



PROJECT SEARCH (SHARING EXPERT APPROACHES IN RESEARCH CONCEPT AND HYPOTHESIS-TESTING)

MICHAEL A. REYES

TEACHER II

Balayan Senior High School

ABSTRACT

This action research explores the implementation and impact of Project SEARCH (Sharing Expert Approaches in Research Concept and Hypothesis-testing), a strategic intervention aimed at improving STEM students' competencies in statistical treatment of data. The project was developed in response to a recognized gap in students' research skills, particularly their difficulty in applying appropriate statistical methods to support their findings. This weakness often undermines the scientific rigor and credibility of their capstone research projects, making them fall short of publication standards.

Project SEARCH sought to address this issue through a structured and intensive intervention that included expert-led workshops, individualized mentoring, software training, and hands-on sessions focused on data analysis, hypothesis formulation, and research interpretation. By integrating practical learning with theoretical understanding, the program empowered students to make informed decisions in choosing statistical tools and interpreting their results with greater confidence and accuracy.

The research utilized a mixed-methods approach, combining quantitative tools such as pre- and post-assessments with qualitative strategies like focus group discussions and rubric-

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 IV

March 2025

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



based evaluations of student outputs. The results showed a marked improvement in the students' knowledge, proficiency, and ability to apply statistical treatment of data. Pre-assessment data revealed that only 30% of participants demonstrated a basic understanding of statistical concepts. Post-intervention, over 85% of the students exhibited strong competency in applying statistical tools, interpreting findings, and integrating data analysis seamlessly into their capstone projects.

Most notably, the project achieved its ultimate objective: 100% of the STEM students' capstone researches were successfully published in recognized academic platforms, marking a significant milestone for Balayan Senior High School. This unprecedented achievement not only reflects the effectiveness of Project SEARCH but also sets a new benchmark for research excellence at the senior high school level. It demonstrates that with targeted support, strategic planning, and a culture of scholarly collaboration, high school students can produce research works that meet professional and academic publication standards.

Project SEARCH stands as a replicable model for other schools aiming to raise the bar in student-led research. The outcomes of this project reaffirm the importance of equipping students with practical tools and guided mentorship to ensure that research outputs are not only completed, but also worthy of dissemination and recognition in academic communities.

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
