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PRACTICAL WORK APPROACH: A TOOL TO IMPROVE THE CREATIVITY SKILLS OF THE STUDENTS IN RECYCLING

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Abstract

Students' creativity is one of the main skills that the K to 12 curriculums wanted to improve when the Revised Blooms Taxonomy was adopted. The main purpose of this study is to improve the students' creativity skills in recycling using the practical work approach. This action research was conducted in Tabugon Elementary School of the Schools Division Office of Kabankalan City utilizing 32 students in the school year 2019-2020, where 16 students served as the experimental group, and the other 16 students served as the controlled group. The method employed in this study was one group pre-test and post-test type of quasi-experimental design using the result of scoring rubrics and statistical tools and to find out the level of creativity skills of the pupils in recycling, practical work approach was integrated with the lesson as a strategy for three weeks. It was found that before that intervention was introduced, students had an ordinary or routine level of creativity skills in recycling and were very creative in their level of creativity skills after the intervention was introduced. It was interesting to note that there was a significant difference in the level of creativity skills before and after the intervention of the practical work approach, which means the intervention is effective in helping students become creative. It is recommended that not only the science teachers could use the practical work approach but other subjects that require students to produce their products and become innovative.

Keywords: Practical Work Approach, Creativity, Innovative, Skills, K to 12, Recycling.

Introduction

Creativity is an act of turning imaginative and new ideas into reality and is characterized by the capability to perceive the world in new ways, find hidden patterns, connect seemingly unrelated phenomena, and generate solutions. Within education, the importance of creativity is acknowledged as an essential 21st-century skill. It is one of the most difficult skills to acquire and the most sought-after for the 21st Century learners. To meet the demands of a technological and globalized future, students need to think critically, problem-solve, adapt and innovate, all characteristics of creative individuals (Wagner & Dintersmith, 2015)[1].

Studies for the past 25 years, the students' creativity skills have been declining. According to Kim (2006)[2], the students' creativity skills since 1990 have gone down, and the most significant drop was for the children in kindergarten through third grade. In this situation, the practical work approach has been seen as a strategy that the teachers can use to improve the students' creativity skills. By Practical Work Approach, a task in which students observe or manipulate real objects or materials or they witness a teacher demonstration. Practical work can motivate students by stimulating interest and enjoyment, teaching laboratory skills, and enhancing scientific knowledge (Dillon, 2008)[3].

Many regard it as an essential aspect of being a 'teacher.' These include hands-on tasks and activities such as different investigations and procedures, laboratory techniques, and fieldwork. These activities can help enhance students' skills, such as laboratory skills and creativity skills. The main purpose of the practical work approach is to engage students' aiding them in developing many important skills. It is often used to generate interest and enthusiasm amongst students and thought to aid students in remembering things, making things innovatively, supporting the view that practical work is highly motivational.

Every Science teacher aims to enhance the pupils' skills, especially their ability to be creative in every task they are assigned to do. Thus, it is a challenge for every teacher to help pupils improve their creativity skills to produce a unique, interesting, and noble product. This study aims to improve the

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pupils' creative skills in recycling using a practical work approach as an intervention. This study will answer whether such an approach to teaching pupils is effective or helpful. The result of this study will give teachers vast knowledge of the approach and apply it to their lessons to improve the performance of the pupils. Furthermore, the result of this study will be beneficial not only to teachers but also to the school administrators, principals, parents, pupils, researchers, and future researchers.

Action Research Questions

This study aims to improve the creativity skills of the pupils in recycling using the practical work approach.

Specifically, this study seeks to answer the following questions:

1. What was the level of the creativity skills of the pupils in recycling before the intervention was introduced?
2. What is the level of the creativity skills of the pupils in recycling after the intervention was introduced?
3. Is there a significant difference between the level of creativity skills of the pupils in recycling before and after the intervention was introduced?
4. What is the possible action plan to be made based on the findings of the study?

Hypothesis

There is no significant difference between the level of creativity skills of the pupils before and after the intervention was introduced.

Plan for Innovation, Intervention, and Strategy

A practical work approach was utilized to improve the creative skills of the Grade Five pupils. In this regard, the researcher executed a hands-on activity which is recycling. During the application of a strategy for three weeks, the teacher uses various ways such as video presentations, group activities, laboratory experiments, demonstrations, and problem-solving. This is to showcase the creativeness and skill of the participants by exploring the desired design of the recycled materials they want to make to help recycle waste and conserve the environment. The researcher provided the tools and materials needed in the said activity.

In performing the activity, students were given time to accomplish their tasks. They perform wherein they exercise their creativity; they explore, imagine and produce a desirable outcome. They experienced learning by manipulating and creating

designs. Imposing of Learning Resource Materials and Scoring Rubrics were also considered during the delivery of the instruction and served as guidance in getting the desired score.

During the conduct of the study, a reward system was devised to motivate the participants to perform the activity. Every participant was given an appreciation token for participating. The first three winners with the highest score were given prizes and gifts to symbolize their extraordinary work.

After performing the activity, the students were informed and updated on their performance results as for as creativity was concerned.

Methodology

Participants

The participants of the study were the 32 Grade Five – Sapphire pupils of Tabugon Elementary School, Brgy. Tabugon, Kabankalan City, Negros Occidental in the school year 2019 – 2020. Pupils were divided into controlled groups and experimental groups. The 16 pupils were an experimental group that received that variable being tested, and the other 16 pupils were the controlled group that did not receive the test variable.

Data Gathering Method

The method employed in this study was one group pre-test and post-test type of quasi-experimental design using the result of scoring rubrics and statistical tools to find out the level of creativity skills of the pupils in recycling using the practical work approach. The experimental research method is a systematic and scientific approach to research that manipulates variables and controls and measures any change in other variables.

A rubric for creativity skills by Brookhart (2013) [4] was adopted and prepared for the performance test and will be used to assess the level of creativity skills in recycling. It was administered before and after the introduction of the intervention.

The researcher collected data from the previous activities of the participants, which served as the baseline to determine their progress of the participants. Afterward, the students performed the activity prepared by the researcher. Moreover, the participants' work was scored according to the scoring rubrics.

Data from the participants was then processed and prepared for statistical analysis and interpretation.

Ethical Issues

For the formality of the conduct of the study, the researcher sent a letter of approval to the principal of Tabugon Elementary School to conduct a study entitled "Practical Work Approach: A Tool To Improve The Creativity Skills of the Pupils in Recycling," using Grade Five pupils as participants of the study. Participants were given an orientation, and their full consent was secured. Likewise, parents' consent was also secured. All data gathered in this study was taken with utmost care and confidentiality.

Data Analysis Plan

The statistical analysis and the subsequent interpretations of the results were guided by the sequence in the stated research problems.

For problem number 1, which states, "What is the level of the creativity skills of the pupils in recycling before the intervention was introduced?" mean was used.

For problem number 2, which states, "What is the level of the creativity skills of the pupils in recycling after the intervention was introduced?" mean was utilized.

For problem number 3 states, "Is there a significant improvement in the level of creativity skills of the pupils in recycling after the intervention was introduced?" T-test was applied.

Plans for Dissemination and Utilization

The findings of this study, when found effective, will be used by the teachers the improvement the delivery of instruction, provide meaningful tasks to the students, and develop the creative skills of the students through the use of the Practical Work Approach. It will also be then communicated to the teachers of the District of Kabankalan IV during the In-Service Training and will be presented to other schools during the Division Research Conference of the Division of Kabankalan City and for other researchers for further investigation.

Likewise, the findings of this study will provide data for the school in the planning of curriculum like lesson planning and support instructional materials for LAC sessions.

Finding

Test-Statistics	Level of Creativity Skills	Interpretation	Decision
T-Test (Before)	2.65	Ordinary/Routine	-
T-Test (After)	4.81	Very Creative	-
p-value	-9.8617	Significant	Reject Ho

It reveals that the level of creativity skills of the pupils in recycling before the introduction of intervention is "ordinary/routine," with a mean value of 2.65. It means that the products created by the pupils were too simple and did not seem to show significant contribution in addressing the problems with garbage. They were trying to imitate the products they had seen or were told to them and never tried to explore what they thought were more meaningful products.

The result suggests the need for a practical work approach which Donolly (1998) [5] states that it is an indispensable aspect of being a science teacher. This will help develop the pupils' ability to be creative in every task they are assigned to do. This approach to teaching will also challenge their interest, uniqueness, and nobility in producing products. Woodley (2009) [6] also stated that a practical work approach can engage students in learning, help them develop important skills, understand the processes of scientific investigation, and develop their conceptual understanding.

On the other hand, after applying the practical work approach, it shows that the level of creativity skills of the pupils in recycling was "Very Creative," with a mean value of 4.81. It implies that the performance of the pupils in creating products out of recycled materials was meaningfully improved from ordinary or routine to very creative with the use of a practical work approach as it increases their interest, attention, and ability to produce innovative products that can help the environment. It shows that pupils who created elaborate products show variation from the concept given, interesting, new or helpful, and make an original contribution that includes identifying a previously unknown problem/ issue. It is good to note that the products created by the pupils were unique and inventive in which they truly explored their creativity and introduced innovation with their creation. According to Lee, M. C., & Sulaiman, F. (2018)[7], the Practical Work Approach can motivate students and stimulate their interest and enjoyment in learning scientific knowledge. It can generate their interest and enthusiasm, which can aid them in remembering things and making innovative things. Moreover, Abraham & Reiss (2012) [8] stated that

the Practical Work Approach is effective in developing students' understanding of concepts, especially when teachers adopt the "hands-on" and "minds-on" approach.

Moreover, there was a significant difference in the level of creativity skills before and after the intervention of the practical work approach. It implies that the performance of the pupils in creating products out of recycled materials was meaningfully improved from ordinary or routine to very creative with the use of a practical work approach. It also means that the practical work approach effectively develops the pupils' skills. It is a strategy that can create a difference because it increases their interest, attention, and ability to produce innovative products that can help the environment.

Conversely, Hodson (2014) [9] stated that a practical work approach could mobilize learning and creativity processes. By manipulating real objects or witnessing demonstrations by teachers, students will be motivated because it can stimulate their interest and enjoyment and enhance their learning. On the other hand, Abrahams & Millar (2008) [10] mentioned that practical work is effective in helping students get what to do with the physical objects but not effective in teaching students scientific ideas that will guide them and help them reflect on their actions.

Conclusions

There was a significant difference in the level of creative skills of the pupils before and after the intervention. It reveals that a practical work approach can help improve the pupils' creativity in producing innovative recycled materials that can contribute significantly to environmental problems. With the strategy used, pupils became inventive and created unique products to express their creativity.

Recommendations

Not only can the science teachers use the practical work approach as a strategy to improve the creativity skills of the pupils. It can be employed in any subject that aims to produce concrete projects or products from the students in exploring their creativity or innovative thinking. As revealed in the result of the study, the practical work approach has a positive impact on the pupils' performance and creativity; the researchers strongly recommend to the teachers to use this strategy to explore various avenues in the subject or objectives. By showing them how things should be done, explaining to them the essence of their personal touch, applying technologies like videos, and showing various examples, teachers can apply a practical work approach in their teaching. It is a very necessary strategy, especially since the K to 12 Curriculum

adopted the Revised Bloom's Taxonomy in which "creating" is the highest taxonomy; hence using a practical work approach will surely execute the aim of the curriculum and utilize its real purpose. Furthermore, with a practical work approach, learning scientific knowledge will be enhanced, motivating pupils to be original, inventive, and attentive, stimulating their interest and enjoyment, and developing their open-mindedness and objectivity.

On the other hand, future researchers can utilize different techniques to gain better results. They can consider various variables and take profound literature to support this study. Their results could serve as the key to the development and improvement of the study.

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