Programmed Instruction has gained wide recognition as an attempt to systematise education. In fact it has aroused a renewed interest in educational and instructional reform because of increasing school population, rising costs, paucity of resources and good teachers, and the increasing pressures of new knowledge on the already overloaded curriculum.

The entire movement exemplified through this technology may also be considered as one of the most significant and exciting innovations since it seeks to apply the knowledge of learning process seriously and systematically to the development of instructional devices and procedures which induce learner to learn easily and enthusiastically.

Good many innovations are promoted to-day on grounds that they make better provision for increased efficiency in learning. Likewise, Programmed Instruction has stimulated considerable research which has led to rather rapid changes in its techniques. It seems, however, that a good deal of research especially devoted to an experimental analysis of the parameters
which influence the effectiveness of the programme needs to be conducted. Although there is agreement on basic principles that apply to the construction of a programme, many issues concerning variables connected with it still remain unresolved. There has been controversy regarding the relative efficacy of small step and large step programmes but no attempt seems to have been made to study the efficiency of a particular step-size in relation to levels of learning conceptualised in terms of taxonomic categories.

The present study intends to explore in systematic way the effect of the variables of step-size in relation to the three levels of taxonomic categories. A third factor - sex - has also been introduced and the study takes the form of a $2 \times 2 \times 3$ mixed factorial design.

In the present report, Chapter one outlines the theoretical framework which is crucial for an experimental study. It also contains description about the problem under study, its objectives, hypotheses, rationale and delimitations.
Chapter two provides a detailed discussion about the two major forms of the programme. It also describes the procedure followed in the preparation of the criterion tests, and in the administration of the programme for individual and group testing.

Chapter three describes the details of the steps adopted for the construction and evaluation of the achievement test used as pre and post test measure for the experiment.

Chapter four discusses the methodology and procedure of factorial experiment. It also gives an account of the nature of the sample, dimensions of the design, and the statistical techniques employed for the analysis and interpretation of results.

Chapter five presents a detailed analysis and interpretation of the experimental findings. The hypotheses examined in this study have been specially discussed in terms of the obtained results.

Chapter six embodies the main conclusions, generalisations and limitations of the study. Possibilities for further research are also indicated at the end of this chapter.
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