

**Abstract:-**

Instructional Strategies were developed on three topics of English Grammar which were very difficult for the students to memorise as per to their version. Teaching through Instructional Strategies was classified into two groups - Modular and Multimedia. Both the techniques were prepared on separate format by compiling information, images, diagrams related to the topics taken from the text book published by the N.C.E.R.T. for class IX on the subject of English Grammar as well as from the web using the internet. The concept and content

DEVELOPMENT OF MODULAR AND MULTIMEDIA INSTRUCTIONAL STRATEGIES IN TEACHING OF ENGLISH FOR THE STUDENTS OF SECONDARY STAGE



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of Instructional Strategies was the same for both Instructional Strategies. The reliability of Instructional Strategies was calculated by Pearson's ' r' which came out to be 0.76.

Keywords:

Modular Instructional Strategy & Multimedia Instructional Strategy.

INTRODUCTION

Instructional materials may be developed for facilitating teaching learning process. The need of Modular and Multimedia Instructional Strategies is based on the following points:

1. Individual differences exist in a large group of students.
2. Number of students in the low achievement group is large. This may be due to difficulty faced by these students in learning information by traditional method.
3. Students learn at different rates of learning, hence need of Instructional Strategies occurs.

SELECTION OF THE TOPICS FOR INSTRUCTIONAL STRATEGIES

The Topics selected for the Instructional Strategies pertained to the level of difficulty experienced by the students. Three topics of English Grammar which were very difficult for the students, according to their version, were taken up the development of Modular and Multimedia Instructional Strategies. The Topics are detailed below:-

- 1. Modals 2. Active & Passive Voice 3. Punctuation**

IDENTIFYING PRE-REQUISITES AND SPECIFYING OBJECTIVES

According to Abedor (1978) "An objective is precise statement of learning outcome' A behavioral objective describes what the learner will be able to do at the end of the instruction".

In Instructional Strategies the objectives have three purposes:

1. To inform the learner what they are supposed to learn.
 2. To help the designer in identifying the most important aspects of the substantive subject matter content.
 3. To help in developing test to assess whether the learners have learnt what they were supposed to learn.
- In writing the Instructional objectives for the Modular and Multimedia Instructional Strategies the approach of Gronlund (1970) for writing objectives is followed given under Table -1

**Table - 1
Topic –Wise Distribution of Instructional Objectives**

Sr. No	Topics	Instructional Objectives
1.	Modals	1.1) Define Modals. 1.2) Distinguish between Modals and Auxiliary Verbs. 1.3) Describe the various kinds of Modals. 1.4) Use the Modals correctly.
2.	Active and Passive Voice	1.1) Describe the concept of Active and Passive Voice. 1.2) Use appropriate verbs in Passive Voice. 1.3) Recognise the Active and Passive Voice Sentences. 1.4) Change the sentences into Passive voice.
3.	Punctuation	1.1) Define the Concept of Punctuation 1.2) Discriminate between the Signs of Punctuation. 1.3) Make correct use of Punctuation signs. 1.4) Mark the correct Punctuation Signs while writing the sentences.

Testing the Entry Behaviour of the Learners

Students were tested to find out their entry behaviour before they were taught the content matter through the Modular and Multimedia Instructional Strategies. The Testing of entry behaviour was done to have a peep into the level of the learners in the following areas:

- Knowledge of content prior to instructions.
- Level of intelligence of the learners.
- Level of motivation of the learners.

Selecting and Sequencing the Content

In design and development of the Instructional Strategies two types of analysis were carried out.

i)Task classification:- This was done by classifying the content of English Grammar in the following manner:

- a.) Modals: Definition and Functions of Modals and Use of Modals
- b.) Active & Passive Voice: Rules to change from Active Voice to Passive Voice
- c.) Punctuation: Common Punctuation Marks and Use of Punctuation Marks

ii)Task analysis: - This was ensured in the context of the requirements of the learning sequences to be provided to the learners to attain the objectives of teaching.

DEVELOPMENT OF MODULAR INSTRUCTIONAL STRATEGY

Modular Instructional Strategy (I1) on English Grammar for class IX was prepared by the investigator, strictly adhering to the syllabus, prescribed by C.B.S.E., New Delhi followed in schools of Chandigarh (U.T.). It is a combination of activity oriented Self Learning Modules and Practice Task with Feedback. The following steps were followed in the development of modular lesson plans for secondary school students.

i.) Instructions to Use the Modules

Instructions for the learners to use the module were given at the first page of the booklet. The instructions were the guidelines for making use of the modules. These were concerned with how to begin with module, how to read the module, when to stop while reading, when to go to next input, when to look at the feedback pages and when to go to the next module.

ii.) Details of entry behaviour for learning

The introductory part of each module gives the essential pre-requisites for learning.

iii.) Sequencing instructional events

The modular lessons were arranged in the logical order based on interrelationship between different concepts and facts. In each module the concept was sequenced as follows.

- i.) A brief introduction of each concept matched with a picture or a figure.
- ii.) Observation of facts in the form of questions.
- iii.) Results in the form of answers.
- iv.) Key points of the lesson.
- v.) Formative evaluation questions.
- vi.) Answers to the evaluation questions.

iv.) Assessment

Provisions were made for formative assessment at the end of each module and summative assessment in the shape of Post Test at the completion of the whole study material.

v.) Conceptual analysis

The self-study material was composed into five modules for learners to do themselves. The learning activities included in the modules were formulated on the basis of specific outcomes of objectives stated at the beginning of the booklet.

vi.) Feed back

In each module, whenever questions were asked, correct responses were provided in the same section in the form of either descriptions or one word answers at the appropriate places. Towards the end of a module, formative evaluation questions were given with the directions to the students to correct their errors and attain mastery of the content.

Vii.) Self-pacing

The prepared study materials were designed as self-study materials for the students. So they could learn at their own pace. After Teaching in the classroom, Pupils could take the booklet home and study at their own will at any time. So, even though the fast learners could complete the course where in a shorter span of time, the slow learners were not left mid-way in the learning process.

DEVELOPMENT OF MULTIMEDIA INSTRUCTIONAL STRATEGY

Multimedia Lesson Plan were developed with the help of appropriate software's and I.T. Experts. Multimedia Instructional Strategies were prepared with the help of modern Computer technology by using Flash, Corel Draw, Page Maker, Photoshop and Microsoft Power Point with compiling information, images, diagrams related to the topics taken from the text books for class IX on the subject of English grammar as well as from the web using the internet. The following steps were used to develop the Multimedia Lesson Plan:

i.) Development of the program concept with reference to scope:

The scope of the multimedia was limited to IX class students. It not only catered to the learning of English Grammar lessons by the students, but also facilitated them to Listen, Speak, Read and Write correct English. Apart from this, it also increased their vocabulary.

ii.) Development of outline of the multimedia:

Multimedia programs have linked associations in different media and these associations are not necessarily linear. The simplest way to define branching for a program is to develop an outline of it. The major headings in the outline become options available to the user in main menu of the program.

iii.) Development of the program storyboard:

The storyboard represents the proposed multimedia project graphically. The storyboard extends ideas presented in the program script with a series of templates upon which the multimedia applications are used. These templates may be of following types-

- Logic flow and branching sequence
- Storyboard template
- Animation sequence template
- Button description template
- Audio description template

iv.) Plan of multimedia user's inter phase:

The user's inter phase is how the user interacts with the program content. It includes navigation buttons, text fields, graphics, animations, audio resources, self assessment questions, feedback/reinforcement and other means of support (forward backward arrows, volume control etc.) to the users to achieve the goals. While planning user's inter phase psychological principles of learning were given due importance.

v.) Preparation of scripts for narrations, text and videos:

Developing specifics and detailed scripts (descriptions) for text, audio (narrations, music or sound effects) and video is the next step of developing a program. The following guidelines were considered of utmost importance, to avoid problems:-

- The cognitive load low was kept with simple, consistent screen design and sparing use of text, sound, motion and colour.
- The learner's attention was ensured by using various media elements such as text, graphics and sound.
- Colour, arrows, shading and sound spangle were used to direct learner's attention to important part of the program.
- Dual encoding by using concrete words and different media (for example text, graphics and sound) was used to reinforce the information /content.
- Video or simulations were made as real as possible.

Validation of Modular and Multimedia Instructional Strategies

The first draft of modular and multimedia instructional strategies was subjected to three types of evaluation - Self Evaluation, Expert Appraisal and Opinion of Students. To check whether these Instructional Strategies were developed according to the mental level of the secondary stage students and were effective in the acquisition of grammatical concepts, 25 students studying in different schools were randomly selected to go through the material and give their feedback.

Reliability of Modular and Multimedia Instructional Strategies

To check the reliability of the tool a try out was given to 50 students of class 9th. The Tools of modular and multimedia instructional strategies were re administered on the same sample after the time gap of 15 days. The correlation was computed between the two sets of scores on the criterion test given at end of each of the four units of the tool. The calculated value of Pearson's 'r' was 0.76 which was good enough to ensure the reliability of the tool.

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