Micro Teaching Strategies and Critical Thinking Skills of Grade 9 Students in Araling Panlipunan

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Abstract

The current challenge for Araling Panlipunan teachers is to improve students' critical thinking skills in Araling Panlipunan. The primary goal of the study was to determine the effectiveness of micro-teaching strategies such as video clips, game-based mobile learning, and infographics in assessing the critical thinking skills of Grade 9 students using the RED model composed of recognized assumptions, evaluate arguments, and conclude at Gumaca National High School, Gumaca Quezon. The study used an experimental research design, implementing the micro-teaching strategies in teaching Araling Panlipunan and using the RED model to assess the critical thinking skills of the Grade 9 students. The researcher created a survey and assessment questionnaire to assess students' experience before and after using the micro-teaching strategies in teaching Araling Panlipunan. The research conducted a pretest and posttest assessment of students' critical thinking skills using the RED model with teaching strategies such as video clips, game-based mobile learning, and infographics. According to the findings, there is a significant difference between the pre-test and post-test scores when using micro-teaching strategies such as video clips, game-based mobile learning, and infographics using the RED (Recognized Assumptions, Evaluate Argument, Draw Conclusion) model only in terms of draw conclusion in assessing critical thinking skills.

Keywords: Critical Thinking Skills, Micro Teaching Strategies, RED Model

Introduction

The education system went through rapid changes over the years. Countries aim to produce knowledgeable and skillful future members of society equipped with 21st-century skills to cope with life in society once they are out of school. To be prepared for it, learning skills such as the 4Cs, life skills, and literacy skills are the foundation of producing 21st-century students (Buckle, J. n.d.). Social studies develop the student's ability to construct informed and decisive decision-making skills, acquiring civic competence and understanding to be a productive and responsible citizen. This allows them to be more aware of their society's social and political issues and make sound decisions to approach these challenges to make a better living life (Camposano, C. O. & Rogayon, D. V. Jr. 2021). Thus, critical thinking plays a vital role in this. As stated by Young (2023), critical thinking is a fundamental life skill that enables individuals to objectively make informed decisions and solve complex problems through analyzing, evaluating, and interpreting information, as all of these involve applying reasoning and logic, questioning assumptions, recognizing biases, and considering multiple perspectives. In the article of Jr. Lugtu, Reynaldo C. (2018), the critical thinking skills of Filipinos are declining due to various reasons, such as the traditional method of pedagogy and the influence of technology in the student's learning development and life skills. Therefore, utilizing bite-sized learning consists of content segments combined with activities (Alqurashi, 2018). The study by Mohammed, G. S., Karzan et al. (2018) helps students retain information using this bite-sized learning strategy.

Teaching and developing learners' critical thinking skills has been challenging for both the learners and the teachers. According to the Reboot Foundation of Elevating Critical Thinking (2020), developing critical thinking skills is one of the key aspects of life, and it is challenging to achieve. Cognitive scientist Tim van Gelder states that "critical thinking is hard" due to our inability to think logically. Other probable causes include technology, societal

norms, and mistaken educational goals. More guidance and practice are needed across the curriculum to teach young people to think critically rather than relying solely on stories, feelings, and intuition (Bouygues, H. L. 2020).

The 21st-century skills are integrated into the education system of the K-12 curriculum as stated in the DepEd Order No. 21 s. 2019. The learners are equipped with information, media, and technology skills, learning and innovation skills, life and career skills, and communication skills, which are necessary to attain and overcome the challenges of the 21st century (Scoular, C. 2020). The learning skills are also known as the 4Cs: critical thinking, creative thinking, collaboration, and communication (Thoughtful Learning, 2021). According to the study of S. Y. Seventika et al. (2017), critical thinking involves reasoning abilities, which are categorized into lower and higher-order reasoning abilities. Critical thinking is the higher-order reasoning that motivates students to interpret and analyze given information to promote active learning. Bite-sized learning, also known as microlearning, focuses on breaking down long information into small pieces per session with a minimum of 15 minutes. It is mainly centered on one learning objective at a time, which gives learners the essential learnings and the flexibility of making connections of the learning sessions between topics per session rather than the long, complex lectures that the teacher connects for them (ACER for Education: Education Technology, 2019).

1.1 Objective of the Study

The study was focused only on investigating the effectiveness of micro-teaching strategies such as video clips, game-based mobile learning, and infographics in the teaching-learning process while assessing the learner's critical thinking skills using the RED Model categorized as recognized assumptions, evaluating arguments, and drawing conclusions as a form of assessment containing a 45-item questionnaire and a survey questionnaire given at the end of the assessment is limited to only assessing the learners' perception regarding using the micro-teaching strategies in the teaching-learning process in Araling Panlipunan.

1.2 Methodology

The study uses experimental research. Experimental research gathers information and data on cause-and-effect relationships by manipulating one or more variables and observing the effects on other variables. The study aims to prove the significant difference between the dependent and independent variables before and after applying the independent variable. The researcher uses the method of quantitative research in gathering data on the effectiveness of micro-teaching strategy used in bite-sized learning contents such as video clips, game-based mobile learning, and infographics in teaching Araling Panlipunan and assessing the Grade 9 students' critical thinking skills using the RED model as an assessment in Gumaca National High School, Gumaca Quezon.

1.3 Research Instrument

The study utilized the researcher-made assessment and survey questionnaire as the main assessment tool. Part 1- deals with the respondents' personal information, such as age, sex, parents' educational attainment, employment status, and family monthly income. Part 2- deals with the level of effectivity of the respondents on the effectiveness of the micro-teaching strategies used in bite-sized learning, such as video clips, game-based mobile learning, and infographics. The respondents used the level of effectivity, from "very highly effective to strongly ineffective." The assessment tool is a 45-item questionnaire that measures the respondents' critical thinking using the RED model: recognize assumptions, evaluate arguments, and draw conclusions as applied in the given pre-test and post-test. Part 3- focuses on the respondents' pretest and posttest, aiming to identify any significant differences between the two. It also employs the RED model, a crucial framework for assessing students' critical thinking skills. This model, which includes recognizing assumptions, evaluating arguments, and drawing conclusions, is pivotal in our research.

1.4 Statistical Treatment

The researcher used the following statistical treatments, such as frequency count, mean, percentage, and standard deviation, to measure the effectiveness of micro-teaching strategies and the critical thinking skills of Grade 9 students in Araling Panlipunan. A t-test of difference was utilized to determine whether there was a significant difference between the pre-test and post-test scores of the learners' critical thinking skills.

1.5 Results and Discussion

The following were the significant findings of the study:

1. **Level of effectiveness of the following micro-teaching strategies**

    1.1. Video Clip. The respondent's level of effectiveness in micro-teaching strategies using video clips shows an overall mean of 3.44 and a standard deviation of 0.93, which is interpreted as moderately effective.

    1.2. Game-Based Mobile Learning. The overall mean effectiveness of micro-teaching strategies using game-based mobile learning was 3.21, with a standard deviation of 1.04, which concludes that it is moderately effective.

    1.3. Infographics. The level of effectiveness of micro-teaching strategies using infographics. This resulted in an overall mean of 3.35 and a standard deviation of 0.93, interpreted as moderately effective.

2. **Pre-test scores of the respondent's critical thinking skills using the RED model in terms of:**

    2.1. Recognized Assumptions. It shows that before using micro-teaching strategies such as video clips, mobile game-based learning, and infographics, the highest frequency was 21, with a percentage of 77.5 interpreted as fair, while the lowest frequency was 8, with 20 percent interpreted as good.

    2.2. Evaluate Arguments. Before the usage of micro-teaching strategies, such as video clips, mobile game-based learning, and infographics, had the highest frequency of 19, with 47.5 percent interpreted as good. Meanwhile, the lowest frequency was 1, with a percentage of 2.5, interpreted as very good.

    2.3. Draw Conclusions. It shows that before using micro-teaching strategies such as video clips, mobile game-based learning, and infographics, the highest frequency was 16, with a percentage of 40 interpreted as fair. On the other hand, the lowest frequency was 2, with a 5-percentage interpreted as very good.

3. **Post-test scores of the respondent's critical thinking skills using the RED model in terms of:**

    3.1. Recognized Assumptions. The results show that the respondents score in terms of recognized assumptions when using micro-teaching strategies such as video clips, mobile game-based learning, and infographics, with the highest frequency of 21 and a percentage of 42.5, interpreted as good. At the same time, both, with the lowest frequency of 4 and a percentage of 10, are interpreted as very good and poor.

    3.2. Evaluate Arguments. The survey shows that the respondents score in evaluating arguments using micro-teaching strategies such as video clips, game-based mobile learning, and infographics. The highest frequency is 25, with 62.5 percent interpreted as fair, and the lowest frequency is 7, with 17.5 percent interpreted as poor.

    3.3. Draw Conclusions. It shows that the respondents' scores when using micro-teaching strategies such as video clips, game-based mobile learning, and infographics are interpreted as very good, with the highest frequency of 17 and a percentage of very good. At the same time, having the lowest frequency of 1 with a 2.5 percentage is interpreted as excellent.

4. **Significant difference between the pre-test and post-test scores in critical thinking skills of the respondents before and after applying the micro-teaching strategies**

Table 1. *Significant Difference Between the Pre-Test and Post-Test Scores in Critical Thinking Skills of the Respondents Before and After Applying the Different Micro Teaching Strategies*

Critical Thinking Skills	Pre-test		Post-test		T	df	Sig. (2-tailed)
	Mean	SD	Mean	SD			
Recognized Assumptions	4.75	1.98	4.92	1.81	-0.39	39	0.69
Evaluate Arguments	6.10	2.085	6.47	2.25	-0.78	39	0.43
Draw Conclusions	5.95	2.40	8.60	2.74	-3.94	39	0.00

<0.01/0.05 significant difference

Table 1 presents that there is no significant difference between the pre-test and post-test scores of the respondents before and after applying the micro teachings strategies such as video clips, game-based mobile learning, and infographics in assessing the learners' critical thinking skills using the RED model composed of recognized assumptions and evaluated arguments. On the other hand, in terms of conclusion, there is a significant difference between the pre-test and post-test scores in utilizing the micro-teaching strategies such as video clips, game-based mobile learning, and infographics in assessing the critical thinking skills of the Grade 9-Maubanog students using the RED model.

1.6 Conclusion and Recommendation

Micro teaching strategies such as video clips, game-based mobile learning, and infographics are moderately effective in teaching Araling Panlipunan to students overall. The respondents' pre-test scores for assessing their critical thinking skills using the RED model, composed of recognized assumptions, evaluating arguments, and drawing conclusions, were mostly fair and good. And the post-test scores in assessing their critical thinking skills using the RED model, composed of recognized assumptions, evaluating arguments, and drawing conclusions, were mostly very good and poor. Therefore, there is no significant difference between the pretest and post-test scores of the students in using micro-teaching strategies such as video clips, game-based mobile learning, and infographics using the RED model composed of recognized assumptions and evaluated arguments. In conclusion, there is a significant difference between the pre-test and post-test scores of the students using micro-teaching strategies such as video clips, game-based mobile learning, and infographics using the RED model critical thinking skills.

The following recommendations are at this moment suggested: Administrators, supervisors, principals, and master teachers may provide training and seminars to Araling Panlipunan teachers on providing instructional materials or innovative teaching and learning tools to enhance students' critical thinking skills. Teachers may use other micro-teaching strategies to motivate students to learn and develop critical thinking skills. Students may further enhance their critical thinking skills by using other micro-teaching strategies depending on their capacity and interest. Future researchers may conduct a similar study with many participants at different year levels. Furthermore, the researcher suggests conducting a comparative study with other instructional tools to improve critical thinking skills.

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