material given to students to aid in mastering the competency-based skills which they were not able to develop in regular classroom instructions. SIM is a multifaceted approach to aid the students, especially those who are non-performing to become independent and successful learners.

In addition, Espinosa (2014) studied the effect of strategic intervention material on the students' academic achievement. The study employed the experimental design and found out that the experimental group, where SIM was integrated, performed significantly better in the post test. It concluded that the use of strategic intervention materials is effective in mastering the competency based-skill based on the mean gain scores in the post tests of the experimental and control group.

#### **SIM is Useful and Helpful**

Teaching materials are integral component in any classroom. This would help students to engage more in the lesson. Strategic intervention material is designed to help and cater the needs of students who failed to keep pace with teaching-learning process in a normal classroom. SIM is given to the students to help them master the competency which they were not able to develop during regular classroom teaching. This would act as a safety valve for the students who are behind the expected level of achievement.

This theme was gleaned on the study conducted by Dumigsi (2019), when he referred SIM as teaching aid introduced into the teaching methods to stimulate the activity of the students and thereby increase their level of understanding. It tends to reteach the lessons which are not clear to the learners and help them gain mastery of the skills. 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.

Furthermore, Cabrella (2019) revealed that the achievement of the students who were exposed to the Strategic Intervention Materials (SIMs) is higher and better compared to the students taught in the traditional approach. The 75 percent proficiency/performance level required in any subject area has been attained in the experimental group. There is a significant difference in the achievement of the students in the control group and experimental group. This suggests that the Strategic Intervention Materials (SIMs) be adopted as instructional materials for teaching Mathematics is useful to facilitate learning and helpful in improving performance of the students.

#### **SIM Develops Teachers' Satisfaction in Teaching**

Teaching is one of the most complicated jobs today. It demands broad knowledge of subject matter, curriculum, and standards; enthusiasm, a caring attitude, and a love of learning; and a desire to make a difference in the lives of students. Many teachers believed that helping their students may be the secret to living a life that is not only happier but also healthier, wealthier, more productive, and meaningful.

Kelly (2016) highlighted that teachers are responsible more than academic enrichment of the students. Helping student grow and succeed is the major goal of becoming a teacher. Great teacher connects with pupils and reach them on multiple levels, because the best teachers are committed to their students' well-being both inside and outside. He also stated that helping students to grow and make them learn will make every educator better and successful teacher.

Moreover, Mendler (2016) pointed - out that teachers find personal fulfillment in life. If they teach a subject they are passionate about, they get to spend every day talking about something they love and, hopefully, passing that passion on to others. If they are a creative, they would find fulfillment designing creative lesson plans, strategies, activities and interventions to their students. Every day teachers continue to learn new things and improve their teaching ability. Watching themselves learn and grow, may build their overall confidence.

#### **Implication for Teaching Practices**

Strategic Intervention Material (SIM) could help improve the academic achievement of students in Science subject. The said intervention material has been assisting students to develop the fundamental knowledge, skills, and understanding in Science and aid them in the transfer of learning. This study successfully surfaced the unique perspectives of teachers in terms of the issues and challenges of SIM implementation and impact to educational practice. Their overall perspectives were summarized through the continuum which presented the general themes that emerged from the varied responses of the Science teachers. This study provided an avenue for all the administrators, teachers, parents and students to understand the lived experiences of the Science teachers who implement SIM.

In the light of conclusions of the study, the Department of Education officials may institutionalize the use of SIM in reinforcing difficulties of learners in learning Science least learned competencies. They may formulate policies that would encourage teachers to develop SIMs for their classes to maximize teachers' potential in making more effective instructional materials which could be helpful in saving students who are academically at-risk. They may also allocate additional budget to assist teachers in helping the students and intensify the creation and crafting of material for the betterment of the implementation. They may consider this study to find a solution to the deteriorating issues and challenges faced by teachers in the implementation of SIM.

The principals, head teachers and master teachers on the other hand may conduct seminars and in-service trainings specifically Science and Math Enhancement Program (SMEP) and conduct learning action cell (LAC) regarding the development of SIM that may aim to enhance and maximize teachers' potential in developing instructional materials such as SIM as well as its implementation tool to help the students who failed certain competencies during regular class. Seminars and workshop would help them acquire vast knowledge on how to implement SIM effectively. This gives support and guide teachers who are in the process of making and implementing SIM. This will encourage all teachers in their school to make and implement SIM as a tool to address the least mastered skill of the students. Also they may include intervention development funds in MOOE to fund the materials needed for SIM.

To the Science teachers, they may develop SIMs for lessons to minimize the least learned competencies in the subject. This may give them motivation to continue with the implementation despite problems they may encounter. Also, this would encourage all Science teachers to make and implement SIM as tool in helping the student who are academically at risk in Science, and reduce least learned competencies in class. Teachers should be resourceful in the selection and utilization of instructional materials that are useful in the concepts that they teach. This study may also give them an idea to join and participate seminars, workshops and research congress.

Moreover, to the students who make use of the material, this may help them realize and appreciate the efforts done by the teacher. This would encourage them to strive harder for their own learning, knowing that their teacher made extra effort to help them learn.

Furthermore, to the parents, the result would give them an idea to develop stronger connections and relationship towards school. This could be ground to have a strong partnership with parents to teachers in school.

Finally, because everyone wanted to have smooth flows of quality education and no child must leave behind, helping teachers among stakeholders of the school must be valued through implementing SIMs that are useful, helpful and beneficial to the students.

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