

MAE A. EVARDO, PhD Bohol Island State University, Calape Campus, Philippines

E-mail: maeevardo@gmail.com

Abstract

This study examines the Dynamic Learning Program (DLP) and its impact on students' academic performance. The DLP is a learner-centered approach that promotes critical and creative thinking through innovative instructional strategies. It aligns with the educational reform efforts in the Philippines and aims to address the challenges faced by the education system. The study explores the psychological impact of the DLP on academic achievements, particularly in mathematics. The literature review highlights the theories of John Dewey and Bruner, emphasizing the importance of experiential learning, active engagement, and independent thinking. The study employs a descriptive correlational design and collects data through questionnaires and grade analysis. The findings indicate a significant positive correlation between students' perception of the DLP and their performance in mathematics. Activity-based multidomain learning and the parallel learning scheme show the strongest correlations. The use of comprehensive portfolios also correlates positively with academic performance. However, attitudes towards the parallel learning scheme do not significantly affect performance. The study concludes that activity-based multi-domain learning is a key factor in improving academic performance and recommends implementing it in the DLP. Additional recommendations include supporting teachers in developing challenging activities, assigning formative exercises, reviewing, and enhancing the use of comprehensive portfolios, and conducting parallel studies to further evaluate the DLP's impact. These recommendations aim to enhance the DLP and improve students' academic outcomes. Keywords: Dynamic Learning Program, Academic Performance

Introduction

Academic progress heavily depends on how teachers reshape classroom activities and cater to different learning styles, encouraging students to exceed the boundaries of standard learning materials. However, research consistently shows that the quality of mathematics education in the Philippines falls behind that of other countries. The Philippines' low rankings in international assessments, such as the Third International Mathematics and Science Study (TIMSS) and the International Mathematics Olympiad (IMO), emphasize the pressing need to address the challenges faced by Philippine education.

The Philippine education system is currently grappling with a severe crisis, posing a threat to the survival of private schools. To foster genuine progress and development, it is essential to carefully evaluate the educational formation of the youth and identify both short-term and long-term solutions. As a response, schools in the Philippines have undergone continuous reform efforts to enhance the quality of education. One notable initiative is the Dynamic Learning Program (DLP), which promotes innovative and

interdisciplinary instructional strategies to nurture critical and creative thinking among students. The DLP adopts a learner-centered approach, empowering students to drive their own learning while teachers serve as guides. By fostering a culture of excellence and hard work, the DLP equips students with the ability to learn how to learn.

The Central Visayan Institute Foundation (CVIF), an educational institution dedicated to preparing students for global work demands, focuses on developing and nurturing students' innate talents and creativity. Following the curriculum guidelines of the Department of Education (DepEd), CVIF creates an environment that cultivates focus, composure, discipline, and stamina. Through this approach, students at CVIF gain hands-on experience in exploring and discovering mathematics, honing critical thinking skills, and developing the mindset necessary for success. To address the challenges of the 21st century, CVIF offers its Dynamic Learning Program, tailored to the needs of the time and extending beyond the local context.

The innovative approach of CVIF has attracted the attention of educators nationwide, with many visiting the school to observe its practices. However, limited research has been conducted on the effectiveness of the Dynamic Learning Program, particularly in terms of academic performance, specifically in the field of mathematics. Consequently, this study aims to investigate the psychological impact of the program on students' academic achievements, filling the existing gap in knowledge and understanding.

Literature Review

John Dewey, a pragmatist, emphasizes the importance of experiential learning and the need to test ideas through experimentation. He advocates for a problem-centered approach to education, where the curriculum is formulated based on students' abilities, needs, and interests, with a focus on activities and projects relevant to the community. Similarly, Bruner's constructivist theory supports teaching methods that encourage active learning and dialogue between instructors and students. In the context of mathematics, students are encouraged to think independently, take responsibility for their learning, and develop problem-solving, critical thinking, and decision-making skills. With proper guidance, students can learn how to learn and continually improve their abilities.

The Dynamic Learning Program (DLP) is a flexible and student-centered approach that emphasizes active participation and learning by doing. The Constructivist Learning Theory supports the belief that students construct their own knowledge through active engagement and meaning-making. Teachers serve as guides to facilitate students' understanding and learning process. Encouraging creativity in students involves providing opportunities for them to explore, experiment, and think outside the box. Teachers should also be open to new ideas and help students develop their own conceptual knowledge.

Lack of qualified teachers has been identified as a challenge in the Philippine education system, impacting its performance in standardized tests like the Trends in International Mathematics and Science Study (TIMSS). The Dynamic Learning Program promotes independent student learning, aiming to develop self-sufficient problem solvers who can monitor and correct their own errors. The program aligns with Bruner's concept of developing independent learners.

The DLP is implemented during the high school stage, typically between the ages of 13 and 17, which coincides with Jean Piaget's formal operation stage of development. This stage is characterized by physiological changes, mental maturity, complex logical thought processes, abstract thinking, and anticipation of adulthood and professional life in the affective learning domain.

There are very essential components of DLP: Activity based multi-domain learning; Parallel learning scheme; and in-school comprehensive student Portfolios.

Activity-Based Multi-Domain Learning in the Dynamic Learning Program (DLP) emphasizes active engagement and problem-solving to enhance critical thinking and deep understanding. Students work on activities independently, guided by facilitators, without traditional lectures or demonstrations. These activities promote cognitive, affective, and psychomotor learning, fostering skills such as problem-solving, analysis, creativity, and self-discipline. Activity-based learning integrates multiple intelligences, appealing to linguistic, logical-mathematical, visual-spatial, and bodily-kinesthetic abilities. By incorporating rich questioning techniques and addressing the challenge of large class sizes, this approach creates a dynamic and inclusive learning environment.

The parallel classes scheme is a crucial component of the Dynamic Learning Program (DLP). This approach involves all sections of the same year level studying the same subject simultaneously. It strategically schedules challenging subjects like science and math in the morning when students are most alert. To manage multiple classes, an expert teacher/facilitator system is implemented. The expert teacher visits different sections while students engage in pre-designed activities. Licensed teachers, who are experts in other subject areas, act as facilitators and oversee the class in the absence of the expert teacher. Inspired by the Jigsaw strategy, the parallel learning group enhances student absorption and mastery of lessons, fosters collaboration among teachers, promotes high-quality lesson preparation, facilitates knowledge sharing, and exposes teachers to effective teaching strategies across different subject areas.

In the Dynamic Learning Program (DLP), students utilize comprehensive portfolios instead of traditional notebooks. These portfolios, color-coded for different subject areas, serve as a compilation of all activities, quizzes, and exams completed in school. Students are not allowed to bring the portfolios home, promoting independence and critical thinking. This absence of notes encourages students to engage in deep thinking and enhances learning by making sense of concepts, problems, questions, and ideas encountered during school activities. The comprehensive portfolio becomes a valuable source of information, documenting a student's growth and providing an opportunity for self-evaluation, reflection, and efficient filing. Accessible to both teachers and students, the portfolios foster cooperative assessment and establish a partnership in the learning process.

Methodology

The study utilized a descriptive correlational design to examine the relationship between students' perception of and attitude towards the Dynamic Learning Program (DLP) and their academic performance in mathematics. The research was conducted at Central Visayan Institute Foundation (CVIF) in Jagna, Bohol, a school in a small coastal town with a population of approximately 33,000. The respondents consisted of three intact classes of third-year students at CVIF. Two sets of instruments were developed for data collection: a questionnaire to assess students' perception of the DLP and an attitudinal

questionnaire to measure their attitudes towards the program. The questionnaires were designed using a Likert scale format and underwent content analysis by experienced CVIF teachers. Additionally, the students' grades for the first grading period were used to explore the relationship between academic performance and their perception of and attitude towards the DLP.

Result and Discussion

The findings of the study indicate a significant relationship between students' perception of the dynamic learning program and their performance in mathematics. Activity-based multi-domain learning and the parallel learning scheme were found to have a positive and significant correlation with mathematics performance. However, there was no significant relationship found between the use of students' portfolio and academic performance. Regarding attitudes, significant relationships were observed between students' attitudes towards activity-based multi-domain learning, the use of students' portfolio, and their performance in mathematics. However, attitudes towards the parallel learning scheme did not show a significant correlation with mathematics performance. These results suggest that the proper implementation and observation of the desired program design by teachers and administrators contribute to the overall positive impact of the dynamic learning program on students' academic performance.

Based on the findings, it can be concluded that activity-based multi-domain learning within the Dynamic Learning Program (DLP) significantly contributes to improved academic performance in mathematics. Emphasizing learning through practical application and experiences aligns with the recommendations of experimentalists and pragmatists. The use of comprehensive portfolios as review materials is beneficial but keeping them exclusively in school does not contribute to performance improvement. Students' attitudes towards the program do not directly affect their academic performance due to the effective implementation and observation of the DLP's learning processes. Enhancing each aspect of the DLP can greatly support students in their pursuit of academic excellence. Therefore, it is concluded that the sincere dedication and cooperative efforts of well-trained administrators, teachers, and other stakeholders are essential for further improving the implementation of the Dynamic Learning Program and achieving the desired educational outcomes for sustainable development.

Based from the findings and conclusion of the study it is recommended to enhance the Dynamic Learning Program (DLP) by implementing activity-based multi-domain learning and aligning it with John Dewey's principles. This involves supporting teachers in developing challenging activities and improving their teaching competencies. Assigning formative exercises for students to practice at home will foster study habits and improve their mastery of math skills. Additionally, strategically reviewing and enhancing the use of comprehensive portfolios is recommended. Lastly, conducting parallel studies across subject areas and schools will provide valuable insights into the broader impact of the DLP on students' attitudes and achievements.

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