



SOCIAL INTERACTION APPROACH IN TEACHING SCIENCE AND ACADEMIC EFFICIENCY OF GRADE 6 PUPILS

Jeepee Amor G. Batas¹

Student, Graduate School, The Rizal Memorial Colleges, Inc.

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ABSTRACT

This study sought to determine the social interaction approach in teaching science and academic proficiency of grade six pupils. Eventually, aimed to the magnitude of effect of the action initiated by the researcher on the academic proficiency of the research subjects was determined. This study made use of the quasi-experimental research design which is a non-equivalent control group pretest-posttest design. Non-equivalent design is a good design when the researcher has accessed to one group for experimentation (Vockel 2019). The researcher opted to use this design because the subjects of the study are intact group of learners. This study conducted in San Isidro Elementary School, Magsaysay South District Division of Davao Del Sur. The subjects of this study will be the 85 grade eight students – 43 are from section A which will be the controlled group and 42 are from section B which will be the experimental group. The composition of these two sections is homogeneous. Both learners from sections A and B had identical grades. This study made use of the non-random assignment of subjects where all learners of both sections A and B are involved as subjects of the study. This study revealed that the utilization of social interaction approach in teaching science and academic efficiency of grade 6 pupils has improved the academic performance of grade six pupils. It also revealed that there is magnitude of difference between the post test scores of the controlled and experimental groups.

KEYWORDS: *Philippine Education, Science Teaching, Social Interaction Approach*

INTRODUCTION

Science education fosters the learners to be a part of worldwide education that focuses on honing learners' various science skills, such as problem-solving, research-oriented, and scientific literacy among pupils. Learners' academic performance can be measured in various ways, such as motivation, pupil engagement, study habits, learning environment, and learning resources. The history of science education has changed due to Coronavirus 2019; this has changed the educational landscape worldwide. Learners, parents, teachers, and school administrators laid the various learning delivery, such as modular, digitized, asynchronous, and online classes. Everybody has adapted to the new educational landscape for two years. Teachers innovate the teaching delivery to become more meaningful and engaging to learners to aid the learning gaps.

Science and Technology is one of the significant subjects that focus on honing various skills of learners to be equipped in educational globalization. Science skills are essential in developing learners to engage in robotics, the digital world, research, Science, and engineering, and the development of new studies when it comes to improving new Technology. Learners' engagement is essential to develop their skills and understand lessons. This pandemic changed learning settings; it has been a challenge to develop their skills through distance learning exposure to using laboratories and performing experiments was affected by this pandemic. Digital learning is different from experiential learning. The impact of various learning modalities received considerable attention in decades of research. Face-to-face is one of the most effective ways to learn skills and knowledge; it includes reading, writing, discussion, experimentation, researching, performing an artwork, demonstration, dialogue, dramatization, practice, and craft journals. (Dorabi & Nelson, 2020).

The COVID-19 pandemic took the education system by surprise. On March 2020, face to face learning engagement of students and teachers within the school has been suspended transforming the life of all learners.



As such, Philippines education sector is one of the most affected in the society as schools and community learning centers shut down for physical conduct of classes.

San Isidro Elementary School is located at San Isidro, Magsaysay Davo del Sur Philippines a far-flung School in the Division of Davao del Sur. Learners in school are very affected in this time of pandemic especially that face to face is not allowed. Learners find hard time to understand the lesson because they are struggling in understanding English and even had a hard time to understand the lesson. Other parent doesn't even know how to read or write. This made the teaching and learning process more difficult since all schools are using modular print modalities.

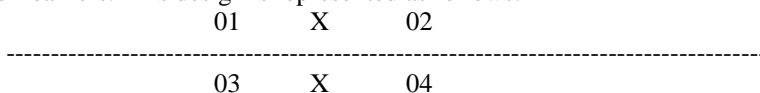
Teachers now are struggling on how to interact to pupils because of the pandemic. Students in our school have difficulty in answering their modules because they feel more comfortable in a face-to-face modality. But our government is not allowing the school to have a face-to-face class. Social interaction positively impacted their learning and they plan to carry on the tradition in their future classrooms. Li (2020) states "Teachers need to create a safe and nonthreatening learning community in which students feel comfortable participa

According to Bromley (2021), active engagement helps create "a positive classroom environment and establish a community of learners who support each other". How can we say that our learners have a conducive and safe environment if they don't go to school where they can study. The lack of face-to-face interaction with the teacher and the absence of traditional classroom setting and socialization the academic efficiency of the leaners is affected.

METHODOLOGY

Research Design

This study made use of the quasi experimental research design which is a non-equivalent control group pretest-posttest design. Non-equivalent design is a good design when the researcher has access to one group for experimentation (Vockel 2019). The researcher opted to use this design because the subjects of the study are intact group of learners. This design is represented as follows:



Where:

- 01 – Pretest of the experimental group
- 02 – Posttest of the experimental group
- 03 – Pretest of the controlled group
- 04 – Posttest of the controlled group
- - Non-random assignment of subjects
- X – Treatment applied in the experimental group

Research Respondents

This study conducted in San Isidro Elementary School, Magsaysay South District Division of Davao Del Sur. The subjects of this study will be the 85 grade eight students – 43 are from section A which will be the controlled group and 42 are from section B which will be the experimental group. The composition of these two sections is homogeneous. Both learners from sections A and B had identical grades. This study made use of the non-random assignment of subjects where all learners of both sections A and B are involved as subjects of the study.

Table 1: Distribution of Respondents

	Subjects	No. of Pupils
1	Section A	43
2	Section B	42
	Total	85

Research Instrument

This study utilized the new normal learning modality. It was a blended learning where teacher gave printed modules and there were times of face to face and online sessions adhering to the protocols of Inter-agency Task Force (IATF). The researcher has to meet the learners online for a follow up session of what has been printed in the module.



The pre and post-performance test consist of a 25 –item test will eventually determine if the learners understand the lesson in science subject through social interaction or teaching with modular printed modality. The pretest will be administered to all subjects prior to the treatment. The pretest will be very helpful to assess the learners. On the other hand, posttest will be administered to measure the effect of the treatment.

Data Gathering

At the outset of data gathering procedure, the researcher will draft a letter seeking for permission that this research study be conducted were sent to the Schools Division Superintendent of Davao Sur, Dr. Nelson Lopez, CESO V and the school principal of San Isidro Elementary School.

While letters seeking permission were delivered to the Schools Division Superintendent and the school principal concerned, the researcher constructed a questionnaire and had it validated by the experts preferably the experts of the study.

After permission had been granted that this study be conducted in San Isidro Elementary School and after the research questionnaire had been thoroughly examined by the expert validators, the researcher will administer pretest to both controlled and experimental class and eventually commenced her experiment. After three weeks of experimentation, the researcher administered posttest to both sections. Scores of the subjects will be submitted to the statistician for statistical computation after which the researcher made analysis and interpretation on the data gathered.

Data Analysis

The following statistical tools will be used in the analysis and interpretation the responses in this study.

Mean will be used to describe the level of academic proficiency of the grade six learners in both pretest and posttest scores.

Eta square will be used to measure the magnitude of effect of the social interaction approach in teaching science on the academic proficiency of grade 6 pupils.

RESULTS AND DISCUSSION

This chapter displays the summary of the findings, conclusions and recommendations drawn out by the researcher after the analysis and interpretation of the findings had been made.

This study sought to determine the effect of social interaction approach in teaching science and academic efficiency of grade six pupils.

This study made use of quasi-experimental research design, which is a non-equivalent control group pretest-posttest design. Non-equivalent design is a good design when the researcher has access to one group for experimentation (Vockel 2019). The researcher opted to use this design because the subjects of the study are intact group of learners.

This study will be conducted in San Isidro Elementary School, Magsaysay South District Division of Davao Del Sur. The subjects of this study will be the 85 grade eight students – 43 are from section A which will be the controlled group and 42 are from section B which will be the experimental group. The composition of these two sections is homogeneous. Both learners from sections A and B have identical grades. This study makes use of the non-random assignment of subjects where all learners of both sections A and B are involved as subjects of the study.

This study revealed that the utilization of social interaction approach in teaching science and academic efficiency of grade 6 pupils has improved the academic performance of grade six pupils. It also revealed that there is magnitude of difference between the post test scores of the controlled and experimental groups.

Conclusions

Based on the collective findings on this study, the following conclusions are drawn:

The pre-test scores of the grade six pupils both the controlled and experimental groups is at the Beginning level. The post-test scores of the controlled group is at the Developing level while the post test scores of the experimental group is at the Approaching level.



Recommendations

In the light of the findings drawn out by the researcher in this study, the following recommendations are offered: It is recommended that teachers teaching science in grade six should use social interaction approach as a strategy that would develop their self-esteem and build resilience towards the unknown and in turn, create connections that make new social interactions less scary. This is an important skill for the first day of school because it can be unfamiliar and scary new environment for your child. If learners take part in the learning process by experiencing the unfolding of the lesson, then they will appreciate the concept being developed, thus, they are learning. The school heads should promote the use of social interaction approach as a strategy that would engage the child actively in the learning process as it is revealed in the study that it is effective especially on subjects that are narrative in nature and are not interesting to learners. Social skills are important for teachers as they help in building successful relationships with pupils. Teachers who benefit from training on social interaction skills as it helps them create an autonomous and supportive classroom environment and promote inclusivity among pupils. A school policy about the utilization of social interaction can be issued. Besides, they can invite the teacher-researcher to demoteach during LAC session using social interaction as a strategy in teaching.

For future researchers, it is strongly recommended that a relative study on the use of social interaction approach as a strategy in teaching will be conducted. Another dimension in teaching can serve as another indicator.

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