



Effects of Higher Order Thinking Strategy of SS III Students Performance in Sentence Combining on Essay Content Writing in Kano State.

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ABSTRACT

This paper examines the role of Higher Order Thinking Strategy of Sentence Combining in the Improvement of the Essay Writing Skill of Content in SS III students' Composition. A senior secondary school was randomly selected for the study; two different classes were selected to form the control and experimental groups. The instruction lasted for four weeks at the end of which a posttest was administered. The posttest results were analyzed using t-test statistical technique; the data analyzed indicated a significant difference in the essay content performances of the experimental group. Recommendations were offered on strategies that will enhance better performance of secondary school students essay writing by using the Higher Order Thinking Strategy.

ARTICLE INFO

Article History

Received: April, 2020
Received in revised form: June, 2020
Accepted: July, 2020
Published online: August, 2020

KEYWORDS

Higher order thinking, Sentence Combining, essay content writing students' performance

INTRODUCTION

Thinking permeates the lives of human kind. There are many studies about the teaching of thinking which all suggest a direction and general guidance about how to teach students to become critical and effective thinkers. A central goal of education and learning is the acquisition of the right strategies for critical thinking. Psychologists (Dewey, 1969; Piaget, 1969- in Sadiq, 2012) have pointed out the role that higher order or critical thinking plays in child development and have recognized the value of experiences that boost a learner's cognitive structures. It is a mental faculty believed by philosophers and psychologists that makes the difference between man and beast. Education, too, is replete with thinking: we read and digest or think over and react to what is read; we write our thoughts and feelings on paper. It is widely believed that thinking can be good or bad. In the scholarly realm, thinking- despite being

researched enough (Hyland, 2004)- has been classified broadly into two distinct categories: lower order thinking and higher order thinking; both have their accompanying skills that date back to the Socratic days up to the days of Bloom (1956), Marzano (1998) and many more.

This paper attempts to establish whether the higher order thinking prediction strategy of Probable Passage (PP) can refine the SS III students' performance in content writing skills in written composition. English language teachers are intuitively aware that essay writing and reading comprehension form a type of exercise that students are less confident with. They are expert forms that require critical thought, understanding, processing and refined articulation to master. Students, in most classes, take a text that they do not know too much about, listen carefully to what the teacher says about the text, add in some thoughts from fellow students, then, as Buka (2014) stated,



regurgitate this into a written form that doesn't always marry itself to the ideas produced. And all this (regurgitation) for an audience who helped them work out what to write in the first place'. This rote learning represents a poor avenue for learning and yet many essay teachers' style of teaching reading and the written word seems to strongly encourage regurgitation of facts, beliefs, or ideas.

Researchers have complained about the inability of students to read between the lines or write essays in English language coherently; scholars like Sadiq (2012), Olaofe (2018), and Adeyanju (2016) observed that students, when given a reading text hardly criticize, evaluate or infer meaning out of the passage as evident in their poor written responses. It is believed in some quarters that secondary school students could locate information in a text and perform computations but were unskilled in the higher order skills of applying and evaluating knowledge.

Research Question

1. How does the higher order thinking prediction strategy of Sentence Combining (SC) affect performance in the content skill in secondary school students' essay writing?

LITERATURE REVIEW

Sentence combining involves explicitly instructing students in rewriting short, syntactically simple sentences into more varied ones in terms of style, length and syntactic structure. For example, Saddler et al. (2018) wrote that a series of simple sentences a young writer may produce such as: "the ball was red. The ball was big. The ball bounced when I dropped it' could be combined in multitude of ways depending on the author's style, for example: 'The ball bounced when I dropped it'

Modeling the Sentence Combining in an experimental classroom, Waters (op cit.) used a graphic novel version of class reader and asked students to list the names of the main characters in the story; responses were recorded on the left side of the grid. Relevant questions were asked about the characters, the students' responses were again recorded in the appropriate side of the grid. Students were encouraged to share their discussions; this exercise continued until the students chose the character traits, motives, or viewpoint based upon the character's actions in the story and all attributes were written atop the grid (Waters, op cit.). This strategy, according to Saddler, Ellis-Robinson & Asaro-Saddler (2018), recommends six criteria to consider when interpreting new sentences: (a) Meaning: matching the idea in a sentence with the writer's meaning; (b) Clarity: comprehensibility of the sentence at first reading; (c) Coherence: logical presentation of the various parts of the sentence; (d) Emphasis: putting key words and phrases in emphatic positions; (e) Conciseness.

Constructing sentences remains a markedly problematic area in the teaching and composing of essays; most of the literature reviewed affirm that constructing syntactically correct and complex sentences is a critical thinking skill that denotes expert writing (Saddler, Ellis-Robinson & Asaro-Saddler, 2018; Graham & Hall, 2016; Hyland, 2004; Hyland, 2014; Wood, 1988). It still remains a fact that some students produce essays with sentences that have fewer words, write sentences that are less syntactically complex and contain more grammar and spelling errors, and less diverse vocabulary- making their essays hard to understand (Graham & Hall, 2016). Sentence Combining can assist students write richer essays that adequately indicate their developing higher order thinking processes. Combining sentences in frequent



writing sessions where the tasks are carefully modeled and openly discussed assist 'in exposing learners to a wide range of syntactic structures they can employ in their essay writing.; the writing tasks can also offer means of testing words and ideas through focused and lively language experiences(Gillespie & Graham, 2014). As the writer chooses words within each sentence that precisely and clearly conveys an idea, they make the composition more understandable to the reader. Since sentences are the vehicles for the writers' ideas, the ability to construct complex and varied sentence structures can facilitate a writers' ability to communicate those ideas to a reader (Saddler, Ellis-Robinson & Asaro-Saddler, 2018).

The 'Guided Practice' step could be spread over two days, as done by Waters (2010) and could involve dividing the class into groups of four and distributing dictionaries or thesauruses to each group. Synonyms and meanings for new words would then be looked up by the students under the guidance of the teacher; this will be followed by the teacher guiding the students to make judgment of the motive or points of view of the character in the story. Once the students understood the process, they will be directed to complete pre-selected tasks with the correct sentence combinations,

The third step, 'Application', involves viewing Sentence Combining as a 'format for analyzing the characters and events, theme, and so on, through writing' (Waters, op cit.; Madison, 2010) by directing their attention to the feature or response written in the sentences to be combined. This then leads to a discussion of how the responses turned out to be correct. Collins and Madigan (2010) conducted a three-year research study to determine if writing can be used to improve reading comprehension in low performing schools; they concluded that

'writing about text not only benefits from development of reading ability but contributes to it as well' and that strategies like Sentence Combining can go a long way in improving low performers' reading and writing skills.

A step-by-step method offered by Collins include:

1. Select a category or topic for the Sentence Combining task'
2. Provide students with key vocabulary words and key features related to the topic;
3. Vocabulary words should be listed on the board

Furthermore, offers a series of sentence combinations can be employed by the teacher; these include: multiple sentence subjects and objects combined with a conjunction; adjectives or adverbs embedding; connecting words; relative clauses, appositives, possessives, modifiers, participial phrases, subordination of clauses, verbs and verbal to connect ideas.

In the Saddler et al. method, instruction is scaffolded via explanation and modeling of each of sentence combining procedures or parts of speech in the grammar condition. The students were first taught how to combine sentences using the conjunctions 'and', 'but', and 'because', then adjectives and adverbs, and finally adverbial and adjectival clauses. The instructor should explain and model how to perform specific sentence combinations before the students participate in guided practice. During guided practice, the students would be placed in dyads (one stronger writer, one weaker writer) and work on writing their own responses. During the independent practice phase, the pair would write a short story and revise pieces utilizing the sentence combining strategy. Using the peer assisted grouping arrangement; one student would assume the role of the coach while the other



student applies the strategy during both the composition and revision process.

The grammar instruction component concentrated on skills associated with nouns, verbs, adjectives, adverbs, subjects, and predicates. The instructor modeled and explained how to appropriately apply a part of speech in a sentence. During guided practice, the students worked in pairs on focused exercises that required them to supply the missing part of speech in a sentence. Identical to the experimental group, the grammar instruction pairs also engaged in writing a short story and revising their pieces utilizing.

The Sentence Combining literature reviewed postulate that improving sentence writing ability with empirically based interventions is important for several reasons: First, problems with sentence production skills often interfere with other processes such as the skills of planning, content generation, and revising because the attention the writer must commit to lower level skills depletes accessible cognitive resources that could be applied to higher level processes (Graham & Hall 2016; Scardamalia & Bereiter, 1986). Second, if a writer lacks the knowledge of effective writing formats at the sentence level it may hinder their ability to translate their thoughts into text (Hyland, 2004; Hayes & Flower, 1986), which could subsequently diminish the intelligibility, complexity and coherence of the communication. Third, difficulties constructing well-designed and grammatically correct sentences may make the material the student writes more difficult for others to read.

METHODOLOGY

To assess the effects of the selected higher order thinking strategy of Sentence Combining on the performances of SS III students in essay writing tasks that require

the display of the higher order thinking skills of inference, prediction, interpretation, and evaluation, essay questions from the 2018 NECO examination were selected for the posttest while the Kano Educational Resource Department (KERD) Senior Secondary School Qualifying Examination (SSSQE) 2018 English language question paper (which contains reading comprehension and essay writing questions and which qualifies students who passed it for payment of NECO examination registration fees by the state government) was used at the pre-test stage. Both instruments have been subjected to reliability and validity tests by the institutions administering the examinations. Students were required to answer one essay question at both the pre-test and posttest stages.

The instrument was designed, based on the evidenced-based works of Collins & Gunning (2010), by the researcher to cover the students' descriptive essay. The Descriptive Essay Test for HOTS was designed to use Story Impressions strategy to examine and improve students' inference and expression skills in content writing.

A sample of 50 SS III participants was selected randomly from a class of 101 students for a four-week lesson on essay content writing using the Sentence Combining higher order thinking strategy; these were the experimental group. A similar number was selected from another SS III class, in the same school, to serve as the control group. The experimental group was taught how to write a descriptive essay using the Sentence Combining strategy for three weeks and the control group was not. English language classes have a thirty-five-minute duration in the secondary school selected.



DATA ANALYSIS AND RESULTS

The post-test results obtained were statistically analyzed using t-test and are presented below:

Table I: Two groups' Post-test performances in Writing Essay Content

Group	Mean	SD	SE	DF	T-value	P-value
Experimental	50	4.65	2.35	98	-3.35	0.0013*
Control	37	6.29	2.33			

Significant* (p < 0.05]

Table one indicated that the mean of the experimental group is 50 while that of the control group is 37. The SD of both the two groups are 4.65 and 6.29 with a DF (98) calculated t-value is -3.35 and p- value is 0.0013.

DISCUSSION

The control group's mean score of 37 strongly suggests that the experimental group's mean score of 50 represents a significant difference in the essay content writing performances of the two groups. Also, since the p value is $0.0013 < 0.05$ level of significance, the null hypothesis is rejected. This significant difference could be attributed to the experimental group's participation in the pedagogic processes involved in teaching Sentence Combining. While there was absence of familiarity with effective writing formats in the control group's essays, the experimental group displayed an overall mastery of essay writing format. A significant number of the control group's descriptive essays followed the letter writing format while the experimental group strictly followed the descriptive essay format with clear, explanatory, and descriptive paragraphs.

The grammar instruction component of the strategy appeared to stimulate the experimental group's appropriate application of parts of speech and the production of concise sentences.

These were noticeably missing in most of the essays written by the control group.

RECOMMENDATIONS

1. To use this method in the class, it is advised that students be divided into groups of five students each as this would ensure more participation by the group members.
2. Brainstorming should be kept to the barest minimum as most learners in this study failed to connect words with their contextual or collective meaning.

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