



TEACHERS' AND LEARNERS' EXPERIENCES ON TEACHING AND CONDUCTING RESEARCH STUDIES OF SCIENCE, TECHNOLOGY, ENGINEERING, AND MATHEMATICS (STEM): GROUNDWORK FOR THE INTERVENTION PROGRAM

MARY HAIL M. GOBUYAN

Teacher II

Pavia National High School
mhgobuyan5718@gmail.com

ABSTRACT

This qualitative study aimed to determine the experiences of teachers and learners in teaching and conducting research studies of Science, Technology, Engineering, and Mathematics (STEM) as basis for the groundwork intervention program in Schools Division of Pavia during the school year 2024-2025. The research method utilized in the study was qualitative method using in-depth interview and the design was phenomenology. The results revealed that the teachers experiences the background, prior knowledge, difficulties of learners in constructing research studies. On the other hand, some learners found conducting research studies is challenging, while others considered it easy and enjoyable. Teachers and learners also encountered hindering and facilitating factors in teaching and conducting research studies. To further address the challenges and supplement the factors encountered by them, the researcher proposed an intervention program.

Keywords: *Experiences, STEM Research Studies, Intervention program*

Editorial Team

Editor-in-Chief: Alvin B. Punongbayan

Associate Editor: Andro M. Bautista

Managing Editor: Raymart O. Basco

Web Editor: Nikko C. Panotes

Manuscript Editors / Reviewers:

Chin Wen Cong, Christopher DC. Francisco, Camille P. Alicaway, Pinky Jane A. Perez,
Mary Jane B. Custodio, Irene H. Andino, Mark-Jhon R. Prestoza, Ma. Rhoda E. Panganiban, Rjay C. Calaguas,
Mario A. Cudiamat, Jesson L. Hero, Albert Bulawat, Cris T. Zita, Allan M. Manaloto, Jerico N. Mendoza



INTRODUCTION

Background of the Study

Research solves social issues, improves convenience, and is a vital instrument for both national and international advancement (Bullo et al., 2023; Al-saff, 2020; Faltoro et.al. 2016; Monro, 2017). In the aspect of education, research is essential for improving the standards of instruction and knowledge. Many learners were drained and exhausted in writing their research paper, maybe because they were not able to understand the concepts and purpose of conducting a research study, as a result, they feel intimidated on how to conduct it. Some learners are scared of carrying out research (Zarah, 2022; Bullo et al., 2023). As a result, most of them do not appreciate the importance of it.

Common experience faced by learners in conducting research is the time-consuming nature of the process. Research frequently entails sorting through vast volumes of data, evaluating information, and synthesizing findings. This can be a daunting task for many learners, especially when balancing other academic responsibilities.

Conducting research can be a valuable learning experience to learners, because it helps them think critically, solve problems and manage their time. Despite the challenges faced along the way, the process of conducting research ultimately contributes to a deeper understanding of a subject area and prepares students for future academic pursuits. In the country, research subjects are being taught to Grade 11 & 12 learners nationwide, especially in Science Technology Engineering and Mathematics (STEM) strand. Teachers who are tasked with teaching research find it to be both a difficulty and an opportunity for exploration. Teaching and

Editorial Team

Editor-in-Chief: Alvin B. Punongbayan

Associate Editor: Andro M. Bautista

Managing Editor: Raymart O. Basco

Web Editor: Nikko C. Panotes

Manuscript Editors / Reviewers:

Chin Wen Cong, Christopher DC. Francisco, Camille P. Alicaway, Pinky Jane A. Perez,
Mary Jane B. Custodio, Irene H. Andino, Mark-Jhon R. Prestoza, Ma. Rhoda E. Panganiban, Rjay C. Calaguas,
Mario A. Cudiamat, Jesson L. Hero, Albert Bulawat, Cris T. Zita, Allan M. Manaloto, Jerico N. Mendoza

INSTABRIGHT e-GAZETTE

ISSN: 2704-3010

Volume VI, Issue III

February 2025

Available online at <https://www.instabrightgazette.com>



researching help develop critical thinking, insight into one's field, and communication skills. It can also draw on the ability to select and organize content in a meaningful way not only for teachers but also for students. On the other hand, teaching research subjects in senior high was a challenge, and the researcher believes that it is not easy for teachers to teach it. Teachers should be knowledgeable about the details and have experience in the field of research. They should also be willing to explore strategies that may help learners embrace the culture of research, because K to 12 curriculum aimed to produce learners who are skilled in research. Teachers should deal with the ever-evolving nature of research methods and technologies. In order to stay current and relevant, they must constantly update their own knowledge and skills in order to effectively teach these new methods to their students.

The researcher has experienced challenges in teaching research, because many of them may not see the relevance or importance of this subject in their academic pursuits. Educators should demonstrate practical applications of research skills in order to motivate students and foster a deeper appreciation for the subject. By addressing these factors head-on and employing innovative teaching strategies, teachers can effectively impart valuable research skills to their students.

It is for these reason that the researcher determined the experiences of teachers and learners in teaching and conducting research studies of Science, Technology, Engineering, and Mathematics (STEM) as the basis for the groundwork intervention program.

Editorial Team

Editor-in-Chief: Alvin B. Punongbayan

Associate Editor: Andro M. Bautista

Managing Editor: Raymart O. Basco

Web Editor: Nikko C. Panotes

Manuscript Editors / Reviewers:

Chin Wen Cong, Christopher DC. Francisco, Camille P. Alicaway, Pinky Jane A. Perez,
Mary Jane B. Custodio, Irene H. Andino, Mark-Jhon R. Prestoza, Ma. Rhoda E. Panganiban, Rjay C. Calaguas,
Mario A. Cudiamat, Jesson L. Hero, Albert Bulawat, Cris T. Zita, Allan M. Manaloto, Jerico N. Mendoza



RESEARCH METHODOLOGY

The research methodology, research design, study participants, data collection techniques, research instrument, and data analysis are all be covered in this chapter. The purpose of this study is to determine the teachers' and students' experiences on teaching and conducting of Science Technology Engineering and Mathematics (STEM) research studies as the basis for the groundwork intervention program in Pavia National High School, Schools District of Pavia during the school year 2024-2025.

Research Method

Qualitative methods have emerged as indispensable tools for garnering deep insights and understanding complex phenomena explores the depths of social phenomena, enabling researchers to connect with the subjective experiences of their subjects (Lim, 2024).

In – depth interview was used as a part of a qualitative research methodology for the study.

During the interview, the individuals conducting the interview, as well as the individual being interviewed, have the opportunity to be seated separately as they contemplate a set of inquiries pertaining to a specific subject matter. By articulating their answers to these inquiries, the participants were prompted to offer their fundamental or crucial perspectives on a particular subject within a societal framework.

Research Design

Research design describes the general plan and analytical methodology that have been selected to logically and cogently combine the many study components, guaranteeing that the

Editorial Team

Editor-in-Chief: Alvin B. Punongbayan

Associate Editor: Andro M. Bautista

Managing Editor: Raymart O. Basco

Web Editor: Nikko C. Panotes

Manuscript Editors / Reviewers:

Chin Wen Cong, Christopher DC. Francisco, Camille P. Alicaway, Pinky Jane A. Perez,
Mary Jane B. Custodio, Irene H. Andino, Mark-Jhon R. Prestoza, Ma. Rhoda E. Panganiban, Rjay C. Calaguas,
Mario A. Cudiamat, Jesson L. Hero, Albert Bulawat, Cris T. Zita, Allan M. Manaloto, Jerico N. Mendoza



research problem will be fully examined. According to USC Libraries (2025), it serves as the guide for gathering, calculating, and interpreting data and/or information.

The researcher settles on the phenomenological qualitative type of research design. A phenomenological study is a type of qualitative research that uses a combination of methods, such as conducting interviews, reading documents, watching videos, or visiting places and events, to understand the meaning of a participant's place on whatever's being examined. It relies on the participants' own perspectives to provide insight into their motivations.

Researchers that use the phenomenological approach examine human experiences, including how individuals interpret their shared and lived experiences. Phenomenology is a theoretical tool for educational research because it gives researchers the freedom to describe and comprehend complicated events, such many facets of the human social experience (Alhazmi & Kaufman, 2022).

Participants of the Study

The participants of the study were four (4) purposefully selected teachers teaching Science, Technology, Engineering and Mathematics research subjects in senior high school (SHS) and sixteen (16) senior high school learners during school year 2024-2025 in Pavia National High School, Pavia, Iloilo. The researcher chose the participants through purposive sampling technique based on the criteria set forth by the researcher. Purposive sampling techniques steer clear of random sampling and ensure that particular types of instances of potential participants are included in the research study's final sample (Nurs, 2020).

Editorial Team

Editor-in-Chief: Alvin B. Punongbayan

Associate Editor: Andro M. Bautista

Managing Editor: Raymart O. Basco

Web Editor: Nikko C. Panotes

Manuscript Editors / Reviewers:

Chin Wen Cong, Christopher DC. Francisco, Camille P. Alicaway, Pinky Jane A. Perez,
Mary Jane B. Custodio, Irene H. Andino, Mark-Jhon R. Prestoza, Ma. Rhoda E. Panganiban, Rjay C. Calaguas,
Mario A. Cudiamat, Jesson L. Hero, Albert Bulawat, Cris T. Zita, Allan M. Manaloto, Jerico N. Mendoza



It is frequently used in qualitative research to find and pick the cases with the most information so that the resources are used as effectively as possible. This involves identifying and choosing individuals or groups who are knowledgeable and skilled about an interesting phenomenon.

Sampling Design

The investigation's sample strategy has a purpose. A non-probability sample, called a purposive sample, is chosen based on the study's demographics and goal.

In purposive research sampling, a sample (person, cases, or events) was chosen based on their assessment that it would fit the study's objective.

Research Instrument

The research instrument used was researcher-made interview questions. The respondents were interviewed based on the questions formulated by the researcher. All the questions that were formulated are appropriate and relevant to the purpose and to the goals of the study. Moreover, the interview was conducted face-to-face or online through Messenger depending on the availability of the respondents.

Validity of the Research Instrument

Prior to the researcher, the advisor, the dean of the graduate school, and the panel of jurors were selected based on their expertise in the field of research, testing and assessment, and validation of each question for review and modification was requested.

A researcher must ensure that their conclusion is appropriate, meaningful, accurate, and valuable in order to be deemed legitimate. The content and structure of evidence related to

Editorial Team

Editor-in-Chief: Alvin B. Punongbayan

Associate Editor: Andro M. Bautista

Managing Editor: Raymart O. Basco

Web Editor: Nikko C. Panotes

Manuscript Editors / Reviewers:

Chin Wen Cong, Christopher DC. Francisco, Camille P. Alicaway, Pinky Jane A. Perez,
Mary Jane B. Custodio, Irene H. Andino, Mark-Jhon R. Prestoza, Ma. Rhoda E. Panganiban, Rjay C. Calaguas,
Mario A. Cudiamat, Jesson L. Hero, Albert Bulawat, Cris T. Zita, Allan M. Manaloto, Jerico N. Mendoza



the validity of the content must align with the definitions of variables and the sample population under study, thus contributing to the validation of the items in the questionnaire.

Applying the appropriate framework of Good & Scates (2007), the input, modifications, and recommendations provided by the panel of validators with respect to the interview schedule was duly taken into account.

Data Gathering Procedures

The researcher asked approval from the advisor, dean of the graduate school, superintendent of the school's division, district supervisors, heads of the schools, and specific participants.

English or Hiligaynon was used to interview the participants in order for them to fully express their experiences, difficulties, and challenges. Face – to - face interview or video recording was used in conducting the study.

The participants assured of privacy and confidentiality of their identities. The contents of the ethical consent form were explained to them before they sign at the start of the interview. The right to withdraw anytime was accorded to the participants.

Data Analysis

Thematic analysis was used to examine the data collected. The goal of thematic analysis is to find and examine recurrent themes or patterns in a dataset. After looking over the data, researchers identify recurring themes or concepts, which are then categorized and given names according to their importance. This procedure aids in identifying important

Editorial Team

Editor-in-Chief: Alvin B. Punongbayan

Associate Editor: Andro M. Bautista

Managing Editor: Raymart O. Basco

Web Editor: Nikko C. Panotes

Manuscript Editors / Reviewers:

Chin Wen Cong, Christopher DC. Francisco, Camille P. Alicaway, Pinky Jane A. Perez,
Mary Jane B. Custodio, Irene H. Andino, Mark-Jhon R. Prestoza, Ma. Rhoda E. Panganiban, Rjay C. Calaguas,
Mario A. Cudiamat, Jesson L. Hero, Albert Bulawat, Cris T. Zita, Allan M. Manaloto, Jerico N. Mendoza



insights and comprehending the underlying meanings of the data under study (Aiswarya, 2024).

RESULTS AND DISCUSSIONS

The main purpose of the study was to find out the experiences of teachers and learners in teaching and conducting research studies of Science, Technology, Engineering, and Mathematics (STEM) as the basis for the groundwork intervention program in Pavia National High School, Schools District of Pavia during the school year 2024-2025.

The research method utilized in the study was qualitative method using in-depth interview and the research design was phenomenology.

The participants of the study were four (4) teachers teaching Science, Technology, Engineering, and Mathematics (STEM) research subjects and sixteen (16) Science, Technology, Engineering, and Mathematics (STEM) learners in the Schools District of Pavia.

The researcher-made interview schedule was used as instrument to gather data. This tool was subjected to validity test.

The following were the findings of the study:

Based on the information gathered through in-depth interview with the participants, it was found out that teachers' experiences were learners' background and prior knowledge on the subject and learners' difficulties in constructing other parts of a research paper while learners' experiences were conducting Science, Technology, Engineering, and Mathematics (STEM) research studies is a challenging task and conducting research is easy and enjoyable.

Editorial Team

Editor-in-Chief: Alvin B. Punongbayan

Associate Editor: Andro M. Bautista

Managing Editor: Raymart O. Basco

Web Editor: Nikko C. Panotes

Manuscript Editors / Reviewers:

Chin Wen Cong, Christopher DC. Francisco, Camille P. Alicaway, Pinky Jane A. Perez,
Mary Jane B. Custodio, Irene H. Andino, Mark-Jhon R. Prestoza, Ma. Rhoda E. Panganiban, Rjay C. Calaguas,
Mario A. Cudiamat, Jesson L. Hero, Albert Bulawat, Cris T. Zita, Allan M. Manaloto, Jerico N. Mendoza



Based on the information gathered through in-depth interview with the participants, it was found that the hindering factors encountered by teachers were lack of laboratory equipment and materials and learners' financial problem, while the hindering factors encountered by learners were time management, errors in methodologies, and data, and identifying and formulating a research problem.

Based on the information gathered through in-depth interview with the participants, it was found out that the facilitating factors encountered by teachers were the type of learners and their level of understanding on the subject and teachers' professional growth, while the facilitating factors encountered by learners were guidance and support from supervisors and learners' collaboration.

CONCLUSION

Based on the findings, the following insights were drawn:

Teaching a research subject is a difficult task, teachers should be equipped with skills and knowledge in teaching the research process to learners. Attending workshops, research forums, and webinars/seminars allows teacher to gain opportunity for continuous professional development and to learn new ways, methods, strategies, skills and tools in guiding and teaching research subjects. To improve professional skills and promotes personal growth of teachers, enrolling in a graduate studies may help them to have deeper knowledge in the field of specialization.

In teaching and conducting Science, Technology, Engineering, and Mathematics (STEM) research studies, teacher and learners may face challenges when schools have

Editorial Team

Editor-in-Chief: Alvin B. Punongbayan

Associate Editor: Andro M. Bautista

Managing Editor: Raymart O. Basco

Web Editor: Nikko C. Panotes

Manuscript Editors / Reviewers:

Chin Wen Cong, Christopher DC. Francisco, Camille P. Alicaway, Pinky Jane A. Perez,
Mary Jane B. Custodio, Irene H. Andino, Mark-Jhon R. Prestoza, Ma. Rhoda E. Panganiban, Rjay C. Calaguas,
Mario A. Cudiamat, Jesson L. Hero, Albert Bulawat, Cris T. Zita, Allan M. Manaloto, Jerico N. Mendoza



insufficient facilities and laboratory materials. Teachers may not be able to perform and teach well if schools cannot provide enough facilities and materials needed by the learners.

Consultation periods, feed backing, and intensive monitoring of learners' research output every quarter are essential and complementary elements, enabling them to improve the research writing and communication skills. Seeking professional advice may also help learners gain knowledge on how to improve their research output especially in formulating a research topic and constructing methodologies with less errors.

Valuing teamwork and collaboration to have better outcomes is an essential tool in constructing research studies. Working in a group encourages personal growth and produces better work. Research collaborations provide opportunities for learners to learn the approaches from complementary disciplines and their application to existing problems that may lead to the development of innovative solution.

Time management is another essential tool in conducting research, because effective time management allows researcher to maintain focus in their work, contributing to research productivity. Thus, improving time management skills is essential to developing and sustaining a successful research output.

Lastly, choosing a research topic is the first and maybe the most important step of research writing process. Most learners may encounter difficulties in determining good research topics, so it is important to make sure they choose a strong and engaging topic that allows them to explore their area of interest in depth to contribute to the existing body of knowledge in the field.

Editorial Team

Editor-in-Chief: Alvin B. Punongbayan

Associate Editor: Andro M. Bautista

Managing Editor: Raymart O. Basco

Web Editor: Nikko C. Panotes

Manuscript Editors / Reviewers:

Chin Wen Cong, Christopher DC. Francisco, Camille P. Alicaway, Pinky Jane A. Perez,
Mary Jane B. Custodio, Irene H. Andino, Mark-Jhon R. Prestoza, Ma. Rhoda E. Panganiban, Rjay C. Calaguas,
Mario A. Cudiamat, Jesson L. Hero, Albert Bulawat, Cris T. Zita, Allan M. Manaloto, Jerico N. Mendoza



References

- Bocar, A., (2011). Difficulties encountered by the student researchers and the effects on their research output. Faculty of College of Arts and Sciences La Salle University – Ozamiz
- Bullo, M., Labastida, R. & Manlapas, C.(2021). Challenges and difficulties encountered by teachers in the conduct of educational research: Basis for teachers' enhancement program. *International Journal of Research Studies in Education*. 10. 67-75. 10.5861/ijrse.2021.a044.
- Cagatan, A., & Quirap, E. (2024). Collaborative learning and learners' academic performance. *International Journal Of Multidisciplinary Research And Analysis*. 07. 10.47191/ijmra/v7-i03-57.
- Caidoy, R. O. (2023). Writing research in status quo: Senior High School students' lived experiences. *International journal of Research Publication*. <https://doi.org/10.47119/IJRP1001181220234471>
- Caraig, R. V. (2023). A proposed faculty loading guide framework for the research subjects in the Senior High School in the Philippines. Far Eastern University Manila Institute of Education. Sampaloc, Manila,

Editorial Team

Editor-in-Chief: Alvin B. Punongbayan

Associate Editor: Andro M. Bautista

Managing Editor: Raymart O. Basco

Web Editor: Nikko C. Panotes

Manuscript Editors / Reviewers:

Chin Wen Cong, Christopher DC. Francisco, Camille P. Alicaway, Pinky Jane A. Perez, Mary Jane B. Custodio, Irene H. Andino, Mark-Jhon R. Prestoza, Ma. Rhoda E. Panganiban, Rjay C. Calaguas, Mario A. Cudiamat, Jesson L. Hero, Albert Bulawat, Cris T. Zita, Allan M. Manaloto, Jerico N. Mendoza



Philippines

Chase, Jo-Ana D.; Topp, Robert V.; Smith, Carol E.; Cohen,

Marlene Z.; Fahrenwald, Nancy; Zerwic, Julie;

Benefield, Lazelle E.; Anderson, Cindy M.; and Conn,

Vicki, Time Management Strategies for Research

Productivity (2013). College of Nursing Faculty

Research and Publications. 262. https://epublications.marquette.edu/nursing_fac/262

Chiruguru, S., (2020). The essential skills of 21st century

classroom (4Cs). 10.13140/RG.2.2.36190.59201

Erlinda, R., Darmayenti, & Dewi, M. P. (2022). Undergraduate

students' difficulties in mastering research

methodology course in Islamic Higher Education. *Journal*

of Education Research and Evaluation, 6(4), 739–747.

<https://doi.org/10.23887/jere.v6i4.48414>

Frank, L. (2021). Challenges faced by students. doi:

10.1063/9780735423756_003

Galvez, S. O.(2021). Teachers' challenges and coping

mechanisms on the Use of Differentiated Instruction,

Bases for intervention program. Master's Thesis, PHINMA

University of Iloilo.

Galdonez, D. P. (2025). Exploring the experiences of STEM

Editorial Team

Editor-in-Chief: Alvin B. Punongbayan

Associate Editor: Andro M. Bautista

Managing Editor: Raymart O. Basco

Web Editor: Nikko C. Panotes

Manuscript Editors / Reviewers:

Chin Wen Cong, Christopher DC. Francisco, Camille P. Alicaway, Pinky Jane A. Perez,
Mary Jane B. Custodio, Irene H. Andino, Mark-Jhon R. Prestoza, Ma. Rhoda E. Panganiban, Rjay C. Calaguas,
Mario A. Cudiamat, Jesson L. Hero, Albert Bulawat, Cris T. Zita, Allan M. Manaloto, Jerico N. Mendoza



students in writing research: Insights, challenges, and strategies. *Journal of Basic Education Research*, 6(1), 9-16. <https://doi.org/10.37251/jber.v6i1.1150>

Herpratiwi & Tohir, A. (2022). Learning interest and

Discipline on learning motivation. *International*

Journal of Education in Mathematics, Science, and

Technology (IJEMST), 10(2), 424-435.

<https://doi.org/10.46328/ijemst.2290>

Hycner, R. H. (1985). Some guidelines for the

phenomenological analysis of interview

data. [https://www.depts.ttu.edu/education/our-](https://www.depts.ttu.edu/education/our-people/Faculty/additional_pages/duemer/epsy_6305_class_materials/Hycne-R-H-1985.pdf)

[people/Faculty/additional_pages/duemer/epsy_6305_class_materials/Hycne-R-H-1985.pdf](https://www.depts.ttu.edu/education/our-people/Faculty/additional_pages/duemer/epsy_6305_class_materials/Hycne-R-H-1985.pdf)

Khozaei, F., Naidu, S., Khozaei, Z. and Salleh, N.A. (2015),

An exploratory study of factors that affect the

Research progress of international PhD students from

the Middle East, *Education + Training*, Vol. 57 No. 4,

pp. 448-460. <https://doi.org/10.1108/ET-09-2013-0115>

Lester, S. (1999). An introduction to phenomenological

research. Published in *Scientific Research Open Access*

Journal

Lozano-Blasco R., Quílez-Robres A., Usán P, Salavera C., &

Editorial Team

Editor-in-Chief: Alvin B. Punongbayan

Associate Editor: Andro M. Bautista

Managing Editor: Raymart O. Basco

Web Editor: Nikko C. Panotes

Manuscript Editors / Reviewers:

Chin Wen Cong, Christopher DC. Francisco, Camille P. Alicaway, Pinky Jane A. Perez,
Mary Jane B. Custodio, Irene H. Andino, Mark-Jhon R. Prestoza, Ma. Rhoda E. Panganiban, Rjay C. Calaguas,
Mario A. Cudiamat, Jesson L. Hero, Albert Bulawat, Cris T. Zita, Allan M. Manaloto, Jerico N. Mendoza



Casanovas-López R. Types of Intelligence and Academic

Performance: A Systematic Review and Meta-Analysis. J

Intell. 2022 Dec 13;10(4):123. doi:

10.3390/jintelligence10040123. PMID: 36547510; PMCID:

PMC9785329

Maledariado, R. P. (2023). Science Academic Challenges of

Panay Bukidnon Learners in Indigenous People Community:

basis for Intervention Program. Master's Thesis, PHINMA University of Iloilo.

Magulod, G.C., Jr. (2019). Learning styles, study habits and

academic performance of Filipino University students in

applied science courses: Implications for instruction.

Journal of Technology and Science Education, 9(2), 184

198. <https://doi.org/10.3926/jotse.504>

Martinich, A. P., & Stroll, A. 2014. Epistemology,

Encyclopaedia Britannica.

Monica, D., Duncan, T. (2019). Regional study hubs:

Increasing student engagement to support regional

students facing high first-year attrition risk factors.

10(2):79-90. doi: 10.5204/SSJ.V10I2.1312

Murtonen, M., & Lehtinen, E. (2003). Difficulties

experienced by education and sociology students in

Editorial Team

Editor-in-Chief: Alvin B. Punongbayan

Associate Editor: Andro M. Bautista

Managing Editor: Raymart O. Basco

Web Editor: Nikko C. Panotes

Manuscript Editors / Reviewers:

Chin Wen Cong, Christopher DC. Francisco, Camille P. Alicaway, Pinky Jane A. Perez,
Mary Jane B. Custodio, Irene H. Andino, Mark-Jhon R. Prestoza, Ma. Rhoda E. Panganiban, Rjay C. Calaguas,
Mario A. Cudiamat, Jesson L. Hero, Albert Bulawat, Cris T. Zita, Allan M. Manaloto, Jerico N. Mendoza



quantitative methods courses. *Studies in Higher*

Education, 28(2), 171–185.

<https://doi.org/10.1080/0307507032000058064>

Nareen, H. (2022). Challenges faced by students in

writing thesis: An investigation from

research students. 2(1) doi: 10.52461/jimp.v2i1.1037

Pathak, Vibha; Jena, Bijayini¹; Kalra, Sanjay².

Qualitative research. Perspectives in clinical research

4(3):p 192, Jul–Sep 2013. | DOI: 10.4103/2229

3485.115389

Nasir, Mahmood., Zafar, Iqbal. (2018). Challenges faced by

prospective teachers during teaching practice:

Connecting theory to practice.

Nebrida, J., Ghilson, B., Amor., Robin, G., Mazorca.,

Ritchell, B., Nacional, N., Jonas, P.(2022).

Challenges of a school in teaching and learning: A

grounded theory. *Journal of scientific research and*

reports, doi: 10.9734/jsrr/2022/v28i730535

Panes, T.F.T., (2024). Experiences of zillennial teachers in working with other generations on school-related

activities: Basis for intervention program. Master's

Editorial Team

Editor-in-Chief: Alvin B. Punongbayan

Associate Editor: Andro M. Bautista

Managing Editor: Raymart O. Basco

Web Editor: Nikko C. Panotes

Manuscript Editors / Reviewers:

Chin Wen Cong, Christopher DC. Francisco, Camille P. Alicaway, Pinky Jane A. Perez,
Mary Jane B. Custodio, Irene H. Andino, Mark-Jhon R. Prestoza, Ma. Rhoda E. Panganiban, Rjay C. Calaguas,
Mario A. Cudiamat, Jesson L. Hero, Albert Bulawat, Cris T. Zita, Allan M. Manaloto, Jerico N. Mendoza



Thesis. PHINMA University of Iloilo.

Palmejar, R.P., (2023). Social media utilization for

learners' academic activities: Basis for program

intervention. Master's Thesis. PHINMA University of Iloilo.

Piedad, A. R., (2023). Learning science through outdoor

Activities: Basis for instructional intervention plan.

Master's Thesis. PHINMA University of Iloilo.

Rioa, I.,L., et.al(2021).Lived experiences of Senior High

School teachers teaching qualitative research without

training. 3877 *Turkish Online Journal of Qualitative Inquiry (TOJQI)* Volume 12, Issue

10, October 2021: 3877-Tongco MDC. (2007). Purposive sampling as a tool for

Informant selection. *Ethno botany Research & Applications* 5:147-158.

Tan, R.C., (2023). Lived experiences of teachers on in

service training: Basis for intervention program.

Master's Thesis. PHINMA University of Iloilo.

Tupas, F. P., & Matsuura, T. (2019). Moving forward in

STEM education, challenges and innovations in Senior

High School in the Philippines: The Case of Northern

Iloilo Polytechnic State College. *Journal Pendidikan*

IPA Indonesia, 8(3). <https://doi.org/10.15294/jpii.v8i3.19707>

Uitto, A., Juuti, K., Lavonen, J., & Meisalo, V. (2006).

Editorial Team

Editor-in-Chief: Alvin B. Punongbayan

Associate Editor: Andro M. Bautista

Managing Editor: Raymart O. Basco

Web Editor: Nikko C. Panotes

Manuscript Editors / Reviewers:

Chin Wen Cong, Christopher DC. Francisco, Camille P. Alicaway, Pinky Jane A. Perez,
Mary Jane B. Custodio, Irene H. Andino, Mark-Jhon R. Prestoza, Ma. Rhoda E. Panganiban, Rjay C. Calaguas,
Mario A. Cudiamat, Jesson L. Hero, Albert Bulawat, Cris T. Zita, Allan M. Manaloto, Jerico N. Mendoza

INSTABRIGHT e-GAZETTE

ISSN: 2704-3010

Volume VI, Issue III

February 2025

Available online at <https://www.instabrightgazette.com>



Students' interest in biology and their out-of-school

experiences. *Journal of Biological Education*, 40(3), 124–129.

<https://doi.org/10.1080/00219266.2006.9656029>

Van Riesen, S. A. N., Gijlers, H., Anjewierden, A. A., & de

Jong, T. (2019). The influence of prior knowledge on

The effectiveness of guided experiment design. *Interactive Learning*

Environments, 30(1), 17–33. <https://doi.org/10.1080/10494820.2019.1631193>



Editorial Team

Editor-in-Chief: Alvin B. Punongbayan

Associate Editor: Andro M. Bautista

Managing Editor: Raymart O. Basco

Web Editor: Nikko C. Panotes

Manuscript Editors / Reviewers:

Chin Wen Cong, Christopher DC. Francisco, Camille P. Alicaway, Pinky Jane A. Perez,
Mary Jane B. Custodio, Irene H. Andino, Mark-Jhon R. Prestoza, Ma. Rhoda E. Panganiban, Rjay C. Calaguas,
Mario A. Cudiamat, Jesson L. Hero, Albert Bulawat, Cris T. Zita, Allan M. Manaloto, Jerico N. Mendoza
