



Efficacy of Advanced Graphic Organizers of Constructivist Strategies in Facilitating Learning English Grammar Rule and Perception of Pre-service Teachers

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ABSTRACT

This paper focuses on "Efficacy of advanced graphic organizers of constructivist strategies in facilitating learning English Grammar Rule and Perception of Pre-service teachers. Individuals have not possessed unique character and learning style in nature. Pre service teachers in DIETs comprise of students who studied Arts, Science and Vocational subjects in their higher secondary class. So their understanding differs from one another. The sample consists of 100 pre service teachers in DIET. The investigators implemented one group pre-test and post-test experimental design. This experimental paper emphasizes the benefits learning through graphic organizers which are indeed 30 years old but scarcely implemented for fear of time consumption. Constructivist learning environments, where facilitators build on what pre-service teachers' previous knowledge are grounded in instructional scaffolding. Mellon (1969) taught grammatical terms using transformational grammar rules along with a sentence combining component and found small significant gains. O'Hare (1973) replicated the study using sentence combining alone with no reference to the grammatical terminology or rules and showed significant gains. A comparative analysis of the Pre-test and Post-test scores and the correlatives study of the items in the survey questioners showed the effectiveness of advanced graphic organisers of constructivists strategies in learning the transformation of sentences. Pre-service teachers were well motivated and so they assimilated the information and completed the complex task of transforming simple, complex and compound sentences. Advanced graphic organisers provided excitement and enthusiasm towards learning.

KEYWORDS

Advance Graphic organizer, constructivist approach, Grammar rule, perception

1. Introduction

Constructivist approaches to teaching and learning are grounded in the idea that students bring valuable prior knowledge to their classes and that teachers help learners build up that knowledge through active and personally meaning full learning activities (Piage,1972; Vygotsky,1978). Teachers who embrace a constructivist approach seek ways to know students as individuals, to understand their unique ways of building, organizing or interpreting knowledge, and then to guide them towards new ways of thinking.

English has become an integral part of India. After the globalisation the parental need for English has sky rocketed. Teachers are expected to train the students not only in numbers and letters but also in communicative language. Though fluency is given priority, there is the need for the basic knowledge of grammatical rules hence the foremost challenge for an English teacher is the teaching of grammar. Graphic organizers are indeed 30 years old but scarcely implemented for fear of time consumption. Graphic organizers are generally used as tools for organizing and illustrating relationships between concepts in knowledge subjects. But they can be incorporated to teach skill subjects too. Graphic organizers comprises of flowchart, matrix, Venn diagram and webbing. At the time of teaching in the classroom, the investigators came to know that the pre service teachers mechanically transform the sentences into simple complex and compound, without understanding the basic concepts. So they needed more assistance in the transformation of sentences. According to ausubel(1960) ,an advance organizer is a material that is introduced before an unfamiliar content so as to facilitate its assimilation. They, therefore,act as anchor for the reception of new content(Ausubel,1963). Ausubel further points out that cognitive restructuring process that is as a result of advance organizers leads to some positive learning outcome. Hence the investigators decided to employ this strategy to pre service teachers for learning of transformation of sentences. This strategy will facilitate the understanding level of pre service teachers in the transformation of sentences. The results will be analysed both

quantitatively and qualitatively.

Graphic organizers of constructivist approach

Graphic Organizers are non-linguistic, visual tool that enable the learner to

- Connect new information to their existing knowledge
- See how concepts relate to each other and fit in
- Recall information easily

Ellis and Howard (2005) define Graphic Organizers as:

"Visual devices that depict information in a variety of ways. Most commonly, they employ lines, circles, and boxes, to form images which depict four common ways information is typically organized: hierarchic, cause/effect, compare/contrast, and cyclic or linear sequences. These images serve as visual cues designed to facilitate communication and/or understanding of information by showing how essential information about a topic is organized."

2.Significance of the study

During the teaching process, the investigators found that the Pre-service teachers failed to remember the grammatical rules learnt in earlier classes. Almost all the Pre-service teacher faced this problem and it was due to a failure of the memory system rather than the language system and so more assistance was needed. In the changed scenario, a teacher has to adopt and adapt a strategy to arouse the enthusiasm among the learners. Grammar classes have to be made interesting and effective for better understanding.

Research shows that graphic organisers make content area information more accessible as well as memorable to students. Advanced graphic organisers are visual display of facts or ideas. Teachers can use graphic organisers to reinforce learning, assess at multiple check points and identify misunderstandings of concepts. Hence this study investigate the use of advanced

graphic organisers of constructivist strategies to teach grammar, especially transformation of sentences to second year Pre-service teachers of District Institute of Education and Training, T.Kallupatti, Madurai District, TamilNadu.

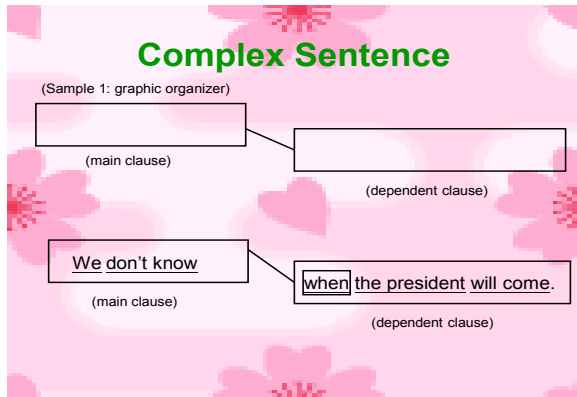
3.Objective:

Research question –This study seeks to answer the question:

How effectively advance graphic organisers be used in grammar rules?

4.Methodology

Investigators used One group pre-test and post-test experimental design for the second year Pre-service teachers to teach transformation of sentences namely, simple, complex and compound. Example: complex sentence in graphic organizer



Source:https://www.oise.utoronto.ca/userfiles/file/Graphic_organizers.doc

Sample

The sample consisted of 100 pre-service teachers of II year in DIET, Madurai

Tool

The Investigators developed pre-test and post-test questionnaire and also a survey questionnaire was administered to pre service teachers to evaluate their perceptions of the use of graphic organisers in learning grammar prepared by Dr.Manar Dahbi. The survey questionnaire consisted of six checklist items. The results were analysed both quantitatively and qualitatively.

Statistical techniques used

The collected data were analysed through Mean score and 't' test in this study.

Procedure

The sample group took a Pre-test to show that mastery of rules for the transformation of sentences that they had studied during the schooling .Graphic organisers like Venn diagram, comparison matrix, flow chart and pictures were used to teach the basic rules for the transformation of sentences. Venn diagram and comparison matrix were used to teach the similarities and differences of simple, complex and compound. This involved three elements: instruction by the investigators, practise by the Pre-service teachers and their feedback. Graphic organisers were implemented at several phases of instruction: pre organisers before the learning task, post organisers after encountering the learning materials. Finally a Post-test was conducted to evaluate the progress in understanding the basic grammatical rules in the transformation of sentences.

5. Findings

pre-test, Post –test questionnaire and perception checklist by Dr.Manar Dahbi were used to collect the data and it was analysed by using SPSS.

Table 1

Significance of Achievement test

Tests	No.of pre-service teacher	Mean	SD	't' value
Pre-test	100	52.3	9.04	8.52
Post-test	100	69	9.52	

*Significant at 0.01 level

The obtained mean value of post test is greater than that of pre-test.It shows that advanced graphic organizers has more influence in teaching grammar. 't' value shows (8.52>1.96) the difference between pre treatment and after treatment. It can be deduced then, that there is positive correlation between the use of advanced graphic organisers of constructivist strategies and pre-service teachers' achievement. The data from the questionnaire also confirm this correlation as the next table.

Table 2

Perception of pre-service teachers about advanced graphic organizer of Constructivist strategies in Learning English grammar

Items	No.of pre-service teacher	%
1.I understand something better in a.written notes b.visual representation	6 94	6 94
2.When I think about what I studied yesterday, 3.I am most likely to get a. a picture b. words	86 14	86 14
4. For me graphic organisers make grammar information Easier to understand Difficult to understand	87 13	87 13
5. I find it easier to recall grammar information From the teacher's notes From my own notes on a graphic organiser	85 15	85 15
6. I prefer a.graphic organisers because they creates some variation in learning process b.I prefer written notes all the time	94 6	94 6
7. I appreciate being able to represent grammar rules in my own way a.Yes b.No	94 6	94 6

6. Discussion of results

Advanced Graphic organisers of constructivist strategy served as valuable instructional instruments that improved the understanding of the basic concepts transformation of sentences. They facilitated, meaningful learning and better understanding they promoted critical thinking by finding new connect information. They made the class more interesting because the investigators had the flexibility to flow from one topic to another. Use of keywords provided freedom to discuss the topics in a structured format without a rehearsed instruction. Pre-service teachers were well motivated and so they assimilated the information and completed the complex task of transforming simple, complex and compound sentences. Advanced Graphic organisers provided excitement and enthusiasm towards learning. They prove to be one of the beneficial instructional strategies to support the learners to retain learned information and to learn more effectively. A comparative analysis of the Pre-test and Post-test scores and the correlatives study of the items in the survey questioners showed the effectiveness of advanced graphic organisers in teaching the transformation of sentences. It is evident that advanced graphic organisers do assist student's grammar rules. It is important to consider this topic of interest because it is one that pre-service teacher will need to remember in future. Knowing proper grammatical rules will help them with speech and writing and develop

self-confidence, to use English whenever and wherever it is needed.

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