ERMA (EFFECTIVENESS OF RECIPROCAL MENTORING APPROACH IN PHYSICAL SCIENCE IN THE NEW NORMAL)

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ABSTRACT

Effectiveness of Peer –Mentoring Approach in Physical Science During the New Normal Education who are under modular distance learning. On the course of its implementation, this study aims to examine the effects of a peer mentoring program on mentee academic performance. Our study had two objectives. First, we wanted to examine the effect of being mentored during the first term of study on academic performance (lower grade) Second, we wanted to examine if there were an improvement on mentee academic performance after 1 semester. The development of a peer mentoring programme to promote the natural process of building intrinsic motivation and personal growth through opportunities for individuals (Marisa H.Fisher & Lindsay S.Athamanah). We expected the participation in the peer mentoring program to affect in the average passed in a positive way who are under Modular Distance Learning of Southville 5A Integrated National High School for the second semester of School Year 2021-2022 are the target participants and beneficiaries of this study. There is a significant number who were identified as Student-at- Risk of Failing. These are students who can't manage to pass their outputs regularly or no outputs at all. Some obviously did not take the learning tasks seriously and pass output only for compliance. These are evident to Grade 11 Students from the TVL Sudents of Southville 5A Integrated National High School for the second t semester of SY 2021-2022. The Effectiveness of Reciprocal Mentoring in Physical Science in the New Normal or ERMA offers an ease to struggling students during this pandemic which evidently get exhausted with the modular learning modality. It gives assistance to the deficient students or students at - risk of failing to improve their academic performance by a deeper understanding of the lessons through the help of proficient students as their mentor. From the value of **73.80** from the third quarter by 20 deficient students identified as mentees, the value increased to **80.50** from the fourth quarter which suggests an improvement in the performance of the students after the conduct of ERMA. This showed a significant mean difference of **6.70** which supports the findings.
This implied that ERMA is an effective intervention to students at-risk of failing to Physical Science.

Keywords: *Reciprocal Mentoring, Peer-assisted Learning and Intervention.*

INTRODUCTION

Maintaining the engagement of students, particularly secondary school students is critical. Dropout rates are still very high in many countries, and a long period of disengagement can result in a further increase. Going to school is not only about learning math and science, but also about social relationships and peer-to-peer interactions (Jaime Saavedra).

Peer mentoring aims to enhance supportive relationships between two people, sharing knowledge and experience and providing an opportunity to learn from different perspective. The mentor serves as appositive role model, promotes raised aspirations, positive reinforcement, provides open-ended counselling and joint problem-solving. (DuBois Karcher (2005) and Jacobi (1991, P.513)

The forms of peer mentoring are a structured and trusting relationship between a young person and a caring individual who offers guidance, support and encouragement" [1].

This tool is intended as an introduction to peer mentoring for schools. Peer mentoring is an evidence-based way to create positive outcomes and build social capital among young people, including those with increased vulnerability. Peer mentoring may be referred to as 'Buddies' or Big Brother, Big Sister' arrangements.

This tool outlines what mentoring involves and the benefits to those participating in mentoring relationships. The information contained in this tool will be helpful to schools considering designing and implementing a peer mentoring program.

Colky and Young (2006) believe that mentoring in a traditional sense is a process that

brings together the inexperienced and the experienced in an attempt where the former will

gain knowledge, self-confidence, skills and other benefits from the later as they

through the process.

In general, a positive effect of peer mentoring is such support programs is that study success is increased and drop-out rates among participating students are decreased (Robbins, Oh, Le, & Button, 2009). Mentoring programs have shown positive effects including academic performance, reduced drop-out rates and better social integration (Allen, McManus, & Russell, 1999; Campbell & Campbell, 1997; Leidenfrost et al., 2011). So far, research has suggested that being a mentee improves academic performance, but little is known if differences in realizing mentoring affect mentee academic performance in different ways. The aim of our present study was to look at the improvement of academic performance through a peer mentoring program and to examine how individual differences in realizing mentoring affected mentee academic performance.

RESEARCH QUESTION

The study aims to apply ERMA as an instructional strategy to refine

knowledge and deepen the understanding senior high school subject area (Physical Science) of Grade 11 Technical Vocational Livelihood Track- of Southville 5A Integrated National High School for the second semester of School Year 2021-2022. Specifically, it aims to:

1.Identify the students the academic performance before implementation.

2.Implement ERMA.

3.Identify student performance after implementation.

4.Determine the pedagogical implications of ERMA.

METHODOLOGY

Grade 11 students who belong to Technical Vocational Livelihood Track of Southville 5-A Integrated National High School for the second semester of S.Y. 2021-2022 were the participants of the study. Specifically, Grade 11 students from Almario, Alonso and Canon will participate in this research
Bearing the intention to seek answers and solution to the identified.
The mentors then were trained with the lessons to be taught to their mentees based on the identified least learned competencies through the result of grades in third quarter. Along the process, the proponents provided the instructional materials and learning resources, and closely monitored each session while the mentors facilitated the learning. Deliberation through post conferences were also observed every end of the session.
There are three purposive sampling criteria for students to be qualified as participants of this study such as: (1) Regular grade 11 students who chose modular distance learning as the learning modality; (2) Students who are enrolled in TVL Track – ;and (3) Students who will garner did not meet expectations (74 and below)' descriptive rating for the 1st quarter,2nd semester of School Year 2021-2022 are the final participants of this study.

The Learning Continuity Plan". Results were recorded as quantitative data. For the qualitative data, the proponents conducted interviews and collected responses from an open-ended questionnaire. Through these, the proponents considered possible pedagogical implications of ERMA.

The action research aims to apply ERMA as an instructional strategy to refine knowledge and deepen the understanding across Senior High School subject area of Grade 11 TVL students (11 -Almario, Alonso and Canon) of Southville 5A Integrated National High School for the Second Semester of School Year 2021-2022.

RESULTS

Table 1. Academic Performance of the Learners

Third Quarter Grade Mean	Fourth Quarter Grade Mean	Mean Difference
73.80	80.50	6.70

Table 1 shows the comparison of the third quarter grade mean **(73.80)** and the fourth quarter grade mean **(80.50)** in Physical Science .The mean difference of **6.70** suggests that the academic performance of the students improved from Fairly satisfactory to Satisfactory .Thus, it supports the study of The Impact of Reciprocal Mentoring on Mentee Academic Performance: Is Any Mentoring Style Better than No Mentoring at All.(Birgit Leidenfrost and Barbara Strassnig :University of Vienna, Marlene Schütz Philipps: University Marburg , Claus-Christian Carbon: University of Bamberg ,Alfred Schabmann: University of Cologne). Teacher will offer students with both opportunities to learn specially the reciprocal mentoring approach as promoted specifically student characteristics like achievement motivation or self-efficacy, social integration of the student, competences in study skills.

DISCUSSION

Coronavirus disease, also known as Covid-19, is a health problem today deeply affecting several areas like daily life, working life and the system of education in world.

Peer mentoring aims to enhance supportive relationships between two people, sharing knowledge and experience and providing an opportunity to learn from different perspective. The mentor serves as appositive role model, promotes raised aspirations, positive reinforcement, provides open-ended counselling and joint problem-solving. (DuBois Karcher (2005) and Jacobi (1991, P.513). Education in the new normal presents an unexpected challenge to teachers, students, and stakeholders. Several students struggle to learn in the modular distance learning modality, especially those who need scaffolding to understand the content well.

Action Research ERMA provided intervention to Students-at-Risk of Failing in Physical Science by reciprocal mentoring approach in the face -face execution.

ERMA would help the students deepen their understanding and clarify the knowledge that they have already gained. Students showed a more positive attitude toward learning and also reciprocal mentoring is an evidence-based way to create positive outcomes and build social capital among young people, including those with increased vulnerability ,confidence and enthusiasm.

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