

# IMPROVING RESEARCH PAPER WRITING PERFORMANCE IN PRACTICAL RESEARCH II OF GRADE 12 TVL STUDENTS USING PEER SERIAL NOTEBOOK (PEERSEN)

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## ABSTRACT

Research paper writing remains a challenge to secondary learners since this requires language prowess, writing and research skills and values. Since the rollout of Senior High School, learners have started struggling to write their first draft in background of the study, research questions and scope and delimitation. With this, I crafted this Peer Serial Notebook (PEERSEN) to improve the research paper writing performance in Practical Research II of Grade 12 TVL Students. This mixed-method study on the use PEERSEN was conducted in Matanao National High School with 45 Participants grouped into 15 teams. They were Grade 12 SMAW learners of the current School Year. This study used the mean scores of the learners before and after the intervention during the first semester SY 2021-2022. These data were the main source to determine the effectiveness of the aforesaid intervention. The data presented through graph revealed that mean score before the intervention is 13.71 which was increased by more than 2 points after the intervention was employed. Using the t-test for paired samples, the t-value is 9.419 with *p value* of .000 which is lower than the .05 level of significance which implies that there is significant difference in the mean scores of the before and after the intervention. In the in-depth interview conducted there were themes that surface why PEERSEN became effective to the SMAW Learners, to wit: change of perception, collaborative and peer learning, compiled outputs and improvement in writing. The results implied that the intervention was indeed effective.

**Keywords:** *Collaborative Learning, Peer Learning, Practical Research, Research Writing, TVL Learners,*

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To God be all the glory!

***Joeisa M. Presbitero***  
*Research*

## **I. CONTEXT AND RATIONALE**

Doing academic research is one of the challenges of senior high students where they will submit proposals and defend their titles. These are some of the things they need to face to finish the course. Students are having difficulty complying with Practical Research 2 requirements, especially among Technical-Vocational-Livelihood (TVL) Track students. A similar finding was mentioned in the study of Leonares (2019) that the challenges encountered by senior high school students in their research undertaking were 1) Lack of basic research background from Junior High School, 2) Formulating a Topic, 3) Dealing with a research team, 4) Insufficiency of Resources, 5) Data Analysis and Treatment, and 6) Staying motivated in the course of the study.

I have been handling Practical Research 2 (PR 2) known as Quantitative Research for years already since the start of Senior High in Matanao National High School. The subject is offered during the first semester in Grade 12. My first class in PR 2 were all students from Industrial Arts of Technical-Vocational-Livelihood Track where EIM students were my first two batches in school years 2017-2018 and 2018-2019 then Shielded Metal Arc Welding (SMAW) in school year 2019-2020. I was expecting good performance from the students since they are in senior high already. When I gave my first task to my EIM students, their outputs were so disappointing. I tried so many ways to encourage them to keep on writing but to no avail, writing has been their enemy. I tried individual, pair and group works but still the performance did not turn out satisfactory. I have been asking my colleagues and myself how I could help these young researchers.

From my experience in using different tools and techniques, I found out that the most important, urgent, the most doable and relevant problem or issue that I needed to focus on is

how I can motivate my learners to write their research paper in PR 2 subject. The three batches of Industrial Arts students gained almost the same average grades, 79.53%, 79.80, and 82.98%, respectively, in PR 2. For three consecutive school years, students in Industrial Arts obtained approaching proficiency level while the first two batches got below 80 grade after the first semester. The last batch made significant increase in average grade because I asked my students to make portfolio of their research outputs which according to them helped them come up with their research proposal. Nurdianingsih (2021) mentioned in his study the tactics used by teachers to teach students reading comprehension. Understanding text, individual and group learning tactics, and QAR strategy were proven to be the teacher's strategies. The findings suggested that teachers should be prepared to teach reading comprehension skills in order to assist students cope with the challenges of learning English. The teachers tailored their strategy choices to the resources, syllabus, and curriculum. Those tactics were helpful in teaching reading comprehension because they allowed students to understand the material and discuss it with their peers.

My TVL students had a hard time submitting research requirements because they found SHS research more difficult than other academic writing in junior high. PR 2 requires students to submit research outputs including but not limited to research problem, objectives, significance of the study, scope and limitation, definition of terms, conceptual framework, review of related literature, methodology, conclusion and recommendation. In one of my casual talks with my male TVL students, they honestly disclosed to me that writing something in English is one big problem for them not only in my subject but also in other learning areas where English is the medium of instruction. Some admitted that they do not have enough money to spend for going to computer

café and for printing. I have even allowed them to write their outputs on a piece of paper where I could mark and do some comments but the problem was my students lost their corrected outputs. This has bothered me a lot.

Teachers who are into the pedagogical aspect of research must devise easier and life and course-related research program for developing positive attitudes towards research. Senior high school teachers must think of ways on how research will be appreciated by students (Taylor, 2017). I feel the need to find another way to allow my students have meaningful experience in writing research paper. Their research outputs, from scratch to finish, must be properly documented and collected to assess their improvement and learning. At first, I have so many doubts that my TVL learners cannot submit their research paper but when I implemented last school year the use of notebook for research writing per group, there was ease in tracking their progress and my students were able to review their work in-class or with their group mates and make revisions using their group notebook.

This has been a challenge to me as research teacher. Students have to learn research writing amidst the pandemic and social restrictions by employing an innovation in teaching through peer learning, collated series of outputs to track progress and immediate feedback and instruction. This can be attained if learners write group outputs in one place. Pablo and Lasaten (2018) suggested that this problem may be addressed with teachers attempting to understand the background of their students in relation to their experienced difficulties and the quality of writing may be better informed. With all these concerns, needs analysis becomes undeniably necessary.

## **II. INNOVATION, INTERVENTION AND STRATEGY**

Attitudes of secondary school students towards doing research and design activities are different when they were in lower grade. Students in the upper secondary grade find doing research projects more difficult than lower grade students. As students proceed in their education, school projects often indeed become more difficult and complicated in higher grades (Vossen, Henze, Rippe, Van Driel and De Vries, 2018).

GKS (2015) and Taylor (2017) discussed the important factors of resisting research in our daily life. The fear of learning, making change and being criticized are the possible factors that hold us back in doing a research.

Moreover, Early's (2014) study presented the pessimistic side of students wherein they have negative thoughts about research. Students enrolled in introductory research courses exhibit the following characteristics: Fail to see the relevance of research to one's life; Anxious or nervous about the course difficulty; Uninterested and poorly motivated to learn; Poor attitudes in approaching the course; and misconceptions about the course.

Through my interview conducted with Technical-Vocational-Livelihood (TVL), it revealed that they have troubles on how to identify their research problem which is the basic competency they need to master. Below are other difficulties encountered by the participants when my learners were asked "*What difficulties you encountered in quantitative research?*" last school year 2018-2019 in Practical Research II:

1. Identifying Research Problem
2. Writing Research Problem and Background of the Study
3. Selecting information from the sources
4. Research Formats
5. Review of Related Literature

6. Presenting of Findings and Discussion
7. Referencing
8. Writing Hypothesis (null and alternative)
9. Research Design
10. Sampling Procedure
11. Keeping of Written Works and Projects
12. Unavailable computers at home
13. Lack of Budget for researching and printing
14. Unavailable printers at home
15. Time Management
16. Group conflict

With my learners, I see in them the fear of learning and they have negative perception in approaching the course because of lack of resources like computer and printer. So to help them out, I have in mind viable solutions to the problems of TVL Student in research writing: first, use of Peer Serial Notebook in Research Writing; second, conduct of online seminar-workshop on research writing; third, reward-the-paper approach; fourth, peer technique; and last is Online Individual Instruction. However, among the identified possible solutions, the use of a Peer Serial Notebook will be a leap of innovation in my subject that will help learners keep their outputs in one place. The name of this approach suggests that there is a series of competency-based tasks to be done in one instrument.

Students, most of the time, submit their answer sheet or their outputs which must not be the case in research writing. The teacher needs to collect the research works of students in Quantitative Research in order to assess and evaluate learning of learners. Learners lagging behind



need to attend remedial classes or individual instruction, if necessary. I believe that using one notebook, teacher can track progress of learners in research writing as well as communicate corrections and revisions through the same instrument. This is also a tool where teacher writes down comments, suggestions and recommendations to improve outputs of learners.

### **How was Peer Serial Notebook used**

The Peer Serial Notebook (PEERSEN) Innovation provided learners an avenue to work with their peers in making their research paper as well as compile their draft and revisions in one instrument where teacher also checked, and gave comments and recommendations. PEERSEN was used by one group with 3 learners. Group members discussed on their tasks and agree on their outputs. Group members took turns in writing. Each member affixed their signatures below their outputs before submission.

The PEERSEN contained the names of members of the group in the front cover. In each page, the group indicated the number of attempts in revising the output in each competency, like *1<sup>st</sup>, 2<sup>nd</sup>, 3<sup>rd</sup> and so on*. There was rubric to rate the PEERSEN Outputs depending on the criteria applicable to the given task.

### **Stages of the Utilization of PEERSEN**

#### **A. Writing Stage**

The outputs were submitted one after the other. Teacher instructed learners to write their outputs on the following competencies:

- a) describe background of research (CS\_RS12-Id-e-3);
- b) States research questions (CS\_RS12-Id-e-4); and
- c) indicate scope and delimitation of study (CS\_RS12-Id-e-5);

#### **B. Checking Stage**

Teacher checked outputs of learners in the PEERSEN and made corrections and recommendations. Teacher returned notebook to learners during module distribution. Teacher recorded group performance using the *Group Progress Chart* which records the completion of every task or activity, if they made it on time as well as the score based on the rubric provided. To obtain the score of the group on one task with more than one revision, teacher computed the average score.

### **C. Revision Stage**

The group made revisions and improvement to their outputs. If there is none, then learners proceeded to the next competency-based task.

## **III. ACTION RESEARCH QUESTION**

The focus of this research is to address struggles of Grade 12 TVL students in research writing. Thus, this action research sought to answer the question: *How Peer Serial Notebook helped my Grade 12 TVL learners in Practical Research II?*

## **IV. ACTION RESEARCH METHODS**

### **A. Participants and Other Sources of Data and Information**

The participants of this action research study were Grade 12 Senior High School of Matanao National High School for Quarters 1 and 2 of School Year 2020-2021. Prior to the conduct of this research, I already identified my participants. They were the Grade 12 SMAW students in senior high whom I have chosen through purposive sampling as my participants based on a pre-selected criteria relevant to the research study (Saunders, 2012; Speziale and Carpenter, 2007; Creswell, 2006). Performance Task scores for the three competency-based tasks were utilized in this research. I also used interview transcripts to identify how PEERSEN helped my learners in research writing.

## **B. Data Collection and Data Gathering**

In order to carry out the action research, the very first step was to inform our school principal in Matanao National High School about the problem I would like to address in my subject. After obtaining the approval from our school head, there were three stages to attain orderly conduct of research: the pre-implementation, implementation and post-implementation stages.

### **A. Pre-Implementation Stage**

Prior to the implementation, I asked permission from the parents/guardians of learners that their children will be participating in the study and also informed the participants about the research through informed consent for 18 and above and assent form for learners 16-17 years old during the first release of modules in Senior High School. After securing approval from the parents, I informed through our Group Chat my Grade 12 SMAW students that they are participants in the study.

After 1 month, I informed my class about their performance in the Quarter I in Practical Research II. Last October 15, I introduced to my learners the Peer Serial Notebook. Students at this stage were asked to group themselves with 3 members and secure the 50-leaf PEERSEN from me. They wrote the names of the members in the front cover. I oriented them on how to use it and how they will be rated as a group.

### **B. Implementation Stage**

Each group started writing for the first group task on the PEERSEN. Task is based on their modules. The first task was “Write a Research Background of the chosen topic” starting October 15. After accomplishing the task, learners submitted their output to me the following week. I checked, made corrections, wrote comments on the outputs then recorded their score on the Group Progress Chart then returned immediately the PEERSEN to the

team every week. There were three competency-based tasks given to the learners and the same process was observed for the succeeding tasks from October 15 to November 26. Scores in the PEERSEN were recorded as Performance Task Output in the class record.

### C. Post-Implementation Stage

After the implementation of PEERSEN, I gathered the data from the score of my learners before and after the intervention. Scores were encoded in the Microsoft Excel as my basis for my interpretation and the same data were used for t-test of paired samples.

Before conducting the actual in-depth interviews with the study participants, I made sure that ethical considerations were properly observed. I applied the key principles of ethical issues (Bloom and Crabtree, 2006; Bricki and Green, 2007; Kaiser, 2009.) that should be considered in any research study which are consent and confidentiality.

In order to elicit relevant information from the participants in line with the purpose of the interview, unstructured interview was employed (Kiger&Varpio, 2020).

I conducted unstructured interview or in-depth interview with the 15 participants from the same group of participants in order to gather experiences and thoughts (Braun & Clarke, 2006) in using the PEERSEN. The interviewer has no clear constraints, restrictions, predefined questions, or list of possibilities in an unstructured interview using open-ended questions. Open ended question is ideal because answers of the participants are not limited to a specific options and does not require yes or no answer but gives opportunity to the participants to express his/her experiences. To engage the participants in an open, casual, and spontaneous dialogue and acquire more in-depth information on the topic, I asked a few broad questions. When in-depth information about people's opinions, beliefs,

experiences, and feelings is required, interviews are an effective strategy. When the topic of investigation necessitates a lot of probing and nuanced questioning, interviews are a good way to go (Easwaramoorthy & Zarinpoush, 2006). Phone call interview under the new normal helped me validate and confirm the objectiveness of the intervention as well as explore on other details of the intervention employed (Mathers, Fox & Hunn, 1998). Data were collected through audio recordings of interviews since audio or video recording improves the accuracy of the content shared in in-depth interview (InSites, 2007).

### **C. Data Analysis**

Group Progress Chart is presented using graphs to show the performance level of the groups in research paper writing activity before and after the intervention. I used t-test for paired samples to get the significant difference of the mean score before and after the intervention. This is very important to determine the effectiveness of PEERSEN.

After the analysis of the quantitative data, I analyzed and interpreted interview data using Braun and Clarke six-step thematic analysis.

According to Braun and Clarke (2014), an approach for examining qualitative data is thematic analysis which requires searching through a set of data to find, examine and report on recurring patterns. Thematic analysis can be used independently as a method of analysis and as a foundation for other qualitative research approaches. When attempting to comprehend a group of experiences, thoughts, or behaviors throughout a data set, thematic analysis is a suitable and strong strategy to employ.

It is worth noting that Braun and Clarke's thematic analysis is intended to be a recursive, rather than a linear, process, with successive steps prompting the researcher to

circle back to prior steps in light of new data or developing themes that warrant additional exploration.

Step 1: Familiarizing yourself with the data. The first step in the theme analysis process is to familiarize with the complete data collection, which includes reading over it several times and actively.

Step 2: Generating initial codes. Researchers can start taking notes on prospective data items of interest, questions, relationships between data items, and other preliminary ideas after completing step 1's familiarization work. This is the start of the coding process in phase 2. This stage of the project generates codes rather than themes.

Step 3: Searching for themes. The researcher creates themes by examining, combining, comparing, and even graphically mapping the relationships between codes. Inductive analysis involves researchers deriving themes directly from the coded data, resulting in themes that are more closely related to the original data and representative of the full dataset.

Step 4: Reviewing Themes. To guarantee adequate match, the researcher examines coded data presented within each theme. Within each theme, there should be sufficient commonality and coherence, and data between themes should be diverse enough to warrant separation. Data extracts and themes can now be re-ordered and adjusted to better reflect and capture coded data. Themes can be added to, joined with, separated into, or even removed entirely.

Step 5: Defining and naming themes. This stage entails developing a definition and narrative description for each theme, as well as explaining why it is relevant to the overall

research issue. The names of the themes that will be included in the final report are checked to verify that they are concise and informative enough.

Step 6: Producing the report/manuscript. The final report, according to King (2004), should go beyond a list of norms and topics. Braun and Clarke (2012) claimed that report should construct a narrative that explains not just how a researcher analyzes the data, but also why his or her choice of theme and interpretation of the data is essential and accurate.

## **V. DISCUSSION OF RESULTS AND REFLECTION**

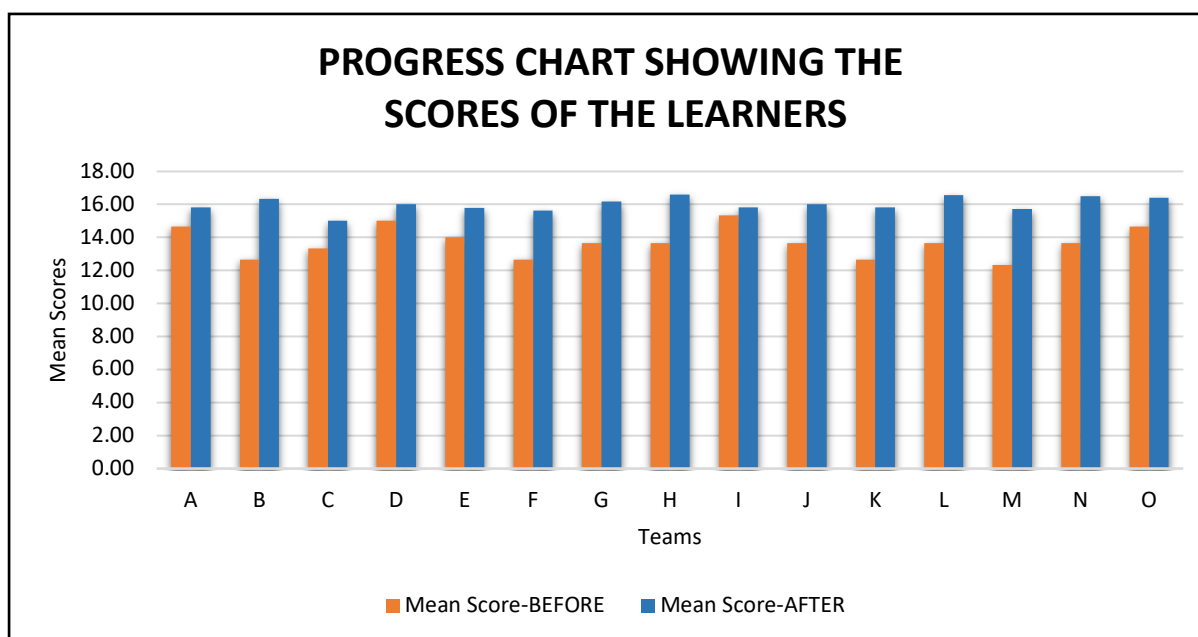
### **A. Discussion of Results**

This part presents the results and discussion based on the scores of the learners and the interviews conducted. This includes descriptive interpretation of scores and graphical presentation.

The Table 1 shows the low performance of the learners before the intervention with mean score of 13.71 with maximum score of 20 points based on the Rubric for Research Paper Writing (see Appendix 1). The result shows that learners do not perform well in writing research background, research question and scope and delimitation. Moreover, this prompted me to really employ PEERSEN to help learners in their research paper writing.

Teachers might intervene in the classroom to remedy any gaps in a learner's growth or achievement. Once a need has been recognized, appropriate treatments can be implemented to help the learner overcome any learning obstacles (Hawthorne, 2021). According to Barredo (2013), intervention materials assist teachers in providing students with the support they require to achieve development. It improves and expands their learning subject abilities, knowledge, and comprehension.

*Table 1: Mean Scores Before and After the Intervention: Improving Research Paper Writing Performance in Practical Research II of Grade 12 TVL Students Using Peer Serial Notebook (PEERSEN)*



*Table 2. Mean Scores and Standard Deviation*

Descriptive Statistics					
		Mean	n (grouped by 3)	Std. Deviation	Std. Error Mean
Pair 1	Before	13.7127	15	.90701	.23419
	After	16.0107	15	.43007	.11104

Table 2 also revealed that before the use of PEERSEN with n=15 the mean score is 13.7127, Standard Deviation of .90701 which means that scores are moderately scattered while the mean score after the use of intervention is 16.0107 with Standard Deviation of .43007 which is less scattered compared to mean score of before the intervention. The increase is largely attributed to the utilization of intervention material. From the table, the intervention becomes a resource of both the teacher and the learners to make improvement in research writing. This is a clear indication that the PEERSEN is effective for my SMAW Learners.



Table 3. Paired Samples T-Test

Paired Sample T-Test								
	Paired Differences					t	df	Sig. (2-tailed)
	Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
				Lower	Upper			
Pair Before - 1 After	-2.29800	.94490	.24397	-2.82127	-1.77473	-9.419	14	.000

Table 3 shows the result of paired t-test before and after the use of PEERSEN with df=14, t value is 9.419 with p-value of .000 which is lower than the .05 level of significance which indicates that there is significant difference in the mean sores before and after the use of PEERSEN.

Hawthorne (2021) further explained in her paper “Effective Interventions in Education: Types and Examples” that students can learn new or existing subject matter through team discussion and group activity in group interventions. Students can then listen to, reply to, and analyze their peers' various viewpoints in a collaborative setting. PEERSEN employs group learning since every member underwent discussion with their team.

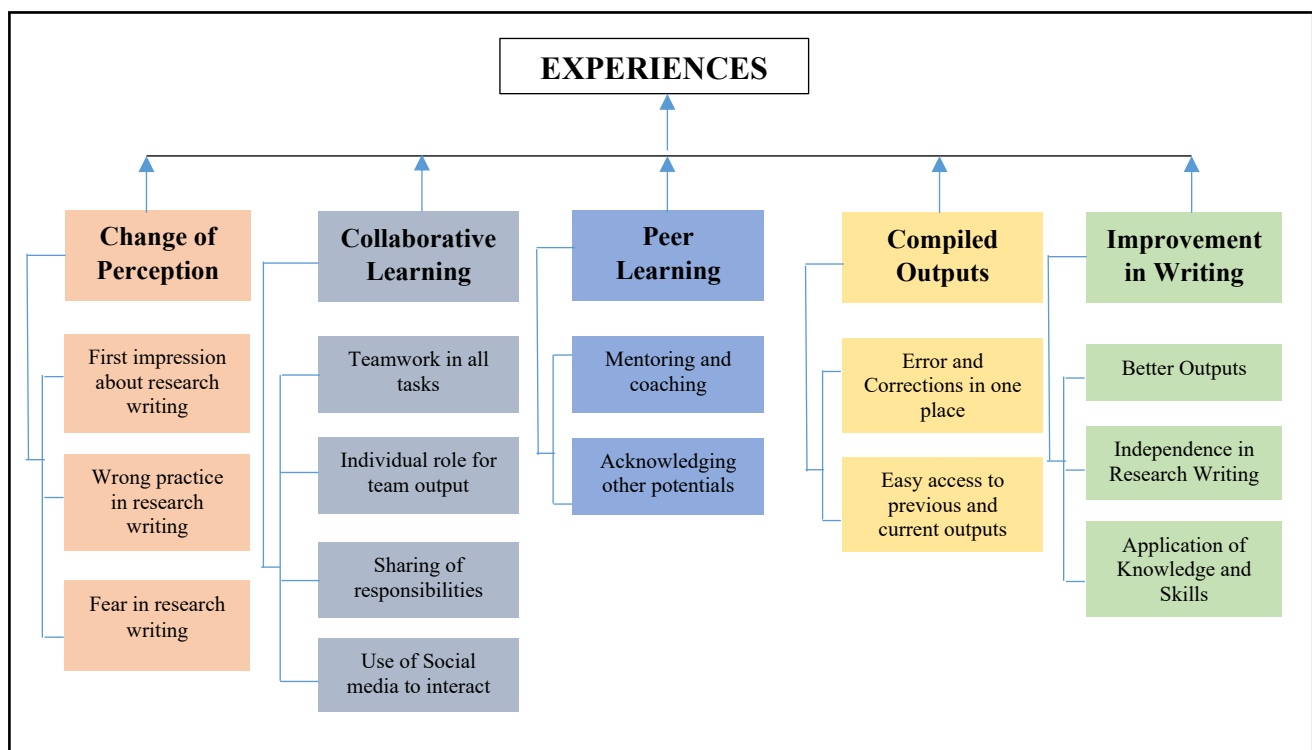
### Interview Results

Interview followed after the quantitative data were collected and analyzed. This method of gathering data intended to get authentic participation of the learners in the study of using Peer Serial Notebook (PEERSEN) in Practical Research II. Interview responses were recorded and analyzed using thematic analysis following the 6-steps of Braun and Clarke (2006).

In order to carry out safety of my interviewees, I conducted face-to-face and online interview through Facebook Video Chat. Parents and the learners were already informed about the research by having sign the consent and assent forms. Interview started with an introduction of myself and of course the purpose of the study. Since I employed unstructured interview, the question was simply to describe their experience with PEERSEN. I asked probe questions to deepen their responses.

Different themes surfaced after coding, Change of Perception, Collaborative Learning, Peer Learning, Compiled Outputs and Writing Improvement. Each theme shall be discussed in this part to determine what makes PEERSEN effective for SMAW Learners in Research Writing.

*Figure 1: Major Themes and Core Ideas on Experiences of Shielded Metal Arc Welding (SMAW) Students in Matanao National High School using Peer Serial Notebook (PEERSEN)*



**Change of Perception.** At first the learners thought that writing background of the study, question and scope and delimitation was difficult. Pre-existing beliefs about the demands of a course's assessment regime, or the standards expected by a teacher, or what students perceive it is possible to learn in a specific situation, according to Ellis, Goodyear, and Prosser (2008), can affect the activities undertaken by students that result in learning. All of the participants revealed that they have apprehensions if they can make their writing right.

*“At first Ma’am, nalibog mi unsaon pagsulat nga dili man mi maayo mosulat jud. SMAW ra baya mi Ma’am, dili mi pareha sa GAS ug STEM.” (M3-19F2F)*

*“Abi namo dili namo makaya pero nahuman ra man gihapon Ma’am. Pagdawat namo Ma’am kay diba, naghatag ka ug instructions namo Ma’am unsa among buhaton. Sa first task kay nagta-aw mi atong klase nimo sa FB Group Ma’am para makasulat mi ug background. Nagtudlanay mi kinsa mosulat kay bac mamali mi Ma’am ba. Mangopya ra man gud mi sauna sa internet Ma’am oi. Pataka ra pud mi kopya then ipaste dayon sa word unya print dayon. karon kay magsulat jud mi unya dili diay lisud. (M7-18FC).*

*“Makatawa mi Ma’am kay gatuo mi taas jud kaayo nga background of the study, naa ra man diay sa 5 paragraphs Ma’am.” (M11-17FC)*

*“Katabang jud ang PEERSEN Ma’am kay nagtuo jud mi sa sugod nga dili mi makasulat jud ug background ug katong question Ma’am pero nakasulat man mi.” (M15-17FC)*

Also, in the study conducted by Tudor, Penlington and McDowell (2010) revealed that perceptions influence students’ approaches to studies. While learners are writing on their PEERSEN, they corrected their previous ideas about research writing. The intervention has helped them to complete the competency-based tasks because they changed their thinking about the subject and its requirements.

**Collaborative Learning.** Marjan Laal and Mozghan Laal (2012) defined collaborative learning as a teaching and learning strategy in which groups of students work together to solve a

problem, complete a task, or create a product. Members of the team were assigned to perform specific tasks to complete the team output. Collaborative learning is evident in PEERSEN as shown in the responses below:

*“Gaan ra ang trabaho Ma’am kay sa tong sige ra mi atubang ug module Ma’am oi unya sige ra mi sulat nga wa diri wa didto among pangsulat. Magtinabangay mi Ma’am. Malingaw mi kay mag abot man mi.” (M45-18FC)*

*“Katong magtapok mi Ma’am sa among classmate unya magtinabangay mi. Isa mosulat ang duha magresearch. Ang among naresearch among pilian unya among ipasulat sa among kauban.” (M33-17F2F)*

*“Nagtinabangay jud mi Ma’am unya kung [ang isa] naa wala kay naa sa bukid kay amo jud xa adtoon sa ilaha. Katong una kay ako man nag-una jud sulat. Lahi ang moresearch, lahi pud mosulat maong dali ra siya Ma’am.” (M11-17FC)*

Mark, not the real name, laughed as he uttered this lines: *“Teamwork Ma’am then contribute jud ug idea kada isa. Dili pwede nga pasagdan ra namo ang isa mosulat kay basi dili mao sa among gisabutan.” (M3-19F2F)*

Online collaborative learning continues long after the pandemic passes. In collaborative learning, learners are more motivated to do their part because their team will be impacted by their performance (Vergroesen, 2020). Despite their distance, they still connect with each other through Facebook Messaging and their Group Chats.

*“Didto ra mi sa GC maam magsabot-sabot about sa research. Pero kada trabaho namo sa PEERSEN maam kay nagameet man jud mi kay dili mi ganahan nga dili magkita. Kadali ra man pud mi maam then human gani ani kay magkaon-kaon pa mi usahay magdula na.” (M7-18FC)*

*“Tawag Ma’am sa facebook unya mo-send lang mi sa among answer then katong in-charge nga mosulat iyaha nalang isulat sa PEERSEN among gipang-send.” (M41-17FC)*

**Peer Learning.** Learners feel at ease doing tasks with their classmates and are more likely to interact, think, and explore ideas more fully than they would in a teacher-led atmosphere. According to Johnston (2009), Peer Learning gives learners the opportunities to teach and be taught by each other in the team which provided them meaningful connections. Each member of a team is responsible not only for learning what is taught but also for helping teammates learn, thus

creating an atmosphere of achievement. Students work through the assignment until all group members successfully understand and complete it.

*“Teamwork jud mi Ma’am kay dili ko hawod. Katong kauban namo nga tan-aw namo kabalo-kabalo jud, siya among hangyuon nga moexplain sa amoa or mosulat.” (M41-17FC)*

*“Then naa jud teamwork maam ba kay akong mga kauban nga kabalo gamay pud kay motabang jud sa akoo.” (M33-17F2F)*

**Compiled Outputs.** For the past years in Practical Research II, I have collected outputs written on sheet of papers and every time I asked the paper I corrected to validate if they were following and applying my recommendations, most of learners if not all would tell me they lost their paper. PEERSEN was appreciated by all of the participants because they can see their errors in the first attempt and the corrected ones in the other page. I see this innovation has become a project-based learning where teachers give them opportunity for feedback and revision of the plan and project, just like in real life, and ask the learners to present their challenges, research process, techniques, and results, just like scientific research or real-world projects must stand up to peer review and critique (Vander Ark & Liebttag, 2018). They found joy in writing, revising and learning.

*“Makalipay pud maam kanang matama na among gisulat kay imoha man ipausab sa amoa, matama jud diay mi sa ikaduha na.” (M15-17FC)*

*“Lingaw pud kay makabalo mi unsa among sayop unya maningkamot mi mausab namo kay ginapausab man nimo sa amoa Ma’am. Kami ra pud makadiskobre usa among mali kay naa ra man sa PEERSEN pud ang among tama na nga task.” (M21-19FC)*

*“Nindot kay makita sa PEERSEN tong una namo nga sulat nga naay mali unya sa pikas page kay katong amoang gisulat ug usab nga tama na. Daku kaayo tabang ang PEERSEN Ma’am kay sauna mangawala among mga sinulat kay papel ra baya Ma’am no, usahay dili matagaan ug bili kay papel ra lage. Pero sa PEERSEN Ma’am man gud inampingan kaayo kay gwapa baya kaayo nagpahatag Ma’am.” (M23-18F2F)*

*“Dili jud mawala ang corrections nimo Ma’am kay nakabind baya to Ma’am.” (M38-19FC)*

*“Unya, mura baya ni siya ug diary kay matigum ang mga sinulat nga mali ug natama na Ma’am.” (M41-17FC)*

**Improvement in Writing.** Authentic learning, according to several studies, aids learners' acquisition of knowledge, comprehension of concepts, and application of skills to solve real-world issues (Wornyo, Klu & Motlhaka, 2018). With PEERSEN, learners were able to apply their learning on how to write background of the study, research questions and scope and delimitation. This is manifested when, *Sardz*, not the real name, expressed that he and his teammates could write their background of the study after I corrected their outputs.

*“Nakakat-on jud mi Ma’am nga mosulat ug background of the study, katong question ug scope [and] delimitation. Magsige ra baya mi kopya kaniadto Ma’am no, pero imoha man gud i-check, makita man nimo kung kinopya ba o katong amo na ba giusab [paraphrase] gani Ma’am. Nakalearn jud mi Ma’am mangita ug related studies sa internet. Then amoang pilian mao na to among ibutang s among background [of the study].” (M35-18FC).*

*“Dali ra diay mosulat ug background research Ma’am, magsugod ko sa baryabols parehea atong sa amo nga modular og dili magmodule nga research study Ma’am.” (M15-17FC)*

*“Then nakalearn pud mi Ma’am nga sayon ra diay ang magsulat sa background ug research question Ma’am kay tungod sa PEERSEN.” (M11-17FC)*

After the interview with the participants, I realized that the PEERSEN has served its purpose. Unexpectedly, their responses helped me proved that the intervention was indeed effective.

## **B. Reflection**

I have been teaching Practical Research II to TVL Students since 2016 and I always wanted to effect improvement in their research task outputs. It is not enough to give them the skills and values necessary to master a certain competency but as teacher, I must innovate materials to make

learning enjoyable and offer another opportunities for my learners to have meaningful experience with the learning contents. Under the new normal, teachers have been printing modules and have been checking outputs of learners every week. And sometimes, authentic assessment of learning is overlooked. This intervention has been my dream since 2018 and I was certain even before that this innovation would be very effective.

Doing this intervention entails longer time with paper works, patience in correcting errors and commitment to sustain what I started with my SMAW Learners. I have seen them struggle in constructing their sentences for just one paragraph and I cannot just look at them and do nothing. Perhaps checking their outputs can by one of my help for them but to make it novel and creative, PEERSEN is the better way to provide opportunities for my learners to interact with their peers, to allow them to see their own errors and experience how they correct it by themselves, and most importantly, to change their perceptions about research writing.

When pandemic hits the world, remote learning was embraced to continue education. Learners were forced to stay at home to study and were restricted to go out from their houses for health and safety reasons, thus, making them away from their teachers and peers. Collaborative learning, on the other hand, helped combat feeling of isolation and boredom (Vergroesen, 2020) that come with the remote learning.

During the implementation of this intervention, one of the challenges I have to face was the late submission of outputs because some of them are working students, others reasoned out that that they were not available during the lecture since they are working in farm and in shops. To resolve this, I extended due dates and I have to report to school whenever my learners were also available. And to collect their outputs on time, daily reminders via Group Chat was made with extra points for timeliness. Aside from this, I also created Facebook Group where I could post my

recorded videos on writing background of the study, research questions and scope and delimitation and can be viewed anytime by my learners.

It is our prime role as a teacher to address their learning needs in order to draw out the best in our learners. This PEERSEN can be one of the innovations in research writing and as innovators, we should never get tired of designing activities and interventions that will address gaps and difficulties in learning. The preparation for the learning process no matter how hard and toilsome it may seem is nothing to the outcome it has produced.

Based on the conduct of the study, I am recommending further study on the addressing learning needs of Grade 12 Learners in Research Writing. Future researchers may also conduct a another study using the same intervention to other TVL Strands or in Academic Tracks like STEM, GAS, HUMSS and ABM Strands. This study may also provide information to other research teachers designing intervention to those learners lagging behind.

## **VI. PLAN FOR DISSEMINATION AND UTILIZATION**

Whatever the results of this action research will be disseminated through Reporting to Parents during Homeroom Parent-Teacher Association Meetings and sharing to fellow teachers through the Learning Action Cell Sessions, In-Service Trainings and in research congress in district, division and regional levels.

The results may provide basis for school administrators as they prepare the Annual Improvement Plan (AIP). This can help the Senior High School research teachers to prepare lesson plans, in-class activities and online classes that will develop among learners the attitude towards research, the value of peer learning and immediate feed backing through Peer Serial Notebook. Future researches may explore other innovations in teaching research aside from the use of group outputs.



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