

Activating Strategies in a Constructivist Teaching of Trends, Networks and Critical Thinking in the 21st Century Culture

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Abstract

This research which was participated in by 98 Grade 12 students enrolled for the school year 2022 – 2023 under the Humanities and Social Sciences Strand was an attempt to find whether the use of activating strategies, written and non–written, improved the level of critical thinking skills of the participants. Using a one–group pretest–posttest design, it gathered information on the use of written and non–written activating strategies using a survey questionnaire and on the level of critical thinking skills using a test. Both instruments were teacher–made and expert-validated. Results revealed that for the respondents, the use of written and non–written activating strategies is generally accepted. Their critical thinking skills can be described as ranging from needs improvement to satisfactory based for almost all skills before the use of activating strategies, but after its implementation, their scores have drastically shifted from very satisfactory up to outstanding. The test of correlation also revealed no significant relationship among the variables except for some variables. The use of activating strategies have also revealed that it improved the critical thinking skills of the respondents. Thus, its use must be encouraged especially when trying to present new lessons and if skills acquisition is desired.

Keywords: Activating strategies, constructivist teaching, critical thinking skills

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Introduction

One of the greatest factors that affects student learning and the teaching – learning process is motivation. Students may achieve this motivation by specific means including but not limited to being able to interact with their classmates, formulating meaning and finding significance to learning, and being able to apply new learnings in day – to – day living (Ramos, 2015). However, when the health crisis started, students and teachers alike were confined and made to fit in the four corners of a screen in order to continue on with learning, causing students to eventually lose the motivation they once had (Corpuz, 2020). This has resulted to a lower performance of students in San Bartolome Integrated High School. In fact, the collective Mean Percentage Score (MPS) and classified grades of students reveal that there has been a significant decline. This is supported by the item analysis results that even those questions that only require simple recall has been answered incorrectly by a great number of students (Quarter 1 and 2 School Monitoring, Evaluation and Adjustment Report). Fueling the claim that their thinking skills are getting compromised.

Methodology

The research used the experimental one group pretest – post-test design. It is a research design where the primary goal will be to show cause and effect and measuring any difference within the group (Heffner, 2014). In a previous study conducted by Sanchez, Garcia & Tondo (2020), the same research design was used to determine whether integrative teaching approaches will be develop understanding of least mastered competencies in Biology. They also suggested that the same method may be used to try to measure levels of understanding in other areas such as Social Science, Physical Education, and Filipino.

The respondents for this research were composed of 98 Grade 12 students who are officially enrolled in Trends, Networks and Critical Thinking in the 21st Century Culture course for the academic year 2022 – 2023. They were exposed to different activating strategies in discussing the lesson content. In terms of characteristics, they were heterogeneously grouped and match – paired in terms of their pretest scores in the thinking skills test.

For the instrument, a teacher – made test was administered as pre and post-test. It was validated by experts in the field of Social Science and was evaluated in terms of content, reliability and internal consistency. Cronbach Alpha was the specific test to measure the said indicators. It is

a 60 – item test to measure the critical thinking skills of the students. A table of specification containing the competency and the skill being measured was also crafted.

In order to deliver the instructions better, instructional plans were made by the researcher. These instructional plans were validated by experts both in the fields of Social Science and Education and which contained activities and lesson distributions. To further standardize the content validation process, the said instrument was evaluated using Lesson Plan Evaluation adapted from Harley (2012). A survey questionnaire was also designed to gather information about the perception of the students on the use of the activating strategies in a constructivist teaching. The said questionnaire was administered in a pilot test and split half method was used to measure test its reliability index.

For the quantitative part, descriptive and inferential statistical measures were used. Mean, Standard Deviation, Frequency Count and Percent distribution were used to interpret the scores of the respondents in the teacher made test and their perception in the use of Activating Strategies in a constructivist teaching. Inferential statistical measure was used. Pearson Moment Product-Correlation was used to determine whether there is a significant relationship between the perceived use of Activating Strategies and the respondents' critical thinking skills. In order to discover whether the pretest scores of the respondents are significantly different with the posttest scores. Paired sample t-test was utilized. Independent sample t-test was used to see whether the post test scores of the group are significantly different with the pre-test scores obtained.

Findings

Summarizing the perception of the respondents on the four usages of activating strategies, it can be observed that for learning objectives, non — written activating strategies was more preferred by the respondents. This may be because non — written activating strategies did not really require the students to be able to speak in English, that's why they were more comfortable with those strategies. However, the same cannot be said for the other indicators, learning experiences, learning opportunities and learning outcomes, as the written activating strategies were more preferred by the learners.

The scores of the respondents in the critical thinking skills test is reflected in table 9. It shows that before the use of any activating strategy, the learners have a very low level of critical thinking skills as to all the individual skills: remembering, understanding, applying, analyzing,

evaluating, and creating. Most of their scores ranged and were interpreted as needs improvement up to satisfactory only with a very few learners being able to score very satisfactorily and outstandingly. Also, it can be observed that as the skills become more complex, the number of learners reaching the higher tiers of scores also decreases in general.

After the use of activating strategies, there was a shift in the scores of the respondents, suggesting that they were able to understand the lessons that were discussed with the integration of written and non – written activating strategies and that they were able to show how the skills can be done, shown, or applied in certain questions or problems.

The test of correlation revealed that, in general, the use of written activating strategies in terms of learning objectives, learning experiences, learning opportunities and learning outcomes do not relate significantly to the level of critical thinking skills of the respondents. However, for learning outcomes, it is related significantly to remembering. This association between the two variables may be linked to their individual nature. As defined previously, remembering is the plain recall of facts, and is probably the most evident and easiest outcome learners can show through a test.

For the test of correlation between the use of non – written activating strategies and the level of critical thinking skills of the students, only learning objectives related to remembering, learning experiences to analyzing, and learning outcomes to remembering have shown significant relationship.

The comparison of the pre and posttest scores of the respondents revealed that there is a significant difference between the scores of the students, in favor of the posttest scores in all of the skills that were tested.

Conclusion

The use of activating strategies creates a non – threatening learning environment for the learners and it also gave them new learning experiences by allowing to work in their own pace, either individually or through groups.

Activating strategies, as perceived by the respondents, do not significantly relate to their level of critical thinking skills except for the perception of the learners on written activating strategies in terms of learning outcomes and remembering, and between learning objectives and remembering, learning experiences and analyzing, and learning outcomes and remembering for the non – written activating strategies.

The results of the test of difference revealed significant differences in the pre and posttest scores, thus, the use of activating strategies was able to develop all critical thinking skills.

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