



PROJECT-BASED LEARNING (PBL): PATHWAY TO DEVELOP THE MAPEH SKILLS OF GRADE 9 STUDENTS OF BAUTISTA NATIONAL HIGH SCHOOL (BNHS)

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ABSTRACT

Project-Based Learning (PBL) is a teaching method in which students learn by actively engaging in real-world and personally meaningful projects. Students work on a project over an extended period from a week up to a semester that engages them in solving a real-world problem or answering a complex question. They demonstrate their knowledge and skills by creating a public product or presentation for a real audience. As a result, students develop deep content knowledge as well as critical thinking, collaboration, creativity, and communication skills. It releases contagious, creative energy among students and teachers.

This study determined the influence of Project-Based Learning (PBL) in developing the Research skills of MAPEH Grade 9 Students of Bautista National High School (BNHS). Specifically, it sought to answer the following sub-questions: What is the performance level of the students in the diagnostic test in MAPEH? What are the common problems faced by the students in MAPEH? What action plan can be proposed to develop the research skills of Grade 9 students? What is the performance level of Grade 9 students in the summative test in MAPEH? Is there a significant relationship between the performance of the Grade 9 students on the diagnostic and summative test?

The participants in this study were the Grade 9 students of Bautista National High School, Division of Pangasinan II. A total of 1,525 Grade 9 students were involved in the study, selected and determined by using Slovin's formula at a .05 level of error. The following data analysis was used, the frequency counts and percentage distribution, the analysis of variance (ANOVA), and the measures of central tendencies such as mean and median.

The performance of the students in the diagnostic test conducted is below the average. The common problems faced by the students in MAPEH were the following: Formulation of problem / or writing a valid and reliable problem. Formulation of the conceptual framework. Formulation of valid gathering tools. Application of the correct statistical method

The action plan proposed in this study that focused on Project-Based Learning (PBL) improved the performance of the Grade 9 students and enhanced their MAPEH skills. There is a greater improvement in the performance of the students in the summative test conducted in MAPEH. There is a significant relationship between the performance of the Grade 9 students on the diagnostic and summative tests.

Based on the findings, analysis, and results of the study the following recommendations are hereby advanced: Teachers should conduct a diagnostic test in research to determine the skills needed by the students. This will help the teachers and the school heads to have a pre-planning of the appropriate teaching methodology and instructional materials. The action plan proposed in this study should be widely used by the division office to have a data bank of information for further research and test of effectiveness. The use of PBL as a teaching approach to develop the MAPEH skills of the Grade 9 students should be tested using another variable to sustain its effectiveness.

KEYWORDS: *teaching and learning, project based learning, teaching strategies and teaching methods*

I. INTRODUCTION

Project-Based Learning (PBL) is a teaching method in which students learn by actively engaging in real-world and personally meaningful projects. Students work on a project over an extended period from a week up to a semester that engages them in solving a real-world problem or answering a complex question.

They demonstrate their knowledge and skills by creating a public product or presentation for a real audience. As a result, students develop deep content knowledge as well as critical thinking, collaboration, creativity, and communication skills. It releases contagious, creative energy among students and teachers.



II. OBJECTIVES/RESEARCH QUESTIONS

This study determined the influence of Project-Based Learning (PBL) in developing the Research skills of MAPEH Grade 9 Students of Bautista National High School (BNHS). Specifically, it sought to answer the following sub-questions:

1. What is the performance level of the students in the diagnostic test in MAPEH?
2. What are the common problems faced by the students in MAPEH?
3. What action plan can be proposed to develop the research skills of Grade 9 students?
4. What is the performance level of Grade 9 students in the summative test in MAPEH?
5. Is there a significant relationship between the performance of the Grade 9 students on the diagnostic and summative test?

III. POPULATION/SAMPLE/PARTICIPANTS

The participants in this study were the Grade 9 students of Bautista National High School, Division of Pangasinan II. A total of 1,525 Grade 9 students were involved in the study, selected and determined by using Slovin's formula at a .05 level of error.

IV. TREATMENT OF DATA

The following data analysis was used, the frequency counts and percentage distribution, the analysis of variance (ANOVA), and the measures of central tendencies such as mean and median.

V. RESULTS/FINDINGS

1. The performance of the students in the diagnostic test conducted is below the average.
2. The common problems faced by the students in MAPEH were the following:
 - a. Formulation of problem / or writing a valid and reliable problem.
 - b. Formulation of the conceptual framework.
 - c. Formulation of valid gathering tools.
 - d. Application of the correct statistical method
3. The action plan proposed in this study that focused on Project-Based Learning (PBL) improved the performance of the Grade 9 students and enhanced their MAPEH skills.
4. There is a greater improvement in the performance of the students in the summative test conducted in MAPEH.
5. There is a significant relationship between the performance of the Grade 9 students on the diagnostic and summative tests.

VI. RECOMMENDATIONS

Based on the findings, analysis, and results of the study the following recommendations are hereby advanced:

1. Teachers should conduct a diagnostic test in research to determine the skills needed by the students. This will help the teachers and the school heads to have a pre-planning of the appropriate teaching methodology and instructional materials.
2. The action plan proposed in this study should be widely used by the division office to have a data bank of information for further research and test of effectiveness.
3. The use of PBL as a teaching approach to develop the MAPEH skills of the Grade 9 students should be tested using another variable to sustain its effectiveness.

REFERENCES

1. York, Dan (June 6, 2016). "Google's IPv6 Stats Hit 12% on the Fourth Anniversary of World IPv6 Launch". *CircleID*. Retrieved August 5, 2019.
2. "The Anatomy of a Large-Scale Hypertextual Web Search Engine". *Computer Science Department, Stanford University, Stanford, CA*. Retrieved January 27, 2009.
3. "Google Search Statistics - Internet Live Stats". *www.internetlivestats.com*. Retrieved April 9, 2021.
4. "Search Engine Market Share Worldwide | Stat Counter Global Stats". *Stat Counter Global Stats*. Retrieved April 9, 2021.
5. Jump up to: ^a ^b "Top 500". *Alexa Internet*.
6. Fisher, Adam (July 10, 2018). "Brin, Page, and Mayer on the Accidental Birth of the Company that Changed Everything". *Vanity Fair*. Retrieved August 23, 2019.
7. McHugh, Josh (January 1, 2003). "Google vs. Evil". *Wired*. Retrieved August 24, 2019.
8. D'Onfro, Jillian (February 13, 2016). "How a billionaire who wrote Google's original code created a robot revolution". *Business Insider*.
9. Google (Tue June 14, 2011) *Official announcement*
10. Hubbard, Douglas (2011). *Pulse: The New Science of Harnessing Internet Buzz to Track Threats and Opportunities*. John Wiley & Sons.