DESIGNING AND ASSESSMENT OF EFFICACY OF INSTRUCTIONAL MULTIMEDIA PACKAGE ON SKILL BASED TEACHING FOR PROSPECTIVE TEACHERS

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INTRODUCTION

Teaching is one of the noblest professions that we can think of. From time immemorial, students have completed studies in order to be able to educate other children like them. The education industry in India has grown like never before and therefore the demand for teachers is also on the rise today. Hence there has also been a rise in the number of teacher's training colleges in India. The teacher's training colleges provide the candidates practical training on how to manage a child while teaching him/her. Teacher performance is the most crucial input in the field of education but unfortunately, the process of updating the curricula of teacher education has been very slow. Most of teacher educator is irrelevant even to contemporary requirement. the teacher' training too is not planned and organized to develop the spirit of inquiry, initiative, scientific temper, manual dexterity, conceptual clarity, linguistic and teaching skills like; introduction, explanation, illustration skill etc.

The goal of education cannot be achieved unless teachers have the necessary skills and competencies .the skills and competencies can be developed through systematic approach. Now in the era of science and technology several innovations have been developed to equip teachers with the requisite competencies and skills to teach effectively. Interaction analysis based on practice teaching training in teaching skills using microteaching approach. Microteaching which is one of the recent innovations in teacher education may be an answer of our problem.

Microteaching is a training procedure aimed at simplifying the complexities teaching procedure. The trainee is engaged in a scaled down teaching situation. Allen (1968) described microteaching as a scaled down teaching encounter in class size and time. Passi (1976) stated that it is a training technique which requires pupil teachers to teach a single concept using specified teaching skills to a small number of pupils in a short duration of time.

At present, for a prospective teachers need to be exposed to sufficient knowledge and practice. Microteaching is one of the best ways to put a person's knowledge and theories he or she has learnt in class into practice. Jerich (1986) contends that microteaching is one of the many

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important approaches to introduce and to improve teaching skills through participation and observation. It is important for teacher trainees to learn these microteaching skills effectively to prepare them for their practical teaching and later on when they become a teacher.

In order to develop these micro teaching skills effectively in the future developing teachers, multimedia can play a very crucial role which can speed up the diffusion of information through active involvement and participation of learners in the learning process. It can be done with the help of computer based user friendly interactive multimedia technology *which demonstrates complex technologies in simpler terms with the use of text, graphics, animation, audio and video involving the use of more of our senses and encompassing labeled instructions helping the user to learn the contents, structure and information using the mouse without depending on the help of a facilitator to learn its contents.* It is a motivational cum inspirational tool playing a significant role in sweeping changes in capacity development of teachers in the era of globalization.

The complex methods of teaching make teacher trainees confused and they feel shy in asking freely. In such conditions the development of instructional material with more use of visuals and self explanatory feature, can be a great source of effective learning and getting across a new and complex idea in an easier way. The result of the researches shows "people learn better from words and pictures than words alone and messages are clear and easily interpreted by the learner" (Mayer, 2001). This scenario warranted the use of "multimedia" to build a knowledge enriched teacher's society.

OBJECTIVE

1) To design multimedia instructional package on skill based teaching for prospective teachers skills are as follows; introduction Skill, Explanation Skill, Illustration skill, Blackboard Skill, Questioning Skill, Reinforcement Skill.
2) To assess the efficacy of instructional multimedia package for prospective teachers.
3) To study the perception of teachers and students about the use of instructional multimedia package on teaching skills.

TECHNICAL TERMS:

1) Designing–Designing is the arrangement of elements or details in a products or work of art.
2) Assessment-Assessment is an ongoing process. Aimed at understanding and improving students learning. It involves making our expectations explicit and public; setting appropriate criteria and high standards for learning quality; systematically gathering, analyzing and interpreting evidence to determine how well performance matches those expectations and standards; and using the resulting information to document, explain and improve performance.

3) Efficacy-Efficacy is the quality of being successful in producing an intended result or effectiveness.

4) Multimedia- which demonstrate complex technologies in simpler terms with the use of text, graphics, animation, audio, video involving the use of our senses and encompassing labeled instructions helping the user to learn the contents, structure and information using the mouse without depending on the help of a facilitator to learn its contents.

REVIEW OF LITERATURE

The training of prospective teachers demands our urgent attention. The   minimum requirement of any training programmes is that it should be enable the prospective teachers to acquire the basic teaching skills and competencies of a good teacher, such as the capacity to manage a class with pupils of varying abilities; to communicate ideas logically and with clarity; to use the technology available to make teaching effective; to organize education experiences outside of class. But the training programme does not provide for developing respectively to induction of modern educational aids nor does it impart skills to operate even audiovisual equipments, so it is necessary for prospective teachers that they should be updated and having knowledge of basic teaching skills such as Introduction Skill, Explanation Skill, Questioning Skill etc. Many researchers have been done in the field of microteaching skills. In this research we try to develop an instructional material on skill based teaching for prospective teachers.

 A comprehensive review of literature is based on following points of objectives as follows:-
   1) Designing instructional multimedia package on skill based teaching for teachers.
   2) Assessment of the efficacy of instructional multimedia package for prospective teachers.
   3) Perception of teachers and students about the use of instructional multimedia package on skill based teaching for prospective teachers.

Designing instructional multimedia package on skill based teaching for prospective teachers:-

Nimavathi, N. (2009), Developing study habits through multimedia program. "The study shows that the students learning with the help of multimedia fared better in their study habits than the students learning through conventional method.

Bhutak (2004), in his study entitled "Development and Effectiveness of Multimedia Package for Science Subject of Standard 9"found that Multimedia package was more effective in terms of achievement and retention of science for both the groups of girls and the boys separately and jointly.

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Hirani (2007), conducted a study on "Development and Try-out of Computer Based Multimedia Package for Instruction in Gujarati Language" and found that the students of Computer Aided Multimedia Package group scored significantly higher on posttest than the students of traditional method group. Students opined favorably for learning through Computer Aided Multimedia Package.

Pandya M.J. (1991), conducted a study of the relative effectiveness of micro teaching and the traditional technique of teacher training in the development of general Teaching ability of the student-teachers of secondary teachers' training colleges.

Khatri, Gandhi K.A. (1992), conducted a study micro teaching approach for student-teachers. The objectives of the study were to study whether the development of teaching skills through the micro teaching strategy helped in shaping behavior modification of students and to compare the outcomes with those acquired by the traditional approach. The study indicated that the student teachers trained though the micro teaching approach was more direct in their classroom verbal behavior than the student-teacher trained through the traditional approach.

Nandita Deb (2011), conducted a study on "An experimental study to find out the effectiveness of some microteaching skills in teaching geography at the secondary level. This study definitely indicates the great potential of microteaching in assisting geography teacher-trainees with the implementation of learner-centered instruction in classrooms.

Syed Manzoor Hussain Shah (2011), Impact of Microteaching Skills on the performance of primary school teachers. The present study was designed to see the impact of micro teaching skills learned through different in service training programs on the performance of the elementary school teachers. The sample of the study consisted 210 elementary teachers (105 with in-service training and 105 without in-service training). The performance of the teachers was observed by the researcher and research assistants through observation scheduled. The observation scheduled comprised eight teaching skills. The study concluded that in-service trained teachers utilized microteaching skills hence their performance was comparatively better. The study recommended continuing in-service training programs on teaching methodologies and strategies for elementary school teachers by establishing independent cell at district level.

Assessment of efficacy and Perception of teachers and students about the use of instructional multimedia package on skill based teaching for prospective teachers:-

Mehra, Vandana (2007), Teacher's Attitude towards Computer use Implications for emerging Technology Implementation in Educational Institutions. The purpose of this study was to determine the attitudes of school teachers of Chandigarh towards use of computer technology for instructional purpose. The findings revealed the teachers possessed fairly positive attitude towards

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computer uses but majority of the teachers needs to be provided training for using computers in instructional settings.

Kumar and Devika (2008), Conducted a study entitled "Effectiveness of multimedia learning package in teaching social science at secondary level" to find out advantage of multimedia learning package over the conventional method in teaching social science at secondary level. Study revealed that the use of multimedia learning package in social science is helpful in improving the achievement of the students of sex, locale and educational level of the family.

Frederick Kwabu Sarfo (2010), "The perception of students, teacher and educational officers in GHANA on the role of computer and the teacher in promoting the first five principles of instruction." The results of the study indicate that there are perception dissimilarities among the participants on the role of a computer and a teacher in implementing the first five principles of instruction. In addition, according to the findings, there is a mismatch of participants' recommendations on training students to acquire computer skills, and training teachers to acquire skills in designing their teaching.

Anboucarassy B. (2010), Conducted a study on "Effectiveness of multimedia in teaching biological science to IX standard students" with the objective of developing a multimedia package to teach biology for IX standard students & studied the effectiveness of multimedia over the conventional method in teaching biology to IX standard students. The study has proved that multimedia is more effective than the traditional method in teaching science subject to IX standard students.

Girija N. Srinivasahu (2011), in the study entitled "Effectiveness of computer multimedia package on achievement in Geography" developed a multimedia package on selected unit of IX standard Geography content and studied the effectiveness to find out relative effectiveness of package on the achievements of students of experimental and control groups and found improvement in achievements of Geography students of experimental groups.

Charles Buabeng-Andoh (2012), conducted a study on Exploration of Teachers' Skills, Perceptions and Practices of ICT in Teaching and Learning in the Ghanaian Second-Cycle Schools. The study revealed inverse correlations among ICT use, age, and teaching experience.

SAMPLE

The college sample was drawn from the representative education colleges.60 prospective teachers are selected randomly from 3 teacher's training colleges.20 from each college.pre and post test will be conducted on both control and experiment group.

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