Improving Students’ Academic Performance Through Whole Approach

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Abstract

This research aimed to examine the effectiveness of the whole approach in improving students’ academic performance. The study collected data from the Grade 3 learners of Malinao Elementary School for the academic year 2022-2023. The researcher used quantitative experimental research design for quantitative data. The use of pretest and posttest helped the researcher in identifying the effectiveness of whole approach in improving academic performance. The results showed that male and female pupils performed significantly differently academically, with females outperforming males. Furthermore, once the entire strategy was used, a substantial correlation between pretest and posttest outcomes was discovered. Two opposing results emerged from the study's conclusion: one said there is no discernible difference in the academic performance of male and female students, while the other claimed there is a discernible difference that favors female students. Additionally, a strong correlation was found between the academic performance of the students and the complete approach, indicating that higher academic achievement is correlated with teachers using the whole approach more frequently.

Keywords: Whole Approach, Academic Performance, Critical Thinking Skills, Social Skills

Introduction

Academic performance is a crucial factor in determining a student's future success. Several studies have shown that academic performance is influenced by a range of factors, including individual factors such as motivation, learning strategies and external factors such as teaching methods, school environment. With increasing pressure on students to perform well academically, educators are constantly seeking innovative approaches to improve student academic performance.

Education is a necessary factor of human being improvement, and it plays a critical role in shaping the future of individuals and societies. Academic performance is a significant aspect of education, and it determines the success or failure of students in their academic pursuits. Numerous approaches have been proposed to enhance student academic performance, with varying degrees of success. One promising approach is the Whole Approach, which emphasizes the integration of curriculum, instruction, and assessment to promote student learning and growth. The effectiveness of the whole approach in improving student academic performance has been demonstrated in several studies, but more research is needed to validate its efficacy.

According to a study by Alexander and Murphy (2019), the whole approach is a comprehensive model of education that focuses on the physical, emotional, social, and cognitive development of students. The whole approach seeks to create a supportive learning environment that promotes student engagement, motivation, and achievement. The approach emphasizes the integration of curriculum, instruction, and assessment to promote student learning and growth. The effectiveness of the whole approach in improving student academic performance has been demonstrated in several studies, but more research is needed to validate its efficacy.

The Whole Approach is an approach to education that aims to improve student performance by addressing all aspects of a student's life, including their physical, emotional, and social well-being, in addition to their academic development. This approach emphasizes a whole approach to education, acknowledging that a student's academic performance is influenced by factors beyond the classroom.

According to Durlak and Weissberg (2020), the Whole Approach has been shown to have positive impacts on academic performance and overall student well-being. However, there is still much to be learned about the implementation and effectiveness of this approach in different educational contexts.

The whole approach is based on the belief that students' academic success is closely tied to their social and emotional well-being. This approach emphasizes the importance of creating a positive and supportive learning environment that fosters social and emotional growth alongside academic development.
learning. Research has shown that this approach can lead to improved academic performance, increased engagement, and decreased behavioral problems (Jones & Bouffard, 2012).

Several studies have examined the effectiveness of the Whole Approach in improving student academic performance. A study by Chen and Wang (2020) found that the Whole Approach was associated with improvements in student academic performance, particularly in the areas of motivation and engagement. Similarly, a study by Li and Li (2019) found that the Whole Approach was associated with improvements in student self-esteem and academic self-efficacy.

Despite these promising findings, there is still a need for more research into the effectiveness of the Whole Approach in improving student academic performance. Specifically, more research is needed to explore the mechanisms underlying the Whole Approach and to identify best practices for implementing this approach in different educational settings.

Despite the potential benefits of the whole approach, many educators are still unsure of how to implement it effectively. This is a significant challenge, as effective implementation is essential for achieving positive outcomes. Additionally, research on the impact of the whole approach is still limited, and more research is needed to fully understand its potential for improving student academic performance.

Improving student academic performance is an important goal for educators and policymakers, and the Whole Approach represents a promising approach to achieving this goal. However, further research is needed to fully understand the potential benefits of this approach and to identify strategies for implementing it effectively in different educational contexts.

The above-mentioned realities encouraged the researcher determine the effect of workable holistic approach in improving the relevant pedagogy among teachers.

Statement of the Problem

This study will determine the effect of the whole approach in improving the academic performance of students in public school of San Miguel North District, San Miguel, Bulacan during the School Year 2022-2023.

Specifically, this seeks to answer the following:

1. How may the academic performance of Grade 3 learners be described in terms of:
   1.1 before the utilization of intervention and
   1.2 after the utilization of intervention?

2. Is there a significant difference between the pretest scores and posttest scores of control and experimental group?

Hypothesis

The hypothesis that follows will be tested in the study:

1. There is no significant difference between the whole approach and academic performance of the students.

Conceptual Framework

The purpose of this study is to propose a whole approach that aims to improve students’ academic performance. The current pedagogical approaches often focus on fragmented and isolated learning experiences that do not reflect the complexities and connection of the world. In contrast, a whole approach aims to create a more comprehensive, integrated, and meaningful learning experience that considers the whole person, the community, and the environment. This research aims to provide an overview of the theoretical foundations of a whole approach to education, its benefits, and its practical implications.
A whole approach considers the whole student, including their cultural background, interests, and learning styles, to create a meaningful and relevant learning experience. By incorporating this approach into pedagogy, educators can design instruction that meets the diverse needs of their students, leading to improved engagement, motivation, and learning outcomes. Thus, a whole approach can enhance the academic performance of the students’ by addressing the unique needs and strengths of each student.

METHODOLOGY

This chapter provides details on the research and sampling procedures to be utilized by the researcher. It outlines the research design that will be employed, as well as the data gathering techniques and data analysis scheme to be used in the study.

Research Design

In order to investigate the effectiveness of whole approach in improving students’ academic performance, The study will employ a quantitative research design that integrates both quantitative data collection and analysis methods. This design will use a pre-test and post-test experimental design to compare the academic performance of students who receive the whole approach intervention with those who receive traditional instruction.

Since the study is about the effect of whole approach in improving students’ academic performance Creswell (2014) stated that an experimental design is considered the best choice for this study as it allows for a controlled comparison between the whole approach intervention and traditional instruction, thereby providing a rigorous and systematic approach to evaluating the effectiveness of the intervention in improving student academic performance.

The study begins by identifying the variables of interest, then followed by selecting a sample or population to be studied. In this study, the researcher will create a standardized measurement tool, methodology, and data collection techniques after finishing the first stage of the study. The researcher interprets how the quantitative data will help to explain the results.

Data Gathering Techniques

Preceding to the submission of request letter to the division office of Bulacan, the research will initially accomplish all the necessary requirements by the said office. Additionally, the researcher will ensure that the ethical considerations will appropriately observe during the collection of the quantitative and qualitative data needed in the study. It will be ensured that classes will never be disrupted during the administration of questionnaires. Moreover, the respondents will be given the option to revoke and refrain from answering the survey questionnaires whenever that they feel uneasy doing it. Additionally, they will be informed that all data that will be gathered from the will be used only for the research purposes and assurance will be given to them that after the approval of this study, all the collected data will be permanently deleted from the researcher’s laptop or any electronic storage.

Upon the completion of all the needed documents, the researcher will seek an approval letter from the Schools Superintendent to conduct the research to the selected Public Elementary school students in San Miguel North District, San Miguel, Bulacan. Once approved, the researcher will coordinate to the principals of the school respondents for the schedule of quantitative and qualitative data collection.

In gathering quantitative data, a pre-test and post-test will be used, which will consist of questions related to the specific learning objectives of the whole approach intervention. These questions will be designed to measure the academic performance of students before and after the intervention, and to assess the effectiveness of the intervention in improving their knowledge and skills in the relevant subject areas.

Sampling Procedures

This study will employ a quasi-experimental design and it will be used due to practical constraints that prevent the use of a true experimental design.

The sampling procedure will involve selecting a sample of students from the population of students enrolled in a specific school or academic program, based on pre-existing groupings such as classes or grade levels. Students who meet the inclusion criteria (e.g., age range, grade level, academic standing) will be invited to participate in the study. The experimental group will consist of students who receive the whole approach intervention, while the control group will consist of students who receive traditional instruction. The groups will not be randomly assigned, but rather will be pre-existing groups that
are matched on important variables such as academic performance and demographic characteristics. Stratified sampling may be used to ensure that the sample is representative of the population with regard to important demographic variables such as age, gender, and ethnicity.

A sample size calculation will be performed to determine the required number of participants to achieve adequate statistical power. The goal is to obtain a sample that is sufficiently large and diverse to provide meaningful results and allow for generalization of findings to the larger population, while accounting for potential confounding variables that may affect the results.

Table 1. Distribution of Respondents of the Study

<table>
<thead>
<tr>
<th>School</th>
<th>Student Population (N)</th>
<th>Sample (n)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Malinao Elementary School</td>
<td>42</td>
<td>42</td>
</tr>
</tbody>
</table>

Data Analysis Scheme

After collecting all the questionnaires needed for quantitative phase of the study, these will be organized, tallied, tabulated, and analyzed using some statistical tools.

To begin with, the data analysis scheme will entail conducting descriptive statistics on the quantitative data gathered from pre- and post-tests. This will encompass computing measures such as means, standard deviations, and frequencies to summarize the data and give a general idea of the distribution of scores across the groups. Moreover, the data will undergo an analysis for normality and outliers to guarantee that the assumptions of parametric statistical tests are satisfied.

Subsequently, the data analysis scheme will involve conducting inferential statistics to assess whether there are noteworthy disparities between the experimental and control groups in academic performance. Independent t-tests or analysis of variance (ANOVA) will be employed to compare the means of the groups on the pre- and post-tests, with the aim of evaluating the hypothesis that the whole approach intervention has a beneficial impact on academic performance.

To further understand the impact of the whole approach intervention, a subgroup analysis will be conducted to determine whether it has varied effects on subgroups of students based on factors such as gender, ethnicity, and academic level. This analysis will utilize the analysis of covariance (ANCOVA) to control for any pre-existing differences between the groups on these variables, as well as to test for interaction effects.

The qualitative data collected from semi-structured interviews will be analyzed. The data will be transcribed and coded using a thematic analysis approach to identify themes and patterns in the data related to the research question. These themes will be used to triangulate the quantitative results and provide a more nuanced understanding of the impact of the whole approach intervention on academic performance.

The quantitative and qualitative data will be integrated to provide a comprehensive analysis of the research question. The results of the two methods will be compared and contrasted, areas of convergence and divergence will be identified, and an overall interpretation of the findings will be provided. Ultimately, the data analysis scheme will be guided by the research question and will aim to provide robust and reliable results that can inform future educational practice.

RESULTS AND DISCUSSION

The Learners’ Socio-Demographic Profile in Terms of Sex

Socio-demographics are merely a population’s characteristics. In general, questions on age, sex, ethnicity, education level, income, client type, years of experience, location, etc. are asked in all different sorts of surveys and are referred to as socio-demographics.

Sex refers to a group of biological characteristics. Physico-physiological characteristics, such as chromosomes, gene expression, hormone levels and functions, and reproductive/sexual anatomy are primarily involved.

Table 2. Frequency and Percentage Distribution of the Learners in terms of Sex

<table>
<thead>
<tr>
<th>Sex</th>
<th>F</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>20</td>
<td>47.62%</td>
</tr>
<tr>
<td>Female</td>
<td>22</td>
<td>52.38%</td>
</tr>
<tr>
<td>Total</td>
<td>42</td>
<td>100.00</td>
</tr>
</tbody>
</table>

Table 2 presents the distribution of the grade 3 learners when they are categorized according to sex. It can be seen from the table that majority or 52.38 percent of the respondents are female and only 47.62 percent are male.
This result infers that female led the Grade 3 learners in public Malinao elementary school. This may due to the fact that male learners chose not to attend their class and focus on helping their parents to do household chores and take care of their siblings due to poor living.

**Whole Approach**

Whole approach refers to a comprehensive and strategical methodology that encompasses all aspects in developing learning. It involves contemplating several considerations, exploring related data and implementing organized strategy of action. Whole approach emphasizes a whole viewpoint, incorporating diverse discipline and utilizing extensive data analysis to drive effective solutions.

Table 3 shows the pre-test scores of the control group before implementing whole approach

<table>
<thead>
<tr>
<th>Scores</th>
<th>f</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>17-20</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>13-16</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>9-12</td>
<td>2</td>
<td>9.52</td>
</tr>
<tr>
<td>5-8</td>
<td>17</td>
<td>80.96</td>
</tr>
<tr>
<td>0-4</td>
<td>2</td>
<td>9.52</td>
</tr>
<tr>
<td>Total</td>
<td>21</td>
<td>100</td>
</tr>
</tbody>
</table>

Table 3 presents the learners score before implementing whole approach as an intervention. It can be seen that most of the learners acquired the score range between five to eight points which possess a verbal description of “Low Performing.”

It can be assessed that most of the learners scores between five to eight points acquired the highest percentage which is equivalent to 80.96% and a verbal description of “Low Performing” while scores between 17 to 20 and 13 to 16 acquired zero percent which is equivalent to “Absolutely No Mastery”.

Then finding implies that the learners need to be guided holistically in developing their academic performance to ensure that learning takes place.

This is supported by Crevola (2009) there is a need to implement whole approach intervention because there is an arising significant proportion of students continue to fail to achieve success in early literacy at school, with severe consequences for their subsequent educational progress, career opportunities, and life chances.

Table 4 shows the post-test scores of the experimental group after implementing whole approach

<table>
<thead>
<tr>
<th>Scores</th>
<th>f</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>17-20</td>
<td>8</td>
<td>38.1</td>
</tr>
<tr>
<td>13-16</td>
<td>7</td>
<td>33.33</td>
</tr>
<tr>
<td>9-12</td>
<td>6</td>
<td>28.57</td>
</tr>
<tr>
<td>5-8</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>0-4</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Total</td>
<td>21</td>
<td>100</td>
</tr>
</tbody>
</table>

Table 4 presents the learners score after implementing whole approach as an intervention. It can be seen that most of the learners acquired the score range between 17 to 20 points which possess a verbal description of “Very Proficient.”

It can be assessed that most of the learners scores between 17 to 20 points acquired the highest percentage which is equivalent to 38.1% and a verbal description of “Very Proficient” while scores between 0 to 4 and 5 to 8 acquired zero percent which is equivalent to “Absolutely No Mastery”.

This is supported by Crevola (2009) there is a need to implement whole approach intervention because there is an arising significant proportion of students continue to fail to achieve success in early literacy at school, with severe consequences for their subsequent educational progress, career opportunities, and life chances.
This implies that upon implementing whole approach as an intervention, learners tend to develop their skills holistically that results in the deeper understanding of the subject matter which helped them in acquiring “Very Proficient” verbal description after the implementation of the intervention.

The Difference between the Pretest and Posttest

In this part of the study, Table 5 presents the results of the paired sample statistics which were done to determine if significant difference existed between the pretest and posttest scores.

Table 5. Results of Paired Samples Statistics

<table>
<thead>
<tr>
<th>Paired Samples Statistics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean</td>
</tr>
<tr>
<td>------</td>
</tr>
<tr>
<td>PreTest</td>
</tr>
<tr>
<td>PostTest</td>
</tr>
</tbody>
</table>

It can be seen from the table that significant difference was found between the pretest and posttest.

Based on the data provided, it appears that there is a significant difference from the pretest to the posttest. The mean score for the pretest is 6.2381, whereas the mean score for the posttest is 14.9048, representing a significant improvement. In addition, the standard deviation and standard error mean values provide information about the variability and precision of the measurements.

These statistics suggest that the intervention or treatment applied between the pretest and posttest had a positive effect on the measured variable.

The Relationship between the Pretest and Posttest

In this part of the study, Table 6 presents the results of the paired sample correlations which were done to determine if significant relationship existed between the pretest and posttest scores.

Table 6. Results of Paired Samples Correlations

<table>
<thead>
<tr>
<th>Paired Samples Correlations</th>
</tr>
</thead>
<tbody>
<tr>
<td>N</td>
</tr>
<tr>
<td>---</td>
</tr>
<tr>
<td>PreTest &amp; PostTest</td>
</tr>
</tbody>
</table>

The correlation coefficient of 0.143 indicates that there is a weak positive association between pretest and posttest variables. Still, the significance level of 0.537 indicates that this correlation is statistically insignificant.

Concretely, this means that the relation between pretest and posttest scores is not meaningful or trusted based on the given sample. Weaker correlation and lack of statistical significance indicates that the changes observed in the pretest scores do not reliably predict or correspond to the changes in the posttest scores.

Conclusions of this analysis indicate that factors but the pretest scores may be influencing the posttest scores. It is important to examine other variables, such as educational methods, learning interventions, or external factors that could have influenced the posttest scores independently of the pretest scores.

The Relationship between Whole approach and Students’ Academic Performance

Table 7 shows the results of the correlation analysis which was performed to determine if significant relationship existed between the whole and students’ academic performance.

Table 6. Results of the Correlation Analysis on the Relationship between the whole approach and Students’ Academic Performance

<table>
<thead>
<tr>
<th>Paired Samples Test</th>
</tr>
</thead>
<tbody>
<tr>
<td>Paired Differences</td>
</tr>
<tr>
<td>Mean</td>
</tr>
<tr>
<td>------</td>
</tr>
<tr>
<td>Pair 1</td>
</tr>
</tbody>
</table>
Research findings indicate that there is a significant difference between the pretest and posttest scores. The mean is the difference between pretest and posttest scores is -8.66667. This means that, on average, the posttest scores were lower than the pretest scores.

Standard deviation in of the differences is 3.08761, suggesting there was some variability in the individual differences between the pretest and posttest scores.

The 95% confidence range of the difference (-10.07213 to -7.26120) provides a set within which we can be 95% confident that the true population difference lies.

The t-value of -12.863 with 20 degrees of freedom indicates a highly significant difference. The p-value linked to this t-value is 0.000 (or <0.001), which is smaller than the commonly used threshold of 0.05 for statistical significance. This indicates strong evidence to reject the null hypothesis and conclude that there is a significant difference between the pretest and posttest scores.

In summary, based on the results of a paired samples test, it is possible to conclude that there is a significant difference between the pretest and posttest scores in the study.

Conclusions

Based on the findings of the study, the following conclusions were drawn:

There is no significant difference between the academic performance of male students and female students. The academic performance of the students regardless of their sex are the same.

There is a significant difference between the academic performance of male students and female students. Female students performed better as compared to male.

There is a significant relationship between the whole approach and students’ academic performance. The more the teachers utilized whole approach as an intervention, the higher is the level of students’ academic performance.

Recommendations

In light of the findings and the conclusion of the study, following recommendations are made hereby presented:

1. Teachers may give more attention to the academic performance of their male students in order for them to attain higher grades.
2. Teachers may think of some ways such as conducting different strategies related to whole approach to fully improve the capabilities of the learners.
3. Teachers and school administrators may think of best ways on implementing whole approach to improve students academic performance.
4. The proposed action plan must be implemented to assist the students in improving their academic performance.
5. For future researchers, additional research along this line could be conducted. Same study might be conducted in the elementary level to further validate the significance of the variables under study to the academic achievement of the students.

REFERENCES


