**NOVATEUR PUBLICATIONS**
**JournalNX- A Multidisciplinary Peer Reviewed Journal**
**ISSN No: 2581 - 4230**
**VOLUME 6, ISSUE 6, June -2020**

# NEMO DAT QUOD NON HABET THE LIVED EXPERIENCE OF SENIOR HIGH SCHOOL TEACHERS TEACHING PRACTICAL RESEARCH SUBJECTS

LEONILO B. CAPULSO, PhD
San Matias National High School- Senior High School
Department of Education, SDO Pampanga, PHILIPPINES
Leonilocapulso102017@gmail.com

ARNEL T. SICAT, PhD
UNIVERSITY OF THE ASSUMPTION
City of San Fernando, Pampanga

**ABSTRACT:**

**The fourth industrial revolution in education and the K to 12 curriculum require teachers to be facilitators of learning in developing and enhancing students competencies centered on collaboration, communication, creativity and critical thinking skills. However, teacher's lack of expertise in teaching research subjects led the researcher to conduct this phenomenological study which explored on the lived experiences of SHS teachers teaching practical research subjects. Using face-to-face intereview, four themes were identified as challenges encountered by the teachers, namely: students' low aptitude on the subject, low morale or lack of motivation, scarcity of teaching resources and teachers' lack of expertise in the subject matter. As a coping mechanism, the following themes were identified: mentoring from peers/colleagues, time management, resourcefulness and professional development. Using Collaizzi's data analysis. The researcher recommended the need of course rationalization or alignment, need for more mentoring, modeling and research enhancement.**

**KEY WORDS: Practical Research, Teaching, Senior High School**

**INTRODUCTION:**

The advent of fourth industrial revolution in education poses a bigger challenge to society, including the academe. Educators, as facilitators of learning are expected to possess certain competencies that are parallel to the demands and anticipated outcomes of the 21st century education. NEMO DAT QUOD NON HABET! This Latin phrase entail that a teacher will not have the capacity to facilitate learning and share to students and other learners those things they themselves do not possess. In response to this challenge, the Department of Education started to reassess its ranks particularly among teachers in line with the educational paradigm shift. Republic Act No. 10533 , "An Act Enhancing The Philippine Basic Education System by Strengthening Its Curriculum And Increasing The Number Of Years For Basic Education, Appropriating Funds Therefor And For Other Purposes also known as "Enhanced Basic Education Act of 2013" introduces the inclusion of Senior High School, an additional two years in the basic secondary education and one year for Kindergarten in the basic elementary education. This law aims to address the poor quality of basic education of the present educational set up as a result of the low achievement scores of the Filipino learners and the diminishing employment rate ( Lim, 2014 ). Some salient points of the RA 10533 include

strengthening the early childhood education, building language proficiency and providing specialized upper secondary education. Since the implementation of the K-12 Curriculum in 2016, there has been a divided opinion on its impact and significance to the learners in particular and to schools' stakeholders in general.

**THE CULTURE OF RESEARCH AND ITS IMPORTANCE :**

The Royal Society, an independent scientific academy of the United Kingdom, defined the culture of research as, "it encompasses the behaviours, values, expectations, attitudes and norms of our research communities. As such it influences researchers' career paths and determines the way that research is conducted and communicated" (Royal Society, 2018). Hanover Research (2013) adopted the definition of research culture as a "system that places great value on conducting and communicating scholarly research." Citing Andrew Cheetham, University of Western Sydney (UWS) Australia, Hanover Research (HR) emphasized that the culture of research can also pertain to "the structure that gives research behaviour significance and that allows us to understand and evaluate research activities" These statements highlight that a culture of research, far from being a group of researchers, extends a supportive context in which research is uniformly expected, discussed, produced and valued. In summary, the Hanover Research forwarded the following findings in relations to research culture: (1) A culture of research requires both the institutional- and unit- based leaders to set clear research goals and communicate them effectively; (2) Institutions wishing to develop a culture of research must allocate significant resources for faculty training and support; (3) A developing culture research requires open and collaborative personal relationships among faculty members; (4) To implement cultural change, administrators, must be prepared to tailor resource allocations based on faculty members' current motivations and abilities; ( 5) A culture of research may take years to develop and, once established, requires regular maintenance; and (6) Plans for a culture of research should include consideration of student involvement.

Kelly Chaplin and David Price (2018) forwarded that a good culture of research is influenced by national policies and programs, local policies and the attitudes and behaviour of staff at all levels. As part of the Annual Meeting of the New Champions, Chaplin and Price (2018) explained that organization's approach to research integrity which includes the formal and informal ethics, standards, protocols and policies research follow in their environment are important aspects of research culture. Hence they suggested the following points in improving the research culture: (1) Small steps can make a difference; (2) Establishing support systems can boost morale and enhance a positive research; (3) Ensure everyone is on the same page; (4) Research culture "cafes" are excellent way to share best practices; (5) Organization, department and team leaders leading by example in promoting an excellent research culture; (6) Discuss training gaps for all team members; and (7) Embed research culture at an institutional level.

**RESEARCH CULTURE AND PRODUCTIVITY IN THE ACADEME:**

In the study conducted by Groves , Grootenboer and Roonerman (2016) entitled "Facilitating a culture of relational trust in school-based action research: recognising the role of middle leaders" identified certain practices such as "professional dialogues

groups, coaching conversation, mentoring conversation and professional learning staff meetings" as essential to improve the learning and teaching process as a part of a long-term action research and development activities. In the same study, the authors emphasized the importance of developing a relational trust among leaders in the success of all research initiatives. The same findings identified that the practices of the middle leaders who were moderated the action research as important factor to the development of the teachers. In the medical field, Smeltzer, Sharts-Hopko, Cantrell, Heverly, Wise, Jenkinson, & Nthenge, (2014) in their research entitled 'Challenges to research productivity of doctoral program nursing faculty" examined the importance of promoting scholarly productivity among registered nurses, nursing faculty in the doctoral programs, in response to the recommendations of Institute of Medicine. To respond to this, creative strategies were identified in the study. However, Barner, Holosko, Thyer, & King (2015) in their study entitled Research Productivity in Top-Ranked Schools in Psychology and Social Work: Does Having a Research Culture Matter?, using controlled-comparative study expressed a contradiction to the prior research that showed social work of faculty tend to be relatively equal to psychology, in terms of its scholarly influence.

Moreover, Aithal, and Kumar (2016) with their paper entitled "ABC Model of Research Productivity and Higher Educational Institutional Ranking" argued that the performance of higher educational institutions should only be based on Institutional Research Performance (IRP), instead on pedagogy, placement, research output, faculty-student ratio, international linkage, management of technology, which normally favoured business schools. Instead, they forwarded a model on evaluating higher institution using three variables such as: (1) Number of Articles published in peer reviewed journals; (2) Number of Books published; and, (3) Number of Case studies and/or Book Chapters published during a given time of observation.

Despite the many studies and literature on the promotion of the research culture and productivity in academic institutions, there is dearth of knowledge on the culture of research during the K to 12 transition among basic education schools in third world countries such as the Philippines that shifted from a ten-year to a twelve-year cycle.

## 21ST CENTURY SKILLS AND PRACTICAL RESEARCH:

The introduction of additional two years in Senior High School as part of the Basic Education has focused on developing the 21st Century Skills (RA 10533). These skills included Critical Thinking, Collaboration, Communication and Creativity also known as the 4C's of 21st Century education (Sibal, 2013). Regional Memorandum 59, series of 2017 (R.M. No. 57, s. 2017) also known as Reformulated Regional Research Agenda highlighted the mandate of government schools to provide quality education to all learners. It is a call to all personnel of the department to engage into research and innovation in order to respond to the challenge of developing a quality and responsive education in line with its vision and mission.

In Senior High School, the competency of the teacher in handling the different subjects has been given premium. DepEd Order No. 3, s. 2016 stipulated the basic requirements in hiring Senior High School teachers specifically on the relevant specialized trainings. Regardless of track and strand, Practical Research 1 (Qualitative Research) and Practical Research 2 (Quantitative Research) are part of the applied contextualized Subjects. These subjects focus on the nature of inquiry and the

different parts of research paper. Its content should create impact in the school and the community. Based on the needs assessment in a select cluster on the implementation of Cluster-Based Research Management, out of 19 schools, a number of them expressed great concern about their teachers' assignment in handling research subjects and the outputs of the school-based management that include that promotion and conduct of research among teachers and students.

With the aforementioned gaps, the study aimed at exploring the lived experiences of teachers teaching practical research in the SHS in order to provide inputs for policy review in the promotion of research culture in the Department of Education. Specifically, it sought to describe the insights of teacher-participants in teaching practical research in particular their challenges and coping mechanisms. This study may provide a clearer view of the of the experiences of the teachers handling practical research subjects in a select government senior high schools in Region III. Findings of this study may contribute to the understanding of the challenges encountered and their coping mechanism in the desire of developing learners with 21st century skills.

**METHOD:**

Research Design

Phenomenological research design was adopted in this study. As a research design, it pertains to "the science of essence of consciousness focused on defining the concept of intentionality and the meaning of lived experience from the first person point of view (Husserl as cited in De Guzman & de Castro, 2012)

Participants & Setting

Ten (10) SHS teachers from a select cluster of DepEd Pampanga became participants on a voluntary basis. Unfortunately, three (3) participants decided to withdraw from participating in the study because of the conflict of work schedules and the new deadlines they have to meet since some of them are doing their responsibilities for the school validation process. The cluster is composed of 19 Secondary schools from four towns of Pampanga. Each school managers has assigned a research coordinator who takes charge of the promotion of school research culture and productivity. The said coordinators helped the researchers in determining potential participants of the study based on the inclusion criteria.

Procedure

This study employed semi-structured interview that focused on the lived experiences of Senior High School teachers teaching research. It centers on the challenges they have encountered in teaching research subjects, their teaching strategies and their coping mechanism. Participants were chosen based on the following criteria: (1) must have handled practical research subjects in the senior high school; and (2) must not have written a graduate school research paper/thesis. Permission was secured from the cluster coordinator and the school head-in-charge. Prior to the interview, consent of the participants were also sought and the nature of the study was also discussed with them. The interviews lasted for thirty minutes due to limited time and the hectic schedule of the participants.

**DATA COLLECTION & ANALYSIS:**

Using focus interview and FGD, the collected data was analyzed using Collaizzi's (1978) method of data analysis. As a rigorous method, the study may find, understand, describe and depict the experiences of the research teachers to bring out emerging themes.

The seven (7) steps of Collaizzi's method was followed namely: (1) Reading and

rereading descriptions – to acquire general feeling for experiences; (2) Extracting significant statements – to generate information pertaining directly to phenomenon studied; (3) Formulating meanings-to illuminate meaning hidden in various contexts of the phenomenon; (4) Categorizing into clusters of themes and validating with original text – to identify experiences common to all informants ; (5) Describing – to generate a prototype of a theoretical model; (6) Returning to participants;- to validate the findings; and (7) Incorporating any changes based on the informants' feedback – to present theoretical model that comprehensively reflects the universal features of phenomenon.

**ETHICAL CONSIDERATION:**

Letter of consent were signed by the informants to assure them of confidentiality of the data shared. In cases where pictures have to be shown for research presentation of output, the same consent were also signed by the participants. To observe privacy law, transcripts were disposed properly through paper shredder.

**FINDINGS:**

Out of the ten (10) teacher volunteers, only seven (7) participated because of the conflict of schedule and their earlier commitments. Based on the data, four challenges encountered by the teachers handling research subjects were identified namely: students' low aptitude on the subject, low morale or lack of motivation, scarcity of teaching resources and teachers' lack of expertise in the subject matter. As a coping mechanism, the participants identified the following: mentoring from peers/colleagues, time management, resourcefulness and professional development. Some recommendations were also identified such as the need of course rationalization or alignment, need for more mentoring, modeling and research enhancement.

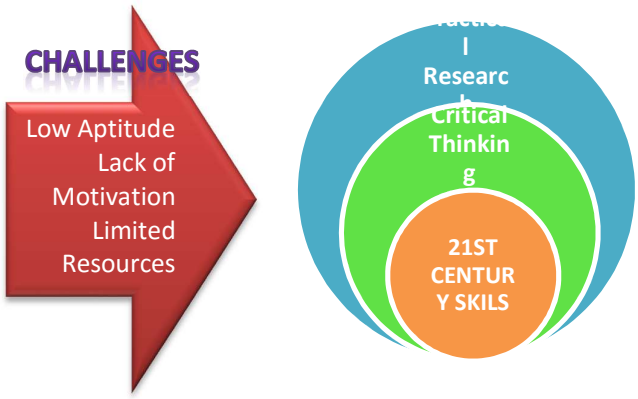


Figure 1. Teachers' Challenges and Coping Mechanism in Teaching Practical Research

**STUDENTS' LOW APTITUDE:**

Practical research subject requires a lot of reading activities especially on related literature and studies from books and research journals. These can be accessed by going to other libraries, since there is no available one in the school, reading sample completed research of the previous SHS students, or through online open sources. However, a participant of the study identified it as one of the challenges they have encountered:

Another challenge that I encounter until now is the level of competencies of my students. Most of them do find it difficult to construct sentences/paragraphs. If they can, they fail to express coherence and cohesion of ideas. Sometimes, I will allow them to speak in Filipino just for them to answer. Sometimes, I have to ask someone to explain the text in their dialect so they will understand the content of the article or text. (P1)

**STUDENTS' LOW MORALE:**

Aside from difficulty in understand and comprehending the text from the journals and other literatures, which often very technical, students also observe to have a very low

morale and motivation. They lack the sense of urgency and normally they do not submit on time. They are not particular with meeting the deadlines as expressed by a participant:

Other students cannot meet deadlines. They are busy with other things or they just have a lot of things to accomplish that many times, they passed their requirements beyond the deadlines, if not passing anything. The teacher sometimes need to remind them in order for them to pass the requirements. Sometimes, you have to tell them the consequences of not passing. Like, they can fail if they will not pass it. (P4)

**TEACHERS' LACK OF EXPERTISE:**

Teachers in Senior High School are expected to teach at least six hours a day regardless of one's field of specialization. Those who are under loaded are given extra subjects to fill the missing number of hours. Unfortunately, those who are assigned to teach Practical Research subjects sometimes are not familiar with the subject or have not even written one formal research. This is the sentiment of one participant when she shared:
Since I am not a researcher myself and I have not written my own research, one of the challenges I have encountered as a Research Teacher is that I don't have enough knowledge in teaching research. I was asked to teach the subject because I am under load and no one will handle the subject. I am just studying the parts of research and teach them to my students. Particularly, I had a difficulty teaching Chapter 4 because it involves the analysis of data. I do not have training in data analysis especially on statistics. ( P7)

Also, the motivation to be applied to students for them to get more interested in studying and applying research. I observed that they are less motivated when it comes to my subject compared to other subjects. (P3)

**SCARCITY OF RESOURCES:**

Teaching practical research to senior high school students requires more than teaching competence from teachers. It also requires necessary resources, material or electronic, to fully appreciate the journey of appreciating and writing a research work. Reading related literature and studies necessitates variety of printed or online resources, paid or open, in order to have better understanding of the topic at hand. Sometimes, reading literature can also be a source of establishing the research gap or a way of supporting one's claims. One needs a good computers or gadgets to be used and eventually a good website for journals. Unfortunately, common situation in government schools expressed the scarcity as projected by one participant.

As a new teacher of research, we rely so much on what our mentors will share about the topic. Personally, we also use our resources by trying to access relevant sites in the internet to get some sources and references online, especially googlescholar.com and other open journal sites. However, when we start sharing them to our students, we have a hard time because of the unavailability of the computer laboratory and slow internet connection. The computer laboratory is not always available because it is sometimes used as a classroom. My students have hard time trying to access the internet in school because of the low signal, if not, because it is not available. (P3)

**TEACHERS COPING MECHANISM:**

To handle the challenges in teaching Practical Research, the participants employed different coping mechanisms. Some participants seek mentoring or the help of other colleagues who are expert on the topic. Resources from previous trainings attended which were provided by the department were also utilized. Other participants make

necessary adjustments in the school plan and activities so as to avail the facilities of the school especially the computer laboratory. Moreover, some participants decided to enroll in the graduate school as part of their professional development.

**MENTORING:**

Teachers who are pioneer in the field encountered some difficulties especially in the delivery of the lesson. Teachers who handle research need some technical skills on certain competencies that is not common to other subjects. To respond to this challenge, one participant opined,

Since I am not well versed in the subject, I tried to ask help from other teachers who are also teaching research. I asked them what their strategies and their sources in discussing the topics. I even asked them about the output they asked their students to submit to them, and request them if they can share it to me. And I am happy because they are very generous in sharing their resources and time. ( P2)

**RESOURCEFULNESS:**

Unlike other subjects, the Practical Research has not yet been provided with text books for the students and the teachers to use for the school year. Teachers need to be very creative and resourceful to deliver the expected competencies of the subject.

To deal with some limitations in teaching PR2, I have been using different resources which tell different information therefore I searched for a reference that is used in Senior High School as well. (P1)

I also used the documents which were shared by PR1 &2 teachers during the RMTOT which took place in Subic. I also bought books as additional references. I frequently conduct conferences with each research team after each discussion to achieve optimum understanding of the subject matter then later conferences with the team leaders and vice leaders. ( P1)

**TIME MANAGEMENT:**

Due to the limitation of material resources in the school, the task of the school leaders and key persons is to see to it that activities are properly plotted out at the beginning of the school year. Considering the many activities, both curricular and extra-curricular, school physical facilities are also properly allocated to cater those department with urgent and related needs. This explains why some activities are properly planned to avoid duplication and render other concerns to be given lesser priorities. Since the computer laboratory is the priority use of subjects on Information and Communication Technology (ICT), students' use of the laboratory for the purposes of practical research is essential. They need to be properly planned and scheduled earlier. This initiative is forwarded by one participant to cope with such challenge in the use of the computer laboratory.

What we did to cope up with the challenges of having an access to internet and facilities like computer laboratory is to make some adjustments with the schedule of the Senior High School students with the availability of the laboratory and use for the mean time the internet connection of the school faculty. Next time, I will see to it, that even the scheduling of using the computer laboratory is prepared at the start of the school year so that my students will not have a hard time scheduling. (P3)

**PROFESSIONAL DEVELOPMENT:**

A dynamic teacher always makes room for improvement and growth. This is true because classroom environment especially in the 21st century calls for the development of competencies that will render the learners relevant and productive members of society. A

participant mentioned its importance especially in teaching research, I updated myself with the current trends in research by attending seminars. I even used my own savings every time I attend trainings because it helped me enhanced my skills in teaching the subject…I also make myself available for some trainings provided by the cluster and the division. ( P2)

**DISCUSSION:**

Critical thinking skills enable one to analyze facts in order to form a judgment. Hey-Williams (2017), a director of Curriculum and Instruction in Two Rivers Public Charter School, identified five constructs associated to critical thinking as a cognitive skill: 1) schema development and activation, 2) effective reasoning, 3) creativity and innovation, 4) problem solving and 5) decision making. Critical thinking is one of the 21st skills expected to be developed by Senior High School students in the K to 12 Curriculum as stipulated in R.A. 10533 also known as Enhanced Basic Education Act of 2013. The curriculum was designed so that subject offerings, regardless of track or strand will produce the desired competencies. Practical Research as a subject aims to develop critical thinking skills among Grade 11 and 12 students. To acquire results and outcomes, teachers or facilitators should possess certain skills, expertise and resources to properly implement the required output.

The researchers identified four challenges encountered by teachers teaching the subject. The word challenges in this study refer to the difficulties met by the participants in executing their task as a research teacher, inside and outside the classroom. The participants of the study belong to the senior high schools in Cluster 6 comprising four towns in the Province of Pampanga, Philippines. The participants are either new to the institution; have not finished their graduate studies and therefore have not written their own thesis in the graduate school. The challenges drawn from the participants are important factors to consider because they can serve as hindrance in realizing the expected competencies of the studies. The study identified four challenges encountered by the participants in teaching Practical research subjects: (1) low aptitude, (2) lack of motivation, (3) limited resources and (4) lack of expertise.

Aptitude can be defined as a high level of intellect or a quickness to learn. It may also refer to a component of a competence to do certain kind of work at a certain level. The low aptitude of students was identified by the participant as one of the problems he encountered inside the classroom. Most of the reading materials in Practical research are written in English and should be understood in the same context. As learners, they are also expected to write their own research output in English following the same rules of grammar. Since students have a hard time constructing English sentences and eventually expressing themselves in English, both the teacher and the students should collaborate in order to attain the desired competencies. Since a big portion of the grade of the students in the subject is given to their performance output, may it be written and oral, students who can hardly comprehend English will have a difficulty producing quality written and oral output and can even fail the class. In this case, teachers should really give an extra effort by employing some effective strategies to enable the students to understand the text and express themselves both in oral or written form.

Each subject in the Senior High School is allotted for one semester amounting to five months equivalent to eighty hours. Each semester is divided into two terms: midterm and final term. Within this period, students are expected to submit all the requirements for

each term in order to pass the subject. In practical research, students' final output per term can either be practical test through research colloquium defense or a periodical exam. This is the same with the final requirements. Whichever mode of assessment the teacher will adopt, it necessitates students' capacity to write a quality research proposal paper with good communication skills to defend their research proposal. The participant identified lack of motivation and sense of urgency among senior high school students as one of the challenges they encountered. Dislen, et al. (2013) identified motivation as the backbone of the learning process. The authors identified the following factors of students' lack of motivation: age, difficulty in concentration, habits of solving multiple choice questions, overloading language lesson hours, syllabus health problems and shortage of material. To engage the students in class the same authors suggest the following strategies: usage of visual aids, communicative approach grammar teaching, and using body language. This strategies therefore implies that teachers of practical research should really exert more efforts in teaching the subject. Contextualizing some research problems and even discussing some concepts in their dialect can help them understand research concepts and eventually get their attention and motivation.

Aristotle said, "Nemo dat quod non habet!" meaning, "You cannot give what you don't have". The lack of teacher's competence to deliver the lesson in practical research is crucially detrimental in attaining the expected learning outcome. To guide the students properly in articulating concepts, dynamics and rigor of research, the teacher should have the required experience and cognitive skills to deliver the outcomes. This study showed the participants' lack of expertise in research is one of the notable challenges that needs to be addressed. Vizconde as cited in Bagtas, et al. (2016) supported this claim with regards teachers' challenges in the K to 12 Curriculum implementation. Cabili, Capilitan and Sequente as cited in Bagtas (2016) further affirmed that teaching subjects which are not their field of expertise is among the struggles of teachers in implementing the new curriculum that left them teaching the subjects the way they comprehend it. Although the department has been providing seminars and trainings for new teachers, an intensified capacity building that focused on research, in the case of this study, should be provided, or compromised the expected course competency among learners.

Scarcity of resources in delivering the lesson in practical research is also identified by the participants. This scarcity refers to the lack of textbooks from the government, limited internet access and other mechanisms. In the absence of the textbook, the teachers have to find their means to deliver the expected competencies to the students. This finding is supported by the study of Ocampo and Delgado (2014) which considered the scarce resources in the delivery of the new curriculum, such as teaching materials and facilities. The need for textbooks and instructional materials were also reiterated by Calderon as cited in Bagtas et al. (2016).

Mentoring refers to the act or process of helping and giving advice to younger or less experienced persons, especially in a job or at school as defined by Cambridge dictionary. Since participants of the study may not have written their own research yet, asking the help of seasoned teachers is very practical and important . Ehri and Flugman (2018) proved that mentoring teachers can help them enhance their skills that can have impact in the performance of the learners. However, the same authors also attested that the effectiveness of intensive mentoring model of

professional development particularly in research subjects are different to teach.

The ability of teachers to recreate and innovate in their teaching strategies and resources are very essential in the presence of scarcity. Thomas and Tomas (2012) identified the same necessity of being creative and resourceful in their study with Zambian teachers, and considered it as a key characteristic of expert teachers. The lack of textbooks and other teaching materials in teaching practical subjects is no obstacle to a resourceful teacher in ensuring students' competencies as required by the subject, a key factor for innovation.

Connected with the scarcity of the resources is the use of other schools facilities like computer laboratories in school. Using online sites especially open sites to access research journals mitigates the challenge. However, the school cannot accommodate some students for this purpose since other subjects related to ICT are the priority of the services. Hence, teachers need to be very creative in scheduling the class. Proper time management and anticipating the school calendar may help them provide students of Practical Research the chance to access the online mechanism of the school. Zafarullah (2017) defined time management as a process of identifying the needs through prioritizing and planning the task in order to achieve organization goals. Moreover, proper time management is also found to be effective in achieving job satisfaction and motivation.

Lastly, teacher participants identified professional development as their solution to cope with the earlier challenges they have encountered. Teachers especially those who have minimal experience in conducting research attend seminars and training to equip themselves with the technical know-how in teaching of Practical Research subjects. Kennedy (2016) identified the positive effects of teaching and engaging in continuing professional development specifically focusing on content knowledge (Blank et al., 2008; Desimone, 2009; Yoon et al., 2007). However, teachers handling practical research subject who are engaged only in content should be warned because content knowledge alone have less effect in the learners' academic performance (Greenleaf et al., 2011; Heller et al., 2012; Niess, 2005). Other aspects of professional development should also be adopted.

Conclusions

The participants identified four challenges in teaching practical research subjects such as low aptitude of students, learners' lack of motivation, limited resources of teachers and lack of expertise of the teachers. These challenges are common to Cluster VI and particularly on teachers of practical research since most of them are new to the field of study. Also, since the curriculum for Senior High School is barely three years of implementation, a lot of curriculum enhancement are possible to address these challenges of teachers.

Some coping mechanism strategies were utilized by teachers in handling there limitation in handling the subject such as: mentoring from other colleagues in school and from other institution, resourcefulness, time management and professional development. Most of their strategies were employed by the participants so as not to compromise the expected competencies of the subject. In most cases, the teacher participants will finance and invest on their own professional education in order to implement the said coping mechanism.

**RECOMMENDATIONS:**

Findings of the study suggest that in the desire to develop the critical thinking skills of students, teaching practical research in Senior High School should be given more attention,

just like other subjects. Teachers especially those handling subjects with less expertise should be provided with more enhanced capacity building/training to compensate the competencies required by the subject.

School leaders, especially those assigned in the promotion and development of school and even division research culture should be more creative in providing support to face fairly the challenges encountered by teachers handling research subjects. Students' lack of motivation and low aptitude in conducting research study should addressed by providing technical skills and enhancement program on technical writing and oral communication skills.

Since the study was limited to the cluster level, it is recommended that the same study be conducted to other clusters so as to have a bigger perspective for the School Division Office. This can be a good opportunity to reassess the Division Research Productivity and the schools research needs in response to the Basic Education Research Agenda (BERA) of the Department of Education.

Future researchers are encouraged to conduct a quantitative study to validate the result of the research. A bigger population of respondents is also suggested to have a more contextualized and eventually make a more reliable generalizations and eventually provide inputs for program and policy reviews for the promotion of research culture in the Department of Education.

**REFERENCES:**

1) Bagtas, E., Sicat T., Calaguas, J, Yalung O., & Calbang R.(2016) . "Crossing the bridge while it is being built": UA 's experience on the K to 12 transition from the perspective of the administeators. Ad Meliora, pp.47-68
2) Dişlen, G., Ve, Ö., İfadeleri, Ö., Motivasyon, I., & Sosyal, A. (2013). THE REASONS OF LACK OF MOTIVATION FROM THE STUDENTS' AND TEACHERS'VOICES. Retrieved: http:// citeseerx.ist. psu.edu / viewdoc/ download;jsessionid=8B86F74F19BF72D09A2F82A5AC8D67A6?doi=10.1.1.680.9919&rep=rep1&type=pdf
3) Ehri, L. C., & Flugman, B. (2018). Mentoring teachers in systematic phonics instruction: effectiveness of an intensive year-long program for kindergarten through 3rd grade teachers and their students. Reading and Writing, 31(2), 425-456.
4) Hobson, A. J., Ashby, P., Malderez, A., & Tomlinson, P. D. (2009). Mentoring beginning teachers: What we know and what we don't. Teaching and teacher education, 25(1), 207-216.
5) Kennedy, M. M. (2016). How does professional development improve teaching?. Review of educational research, 86(4), 945-980
6) Kirillov, A. V., Tanatova, D. K., Vinichenko, M. V., & Makushkin, S. A. (2015). Theory and practice of time-management in education. Asian Social Science, 11(19), 193. Retrieved : https://www. questia.com /library/ journal/1P3-3780459281/theory-and-practice -of-time-management-in-education
7) Thomas, C. M., & Thomas, M. A. (2012). Zambian teachers' perceptions of expert teaching: resourcefulness, punctuality, and sobriety. International Journal of Qualitative Studies in Education, 25(5), 583-600.
8) Zauszniewski, J. A., Eggenschwiler, K., Preechawong, S., Roberts, B. L., & Morris, D. L. (2006). Effects of teaching resourcefulness skills to elders. Aging & Mental Health, 10(4), 404-412.
9) Zafarullah, S., & Pertti, V. (2017). Effect of time management on the job satisfaction and motivation of teacher educators: A narrative analysis. Retrieved: https://erepo.uef.fi/handle/123456789/2594.