



Student-Teachers' Attitude towards the ITM and Willingness to implement that in their respective classroom.

KEYWORDS

Kabita Dey

Asstt.Prof. in Life Science, Basirhat Mahabodhi College of Education, Champapukur, N-24 Parganas, West Bengal.

INTRODUCTION:-

Development of teaching is the key function of teacher education, where prospective teachers are enrolled for training and it is assumed that a student-teacher will acquire those skills which may be helpful for the developing of creative thinking abilities among students. Mc Cormick (1986) had used some selected training methods such as 'brain storming and written creative thinking exercise' in training students enrolled in an Elementary Science Education.

Quality of school education is directly related to the quality of teachers and teacher-education system. So it is very essential to improve the quality of teachers and quality of teaching that can be enhanced by using different teaching skills, innovative teaching and using modern technique and make the teaching more interesting and attractive.

The model approach to teaching was first described by Joyce and Weil (1972). Models are highly specific teaching strategies designed to accomplish certain goals. A model of teaching is merely a tool for thinking about classroom training. It is a set of concepts carefully arranged to explain what teachers and students should do in a classroom, how they should interact, how they should use instructional materials and how these activities affect what students learn. They help students to acquire information, ideas, and ways of thinking and means of expressing themselves.

The ITM as developed by Suchman (1962) is classified under the Information Processing models of teaching. Suchman assumes that human beings are basically curious and problem-solvers by nature. Suchman and his associates after identified the elements of their inquiry process, the generated the instructional model called Inquiry Training Model.

Attitude of student-teachers towards ITM in terms of understanding, competence and interest in using ITM.

Willingness means interest of student-teachers to use the ITM in their classroom teaching. The basic research question of the present study was-

Are the Student- teachers of the Teacher Education Programme ready with positive Attitude towards the ITM and Willingness to implement that?

On the basis of above question, following objectives were identified:

Objectives:

1. To study the attitude of student-teachers towards ITM.
2. To study willingness of the student-teachers to implement the ITM in their respective classroom teaching

Hypothesis:

1. There is no significant difference between sexes of the student-teachers in respect to attitude towards the ITM.

2. There is no significant difference between sexes of the student-teachers in respect to Willingness to implement the ITM in their respective classroom teaching.

Methods:

The present study comprises experimental types of research. The investigator assumed that student-teacher has knowledge to models of teaching, but no attempt was made to provide training to student-teacher. Their opinions were gathered by administering the attitude towards ITM and willingness scale in respect to find out their Willingness to implement the ITM in their respective classroom teaching.

SAMPLE:

Variables: The variables chosen for student-teacher's sample were sex.

1. Dependent- Attitude and willingness
2. Independent- sex

The population of student-teachers has more number of male student-teacher than female. It is a general opinion that female students-teachers are conservative and traditional compared to male. If that is the case then male student-teacher should be more willing to be innovative and modern than female should.

For the study 66 student teachers of different Teacher Education Colleges of West Bengal were selected purposely for training in ITM. All student-teacher were subjected to then attitude towards ITM scale and the investigator try find out their attitude towards ITM or reaction towards ITM. And then willingness scale was administrated on students-teacher for gathering the data for their willingness to implement the ITM in their respective classroom teaching.

Reaction towards ITM and Willingness Scale to implement the model of teaching-By B.K. Passi and

Sansawal (1987) was used for the study, which is a 3-point scale (F=Favorable=Neutral and U=Unfavorable). The ITM scale consists of 16 questions and willingness scale consists of 18 questions.

Table-1: shows sample:

S.NO	VARIABLES		SAMPLE SIZE
1	SEX	MALE	36
		FEMALE	30

Results:

After understanding their knowledge on Inquiry Training Model a scale was given to them to check their attitude towards ITM and that is consist of 16 items and is a 3-point scale (F-Favorable, N-Neutral and U-Unfavorable).

Table-2: Attitude towards ITM scale

S. NO.	STATEMENTS	CHI-SQUARE			
		MAL E	SIG.	FEM ALE	SIG.
1	It provides opportunity to think independently.	40.6		43.4	
2	I get frustrated when my hypothesis gets rejected.	4.5		2.6	*
3	It helps in developing independent study habit.	45.48		25.4	
4	I get motivated when I see others asking questions	50.16		33.8	
5	It does not provide freedom for thinking	31.9		38.6	
6	Others subjects It does not provide freedom for thinking should also be taught by this method.	36.15		25.4	
7	It does not help in developing self-confidence	40.6		43.4	
8	I remain active while teaching through this model.	36.15		33.8	
9	It is not conducive to developing scientific process skill.	6.16		14.6	*
10	I can develop a new hypothesis on the basis of other ideas	45.13		29.4	
11	I fell exhausted quickly during teaching through this model.	4.66		17.8	*
12	It is time consuming yet no through understanding of the subject	1.16		9.8	*
13	This model is good for learning how to ask pin-pointed.	40.6		38.4	
14	It does not help in developing analytical ability	32.13		29.4	
15	It is difficult to maintain discipline during teaching.	4.66		5.6	*
16	Without any hesitation I can ask questions.	49.9		51.5	

With df=2, the X² value to be significant at 0.01 level is 9.21 [From table value]

From the analysis of above table-2, it is found that calculated chi-square value for items 2, 9, 11, 12 and 15 are less than < 9.2 (table value) in case of male student-teacher and in female only 2 and 15 is less than table value.

Hence, the * marked divergence is significant. The Null hypothesis is accepted, thus we may conclude that our group not favors these proposition.

After training on the model willingness scale was administered on the subjects. The data were collected and analyzed by employing chi-square. The analyzed data of Willingness to implement the Models of Teaching was given in the Table-3 below.

Table-3: WILLINGNESS SCALE

S. NO.	STATEMENTS	CHI-SQUARE			
		MAL E	SIG	FEM ALE	SIG
1	The model of teaching is very difficult to implement.	8.16	NS	15.0	S
2	My Head of Institution will give academic support for implementing the model of teaching	17.41	S	25.4	S
3	I don't understand the theory underlying the models.	21.16	S	18.2	S
4	My Head of Institution does not allow any change in the timetable.	1.99	NS	12.2	S

5	I am ready to implement provided my work-load is reduced.	36.16	S	21.6	S
6	I have lost faith in educational innovations.	40.5	S	38.4	S
7	I am ready to implement provided I get additional increment.	21.16	S	25.8	S
8	Models of teaching are more useful in those institutions where hardware facilities are available	55.16	S	29.6	S
9	I don't have time for its preparation.	21.16	S	29.4	S
10	The space facilities required for implement the model of teaching are not available in my institution.	8.66	NS	10.4	S
11	The institutional materials required for implementing the models of teaching are not available in my institution.	11.16	S	18.6	S
12	The models of teaching need not to be applied as these may not improve teacher training programme.	28.16	S	18.2	S
13	Students of my institution will find it difficult to understand even the theoretical part of the model	1.99	NS	7.4	NS
14	The use of the models of teaching in our teacher training institutions is not practicable.	28.5	S	21.8	S
15	Through this practice I could not develop abilities needed for implementing of the models of teaching.	32.16	S	15.2	S
16	I am sure the models of teaching can improve the quality of teacher training programme.	55.16	S	38.4	S
17	I can implement the models of teaching inspite of all types of difficulties.	36.16	S	43.4	S
18	The implementation of the models of teaching will not have any financial burden on my institution	1.16	NS	9.8	S

Analysis of data :-

The student teachers responses to the Willingness Scale were tested by the equal probability using chi-square. Each item on Willingness Scale was analyzed using chi-square test.

From the above table-3 it was clear that all chi-square values for all items are significant except for the 1,4,10,13 and 18 statement in case of male student-teachers and all the items are significant except item 13 in case of female student-teachers.

Those values which shows significant difference, clearly indicate that the response of the student-teachers falling in favorable, neutral and unfavorable categories differ significantly. On the basis of categories of responses (majority) falling in the favorable categories for positive statements and unfavorable for negative statements, from the responses it can be analyzed that female student-teacher had developed more positive attitude towards willingness to implement the model. Thus we can say that the hypothesis that willingness to implement the Inquiry Training Model will be developed in student-teachers due to training was not rejected.

Conclusion:

Educationists believe that models of teaching are vehicles of communication of scientific process skills. They believe in philosophy of Models of Teaching as strategies to improve teacher education programme.

Models of teaching are examples of latest developments in the field of education whose knowledge would improve the

teaching competence of student's teachers. Apart from other models ITM could prove to be a very important tool in the hands of a resourceful teacher in teaching of science.

The present study has elicited the response of student teacher to Willing Scale; ITM is concerned with the development of Inquiry Skills. Inquiry based teaching can be introduced in schools only if there are teachers trained to implement it.

The student teachers express their view that they were ready to implement models of teaching. The student teachers were willing to implement models of teaching. They were prepared to try out ITM in their practice teaching. After training many of them found it impracticable to implement them. They said that implementation of models were time constraints, inability of student teachers to comprehend theory of the model and lack of instructional materials. But overall responses of student teacher were encouraging since they were willing to implement models of teaching. Sex and Location was not significantly influencing the willingness scores of student's teachers.

The main goals of science teaching, is to develop process skills. Inquiry training approach helps in developing the skills of creative thinking, scientific inquiry, divergent thinking and independent thinking. The student teachers have shown positive attitude towards ITM. The implementation of ITM requires the willingness of student teachers to use the model in their respective classroom teaching.

References

1. Aggarwal, Y.P. 1988. Research on Models of Teaching in Research in Emerging Fields of Education, Concepts, Trends and Prospects. Sterling Publishers, New Delhi.
2. Joyce, Bruce and Weil, Marsha (1985): Models of Teaching Printice Hall India Private Limited New Delhi.
3. Chauhan, S.S. (1979). Innovations in teaching learning process, Vikas Publishing House (Pvt.) Ltd., New Delhi.
4. Dubey, Alpana (1986). A study of the efficacy of the Inquiry Training Model in learning outcomes, Unpublished M.Ed Dissertation, Univ. of Indore.
5. Garrett, E. Henery and Woodworth, R.S. (1985). Statistics in Psychology and Education Eleventh Indian Reprint, Vakils, Feffer and Simons Ltd. Bombay.
6. Joyce, Bruce and Weil, Marshal (1992). Models of teaching (4th Edition) Prentice Hall of india (Pvt.) Ltd., New Delhi.
7. Katiyal, Sunita (1985). How does Inquiry Training Model affect the learning outcomes in comparison to traditional teaching, Unpublished M.Ed dissertation, University of Indore.
8. Kaul, Lokesh (1993). Methodology of Educational Research, Vikas Publishing House (Pvt.) Ltd., (Reprint, Second Edition).
9. McCormick, M. & Lubans, J. (1983). Library literacy. RQ, 34(2), 158-163.
10. Mani, R.S. (1985). Inquiry Training Models of teaching: An overview. Indian Educational Review, Vol. 20(4), pp. 51-65.
11. Pandey, A. (1987). Teaching style and concept attainment in Science. Third Survey of Research in Education (1978-83), p. 769.
12. Passi, B.K., Singh, L.C. and Sansanwal, D.N. (1987). Inquiry Training Model of teaching, National Psychology Corporation, Agra.
13. Siddiqui, Mujibul Hasan (2008) Models of Teaching Ashish Publishing House New Delhi ISBN NO 978-81-313-0382-5
14. Singh, Bhoodev (1986). Teaching competence and attitude towards teaching of prospective teachers: Effect of teaching models, Indian Educational Review, Vol. 21(4), pp. 16-24.
15. Sivakumar, P. and Prema, P. (1997). Effectiveness of Suchmans Inquiry Training Model in learning Biology. Journal of Educational Research and Extension, Vol. 33(3), pp. 136-40.
16. Third Survey of Secondary teachers education in India (1971-72), NCERT Publications, New Delhi. (1979).
17. Weil, Marsha and Joyce, Bruce. Information Processing Models of Teaching. New Jersey: Prentice Hall, Inc. Englewood Cliffs, 1978.