



Advance Organizer Model: Reviews of Past Studies

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Abstract:

Advance organizer model is given by David Ausubel to strengthen student's cognitive structure. This model helps in overall development of children and provides better way of retaining knowledge. Many educational researchers conducted the studies to check effectiveness of advance organizer model in teaching learning process. The present article reviews some of these studies. Reviews of past studies suggest that to find effectiveness of advance organizer model experimental design were widely used, randomly selected sample of 30-40 students in each group were very useful and data analyzed using inferential statistics. All studies found that Advance organizer model of learning is better than conventional method. This model is very useful for teaching subjects like science, social science, and mathematics and English. Advance organizer model helps in developing interest in inquiry and habit of precise thinking.

Key Words: Advance Organizer, Reception Activities, Effectiveness, Verbal Learning, Category

INTRODUCTION:-

An advance organizer is a cognitive instructional strategy used to promote the learning and retention of new information. Advance organizer model is given by David Ausubel who is one of the educational theorists. This theory of meaningful verbal learning deals with three concerns,

1. How knowledge is organized.
2. How the mind works to process new information and
3. How teacher can apply three ideas about curriculum and learning when they present new material to the students.

This model is designed to strengthen student's cognitive structure. This model consists of three phases, presentation of an advance organizer, presentation of learning task or material, and strengthening the cognitive organization. In this model teacher plays the role of organizer of subject matter and present information through lectures, reading and providing task to the learners, to integrate what has been learned. In this model teacher is responsible for organizing and presenting what is to be learned. The learner's role is to master ideas and information. The Advance organizers provide concepts and principles to the students directly. Well organized material is the critical support requirement of this model. The effectiveness of the Advance Organizer depends on an integral and appropriate relationship between the conceptual organizer and the content. This model provides guidelines for building instructional materials. The model helps in overall development of children and provides better way of retaining knowledge.

In recent years, many of educational researcher conducted study to check the effect of Advance organizer model in teaching – learning process. The results of the studies show Advance organizer strategies are much useful for student to acquire new knowledge. Here are some summary of past researches.

Reviews:-

Dr. Umesh Chandra Kapri (2017) studied the effectiveness of Advance organizer model over conventional methods of teaching of science at secondary level. The study was experiential in nature. The sample consists of 76 students studying in IX Class in secondary school located at Faridabad. Group-1 consisted of 36 students taken as experimental group which was taught through Advance organizer model and Group-2 consisted of 40 students named as control group was taught through conventional method. For the purpose of data collection the researcher constructed two achievement tests (Pre and Post) from the selected four topics of science. The collected data were analyzed and interpreted by using descriptive and inferential by using descriptive and inferential statistics. The result shows that the teaching of science by the Advance organizer model is better than by the conventional method of teaching.

Arti Sharma, Digvijay Pachauri (2016) consisted study to comparison of Advance organizer model and concept attainment model for teaching concepts of science to standard IX. The study was experimental in nature. The sample consisted of 60 students which were divided in two groups, 30 students in each group. Group-1 was taught through Advance Organizer and Group-2 was taught through concept attainment model. The tool used for study was

higher mental ability in science which was developed by Joshi and Sansanwal (1986). It measures the power of analysis, synthesis, application and evaluation in science. For analyzing the data mean, standard deviation, Percentile, ANCOVA, ANOVA statistical techniques were computed. Result of the study shows advance organizer model and concept attainment Model both found equally effective for teaching concepts in chemistry at IXth standard.

Mihirkumar Mallick and Amandeep (2014) conducted the study to see the effect of Advance organizer model of teaching on Academic Achievement of secondary school students in social science. The study was experimental type in nature. The sample of the study includes 60 students of class IX. Purposive sampling techniques were used to collect data. Intelligence test used for selection of experimental and control group. The students were divided into two groups. (30 students in each group) on the basis of intelligence test score. The experimental group was taught through Advance organizer model and the control group was taught by using traditional method. After completion of teaching a self-developed achievement test was administered for drawing out the result, t-test was used for data analysis. Result showed that students exposed to Advance organizer model possessed higher score than the students taught through traditional method in social science.

S. K. Nazimuddin (2014) conducted study to check effect of Advance organizer model on pupil's Academic Achievement in Geography-A study at secondary level. The study was experimental. The sample consisted of 70 students of IXth standard of Govt. Aided schools. With the help of standardized intelligence test, two equivalent groups were prepared. Each group has 35 students. From these groups one group was selected as an experimental group taught by AOM and other was selected as control group taught by conventional method. After teaching the selected topics self-developed achievement test of geography was administered for data collection. Data analyzed with the help of descriptive and inferential statistical techniques like mean, standard deviation and t-test; the result of the study showed that Advance organizer model was found to be more effective than the conventional teaching method. The students taught through Advance organizer model

showed superior achievement in the subject of geography.

P. B. Beulahbel Bency and K. Nagarajan (2010) designed a study with the aim to find how Advance organizer model affects the learning outcomes in comparison to Inquiry training model? The study was experimental. To compare the effect of AOM and ITM on the learning outcomes of prospective teachers in physical science education, a group of 30 prospective teachers were selected as experimental group-1 (N=30) and experimental group-2 (N=30) and given different treatments. The experimental group-1 was treated with AOM and the experimental group-2 was treated with ITM. For data collection the investigator constructed and validated two achievement tests in physical science education namely, Achievement test in physical science education taught by AOM and achievement test in physical science Education taught by ITM consisting of 36 and 56 objective type questions. The collected data were analyzed by using SPSS package. Finding of the study reveals that learning outcomes and retention of the experimental group-1 taught by AOM was significantly higher than that of the experimental group-2 taught by ITM.

Samuel W. Wachanga, Antony Mugiira Arimba, Zachariah K. Mbugua (2013) investigated on the effect of Advance organizer teaching approach on secondary school student's achievement in chemistry in Maara district, Kenya. Quasi experimental research was employed since intact chemistry classes were involved. Solomon's four non-equivalent control group designs were used. The purposive sampling method was used for study. The number of students in experimental group-1 (E1) was 49, Control group 1 (C1) were 41 while Experimental group-2 (E2) and control group (C2) were 36 and 35 respectively. The total number of students was 161. Chemistry Achievement test (CAT) was used for data collection. The CAT was administered to group E1 and C1 before teaching started. The experimental groups were taught using the advance organizer teaching Approach (AOTA) while control groups were taught using the Regular method to determine its reliability, while its validity was ascertained by experts. At the end of eight weeks of teaching the CAT posttest was used for data analysis. Descriptive statistics like mean, percentile and standard deviation and inferential statistics like ANOVA, ANCOVA and t-test were used for

data analysis. The study found out that there were significant effects of the use of Advance organizer in chemistry learning, students who were taught using AOTA achieved better in chemistry learning than those who were taught through RTM. The findings of this study also indicate that gender has no significant effect on CAT scores in chemistry learning when AOTA is used.

Atomatofa, Rachel (2013) conducted study with Aim of to study the effect of advanced organizers on attainment and retention of student's concept of gravity in Nigeria. The pretest, posttest control group quasi experimental design (Best, 1981) was adopted for this study. 80 journey secondary one students from two secondary schools in Delta state Niegeria were used as sample of study. The students were divided in two groups, experimental group and control group. The advanced organizers were given before each of lesson to those in the experimental group while those in the control group had no-organizers. Test of concept of gravity (TCG) used for pretest and scrambled for post and delayed retention test respectively to collect the data Descriptive statistics like t-test were done to find out differences in the pretest, posttest and retention test mean of subjects in all the groups. The present study found out the students' those given advanced organizers did better than those who not given organizers in both attainment and delayed retention of concepts.

Hudson Shihusa and Fred N. Kuraro (2009) investigated the effect of using advance organizers on student's motivation to learn biology. The research design used was quasi-experimental design where the non-randomized Solomon four groups were adopted. The sample comprised of 166 from three (third grade in secondary school cycle) students in Bureti district, Kenya. Data was collected by using students motivation questionnaire. A t-test, one way ANOVA and ANCOVA statistical techniques were used to analyze the data. The findings indicate that the students using advance organizer had a higher level of motivation then those taught using conventional teaching method. The findings further indicate that following the intervention, male students had a significantly higher level of motivation than their female counterparts.

Awodun, Adebisi Omotade (2016) investigated the effect of advance organizer teaching approach on students' academic performance in physics in senior

secondary school in Ekiti state, Nigeria. The study was a pre-test, post-test, control group quasi experimental design. Purposive and stratified random sampling techniques were used to select a sample of 50 students. This sample was divided into experimental and control groups in ratio 1:1, i.e. 25 in each group. The instrument for this study was physics achievement test (PAT) and the treatment package used for the study was tagged; Advance organizer instructional package (AOIP). The data collected were analyzed using t-test and ANCOVA statistical analysis package. The results of analyses showed that no significant difference existed between the performance of students in experimental and control groups involved in the study of pre-test. However, student's achievement in the experimental group at posttest level was found to be significantly better than that of the control group. This showed that the Advance organizer teaching approach significantly influenced students' academic performance in physics in senior secondary school.

Conclusion:-

- All above study shows that advance organizer model of learning is better than conventional method.
- Comparative study of Advance organizer model with other teaching learning model also is possible to check effectiveness of advance organizer model.
- Advance organizer model is very useful model for teaching subjects like science, social science, mathematics and English.
- All above researches shows that experimental research design is very useful to check out effectiveness of advance organizer model.
- Data collected by achievement tests and Analyzed by using SPSS package or inferential statistics like ANOVA, ANCOVA and t-test.
- Randomly selected sample of 30 to 40 students in each group are very useful for the study. Researcher can increase the sample as per his requirement.

Educational Implications:-

The advance organizer model is useful to structure extended curriculum sequences or courses and to instruct students systematically in the key idea of a field. Step by step, major concepts and propositions are explained and integrated, so that at the end of a period of instruction

the learners should gain perspective on the entire area being studied.

The model can be also being shaped to teach the skill of effective reception learning. Critical thinking and cognitive reorganization can be explained to the learners, who receive direct instruction in orderly thinking and in the notion of knowledge hierarchies; ultimately, they can apply this techniques independently to new learning. In other words, this model can increase effectiveness in reading and watching film, and in other “reception” activities.

Other models are also useful for evaluating or applying the material presented by the advance organizer. For example, the advance organizer model, after introducing new material in a deductive, presentational way, can be followed by inductive concept attainment activities that reinforce the material or that informally evaluate student’s acquisition of the material.

Advance organizer are used to provide a structure for students thinking, acting as conceptual bridge between information they already know and what they are about to learn. Advance organizer model strengthen cognitive structure and enhances retention of new information through meaningful assimilation of information. This model helps in developing interest in inquiry and habit of precise thinking.

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