

EFFECT OF MICRO-TEACHING SKILLS AND MULTIMEDIA ON TEACHING COMPETENCE OF PROSPECTIVE TEACHERS

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Abstract:The study investigated the effect of Micro-Teaching and use of Multimedia on teaching competence of prospective teachers. Experimental method of research used and total 120prospective teachers were selected randomly from three B.Ed. Colleges of Educationof Kaithal district. The study revealed that (1) there is significant effect of micro-teaching skills on teaching competence of prospective teachers, (2) there is significant effect of multimedia on the teaching competence of prospective teachersthe use of multimedia can improve their teaching competence level, and (3) there is no significant relationship between conventional method and teaching competence. The study has significant implications for Pre-service and In-service Teachers,headmasters, parents, curriculum framer, administrators, policy makers, parents, community member’s voluntary agencies and all other bodies concerned with educational programme and in providing an advanced knowledge and understanding of micro-teaching and use of multimedia on teaching competence of prospective teachers and the effect on cognitive learning.

Keywords: Effect, Micro-Teaching, Multimedia, Teaching Competence, Prospective Teachers, Traditional Method

PREAMBLE:

Teacher education is the foundation stone of nation’s intellectual power which shapes the power profile of the nation in the community of the world nations, thus, it is rightly said that progress of a country particularly of a democratic country depends upon the quality to its teachers and for this reason teaching is the noblest profession among all the profession.

It is stated by Rastogi and Chanchal in 2010 that pre-service education of prospective teachers provides a wide variety ofexperiences which can be designed to develop teaching competency among them. The teachers can play a pivotal role in the process of implementation of the policies, to achieve the predetermined desired goals for the qualitative improvement of education. In 2004 Rayans pointed out that in the educational scenario the teachers can act as a ‘pivot’ on which the entire process of education has been rest on. Teachers have been called the national builders of the society in every time period, space and in every society.

Teachers themselves really are the key persons in developing good community sensations, feelings, patterns, sentiments, feeling of brotherhood, nationality, sanskritization, value patterns etc. It was emphasized in 2010 by the Sabu that in the present era the drastic changes are required to meet the predetermined goals of education to increase the competency among the teachers. It was the opinioned of Thomson (2010) that the teacher should foster and encourage such a classroom environment that is inviting respectful, supportive, inclusive and flexible among students. Singh (2009) stated that the teachers are considered the most important resource for a school. It was remarked by the various research studies that the competent teachers possess higher mean scores on knowledge, creative and humanistic values than their incompetent counterparts.

The Education Commission (1964-66) observed that of all the different factors which influence its quality of education and its contribution to national development, the quality, competence and character of teacher are undoubtedly the most significant.

It was also emphasized that the strength and success of any educational institution depends primarily on the professional competence, self-less devotion of teachers and the extent to which they know and love their subjects and pupils.

1. CONCEPTUAL FRAMEWORK:

1.1 Micro-Teaching:

Micro teaching has been described as an important innovation in teacher education. Micro teaching is a training procedure which aimed at simplifying the complexities of teaching procedure in which the trainee is engaged in a scaled down teaching situation. Allen in 1968 described micro teaching 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.

The micro teaching being a controlled practice of teaching which can be a very good tool for providing training to pupil-teachers in the form of micro-teaching skills 'component' of teaching. It is discovered a positive gain in teaching efficiency as a result of pre-practice in micro teaching programme.

In nutshell, we can say that micro teaching is a scaled down teaching encounter in terms of (i) time, as it lasts for five to ten minutes, (ii) class-size, as a trainee teacher a group of five to ten pupils, and (iii) task, since the trainee practices only one specific teaching skill. The value of micro-teaching

experiences promoted the use of background in information provision of concrete materials utilizing children's observations, allowing developing conclusions, helping children to verify conclusions. It was pointed out that micro teaching was a better technique than conventional approach in the development of certain skills in the pupil-teachers or pre-service teachers. It was accepted that the teaching strategies were significantly effective in gaining understanding of microteaching and in developing a positive attitudes towards teaching.

TEACHING COMPETENCE:

1. "To the child, the teacher is the key to knowledge, understanding and wisdom"
2. "To the community, the teacher represents the voice of wide understanding needed in the solution of problems in and out of the classroom"
3. "To the nation, the teacher is necessary for he instills the basic knowledge about the rights and the responsibilities of the Government, so the free citizens can govern themselves"
4. "A nation's economic strength too stems from the teacher who conveys not only the skills that advance the nation but also enables the citizens to think"

Competency has become the key word in the current educational scenario in India. If competent teachers can be obtained, the likelihood of attaining desirable educational outcomes is substantial. What constitutes teaching competency? And what are the distinguishing characteristics of a competent teacher? It is said that teaching is competent to the extent that the teacher acts in ways that are favourable to the development of basic skills, understanding work habits, desirable attitudes, value judgements and adequate personal adjustment of the pupil" (Ryans, 1960: 2).

"Competency is the proven ability to produce results. It is the result of intelligent effort. That knowledge, skills and behaviors required of a teacher to bring about desirable behavioural changes among learners" (Passi, 1976: 8). Teaching competencies was functional abilities which teachers show in their teaching activities (Sachdeva, 2002: 57). Teaching competency is the ability of the teacher to transmit knowledge, application and skills to the students. Competency does not imply perfection; it implies performance at a stated level (Ashworth, 1990: 1). Teaching competency is the ability of a teacher manifested through a set of overt classroom behaviour.

Competent teaching demands exceptional qualities-intellectual, moral, physical, emotional and a sincere devotion to human betterment (Gould, 1947:3). Teaching is a deliberate and persistent activity which is calculated to vitalize the mind of the young with mental pabulum that has to be not only

palatable but also rich in the constructive elements of culture. That is how the work of the teacher has come to be regarded as Edu creation instead of mere Education. Therefore people with high intellectual caliber, quick with imagination and resourcefulness, should take to the teaching profession so as to sustain the interest of the young and ignite them into constructive activity along the lines of their natural aptitudes and in accordance with the urgent needs of gainful occupation. The pupils of to-day are the builders of tomorrow. They must be taught to understand the responsibilities that await them and trained to shoulder them effectively. The immense potentialities can be moulded into desirable patterns of life and conduct only by the human element supplied by the teachers` personality. Therefore the duty of teachers is to implant in juvenile hearts right habits and wholesome attitudes.

Competent teaching is a par excellence attribute of quality education which helps in cultivating the resources of persons. A competent teacher must be a perpetual seeker of intellectual integrity and universal compassion. He should be a devoted person and must make teaching as his mission. He must take efforts to acquire such desirable traits of a competent teacher as,

- ❖ Interest in pupils
- ❖ Ability to motivate learning
- ❖ Stimulation of thought
- ❖ Sympathy
- ❖ Sincerity and a sense of justice
- ❖ Adoptability and consideration for others
- ❖ Cheerfulness and enthusiasm
- ❖ Breadth of interest
- ❖ Good judgement and;
- ❖ Self-control

Teaching competence defined as adequacy for a task of required knowledge skills and abilities. It emphasizes on the ability to do rather on the ability to demonstrate knowledge. As such in teaching competency based teacher education has become a special designation for an educational approach. In the present scenario we need competent teachers to meet challenges of teaching learning process. National Policy on Education (1986) has also recommended that norms of accountability should be strictly followed with incentives for the good performance and disincentives for the non-performance, Veer (2004) emphasized that teacher should possess teaching skills and competencies so that his task may be easy, useful and effective.

The beliefs, assumptions, and feelings of the teachers are the air of the learning environment that determines the quality of life within it. Teaching should be such that what is offered is perceived as a valuable gift and not as a hard duty. Hence the teacher must be prepared to learn in order to improve intelligence and commonsense. Every teacher must read continuously in order to supplement the knowledge. She should have a sharp memory and must remember all the essentials of her subject. She must have the urge and zeal to improve professionally.

Teachers should never miss the opportunity to attend enrichment and enhancement programmes like seminars and workshops to gain vigour and maintain fertility. Constant enrichment to knowledge keeps her teaching alive and energetic. She should keep-up with new literature as it comes out. A competent teacher has to develop the spirit of enquiry among her students, a spirit which is linked with the scientific spirit. So she must retrain herself continuously with regard to subject matter, pedagogy and educational technology. By accumulating all the research studies which are discussed in foregoing pages, the investigator feels that in the present scenario when every aspect of education needs a drastic change to suit changing development of time, it is very much necessary to increase teacher competency. The present study was undertaken with a view to investigate the effect of micro-teaching and use of multimedia on teaching competence of prospective teachers.

SIGNIFICANCE OF THE STUDY:

There are so many techniques to modify teacher behaviour and different researchers conducted research in their field. As it is found that the qualities of the teachers creates excellence in all walks of life. Whereas, it is emphasized that an essential ingredient of teacher's professional equipment pertains to in-serve education and pointed out that in educational scenario, teachers act as a pivot on which the process of education rest on. It is emphasized that in the present era drastic changes are required to meet the goals of education by increasing teacher competency. Hedge (2009) stated that teachers are the social doctors. It is accepted that learning through viewing of the video film was more effective than learning through charts. Kaur (2005) pointed out the extent of impact of TV programmes on rural adults is related to this literacy, sex and view time. Singh and Mishra (2009) found that e-Learning may be effective in developing cognitive ability of pupil teachers.

After undergoing a review of literature researcher found micro teaching was used as a teacher training technique and multimedia was also used to make teaching learning process meaningful. So the researcher wanted to see the effect of microteaching and use of multimedia on teaching competence. This research would be helpful in understanding the effect of microteaching and use of multimedia on

teaching competence. The results of this research would prove as guidance to prospective teachers and would in a way help them to develop professionally. This would also benefit for the educational planners and administrators for making policies and plans.

OBJECTIVES OF THE STUDY:

The objectives of the study are as following:

1. To study the significant effect of micro-teaching skills on teaching competence of prospective teachers.
2. To study the significant effect of multimedia on teaching competence of prospective teachers.
3. To study the significant effect of conventional method on teaching competence of prospective teachers.

HYPOTHESES OF THE STUDY:

In order to fulfill the objectives of the study, the following hypotheses formulated and tested which are as following:

1. There is no significant effect of micro-teaching skills on teaching competence of prospective teachers.
2. There is no significant effect of multimedia on teaching competence of prospective teachers.
3. There is no significant effect of conventional method on teaching competence of prospective teachers.

RESEARCH METHOD:

The study was conducted through experimental method of research.

POPULATION AND SAMPLE:

Total 120 prospective teachers were selected randomly from three B.Ed. Colleges of Education of Kaithal district. The Random sampling technique was used for choosing three education colleges out of Kaithal district of Haryana namely; (1) M.D.N. College of Education, Kalayat (District Kaithal), (2) Rama College of Education, Kutubpur, and (3) Kithana College of Education, Kithana was selected for distribution of groups.

RESEARCH TOOLS:

The following tools were selected for collecting purposive kinds of information by the investigator:

- ❖ General Teaching Competence Scale (GTCS) of Dr. B.K. Passi and Dr. Mrs. Lalita (1977).
- ❖ Micro-lesson plans for micro-teaching and lesson plans for use of multimedia prepared by the

investigator self.

- ❖ Observation schedule for selected skills are used.
- ❖ Transparencies and slides prepared by the investigator.
- ❖ Overhead Projector and Slide Projector used to demonstrate the transparencies and slides.

THE DESIGN OF THE STUDY:

Treatments	Groups		
	Experimental Group A1	Experimental Group A2	Control Group A3
	Equating the groups on the factors of intelligence and subject opted as teaching subject in B.Ed.		
Pre-Test	Administration of Baroda General Teaching Competence Scale		
Training	Orientation and training in Micro Teaching skills	Training to use Multimedia	Training through traditional method
Post-Test	Administration of Baroda General Teaching Competence Scale		

Statistical Analysis:

For analysis of data in the present study following statistical techniques were used: Mean, Significance of difference between two means, T-test.

ANALYSIS AND INTERPRETATION OF THE DATA

In the beginning two lessons of each prospective teacher were observed by applying general teaching competence scale for obtained pre-test score.

Table 1: The Effect of Micro-Teaching Skills on Teaching Competence of Prospective Teachers on Experimental Group-A1

Variable	N	Mean	S.D.	S.E.	't' Value
Pre-test	40	44.378	10.65	2.37	30.83**
Post-test	40	117.72	10.73		

**P < 0.01

It is clear from table 1 that the t-ratio came out between the pre-test and post-test is 30.83 which is significant at 0.01 level of confidence. As the effect of micro-teaching on teaching competence of prospective teachers comes out significant in all the analyses, the null hypothesis (Ho-1): "There is no significant effect of micro-teaching skills on teaching competence of prospective teachers", is rejected. This shows that there is significant relationship between micro-teaching and teaching competence of prospective teachers with the use of micro-teaching prospective teachers can improve their teaching

competence.

Table 2: The Effect of Multimedia on Teaching Competence of Prospective Teachers on Experimental Group A2 at Pre-Test and Post-Test Stage

Variable	N	Mean	S.D	SED	't' Value
Pre-test	40	43.57	10.73	2.13	41.49**
Post-test	40	132.30	6.48		

** P< 0.01

This is clear from table 2 that the t-ratio between the pre-test and post-test comes out to be 41.49 which is significant at the level of 0.01. The table shows that there is significant relationship between multimedia and teaching competence. There is significant difference between mean score of pre-test and post-test of prospective teachers, hence the null hypothesis (Ho-2): "There is no significant effect of multimedia on teaching competence of prospective teachers" is rejected. The result reveals that by the use of multimedia prospective teachers can improve their teaching competence level.

Table 3: The Effect of Traditional Method at Teaching Competence of Prospective Teachers on Control Group A3 at Pre-test and Post-test Stage

Variable	N	Mean	S.D	SED	t Value
Pre-test	40	44.27	10.80	12.32	0.58
Post-test	40	51.52	11.80		

Note: not significant at 0.05 levels.

This is clear from table 3 the t-ratio comes out between the pre-test and post-test is 0.58, which is not significant at 0.05 levels of significance. The present study shows that there is no significant relationship between conventional method and teaching competence, hence the null hypothesis (Ho-3): "There is no significant effect of conventional method on teaching competence of prospective teachers" is accepted.

FINDINGS, DISCUSSION, EDUCATIONAL IMPLICATIONS:

The results of this research would prove as guidance to prospective teachers and would in a way help them to develop professionally. The role of Education programme in teacher effectiveness in the journals of Indian education that teaching competency is the more essential availability required for an

effective and successful teacher. The findings of the study are as following:

FINDINGS OF THE STUDY:

On the basis of result of the study, as reported in preceding section, testing of hypotheses are as following:

1. The null hypothesis (Ho-1): "There is no significant effect of micro-teaching skills on teaching competence of prospective teachers", is rejected. This shows that there is significant relationship between micro-teaching and teaching competence of prospective teachers with the use of micro-teaching prospective teachers can improve their teaching competence.
2. The null hypothesis (Ho-2): "There is no significant effect of multimedia on teaching competence of prospective teachers" is rejected. The result reveals that by the use of multimedia prospective teachers can improve their teaching competence level.
3. The present study shows that there is no significant relationship between conventional method and teaching competence, hence the null hypothesis (Ho-3): "There is no significant effect of conventional method on teaching competence of prospective teachers" is accepted.

DISCUSSION OF RESULTS:

The results of the present study are in accordance with a number of studies, such as Harris and Ward (1970) who reported that the micro teaching improved the attitude of staff as well as students towards education. Khan (1985) and Oak (1986) also reported that micro teaching technique had proved itself to be a more effective teacher training technique than the traditional method when subjected to factorial analysis of variances. Dove (1987); Pandian (1987) also focused that the teacher belonging to the mini-teaching groups produced a significantly favourable attitude towards teaching in comparison to the summative group and the traditional group.

The results go in line with the findings of Asija (1990); Dutta (1990) and Singh (1990) who found that the micro teaching technique had a positive effect in developing attitude towards teaching.

The main findings of the study are use of multimedia was found to be effective compared to the conventional method of teaching in achievement of teaching competence level.

EDUCATIONAL IMPLICATIONS:

The findings have significant implications for teachers, headmasters, parents, curriculum framer, administrators, policy makers, parents, community member's voluntary

agencies and all other bodies concerned with educational programme and in providing an advanced knowledge and understanding of micro-teaching and use of multimedia on teaching competence of prospective teachers and the effect on cognitive learning. In this section implications of the findings along with the suggestions of the research have been presented.

The present study will undoubtedly enrich the world of knowledge in the field of education. So, we need is a systematic approach for planning, organization and effective implementation of the programmes in the light of social, economic and cultural context of the effect of micro-teaching and use of multimedia on teaching competence of prospective teachers.

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